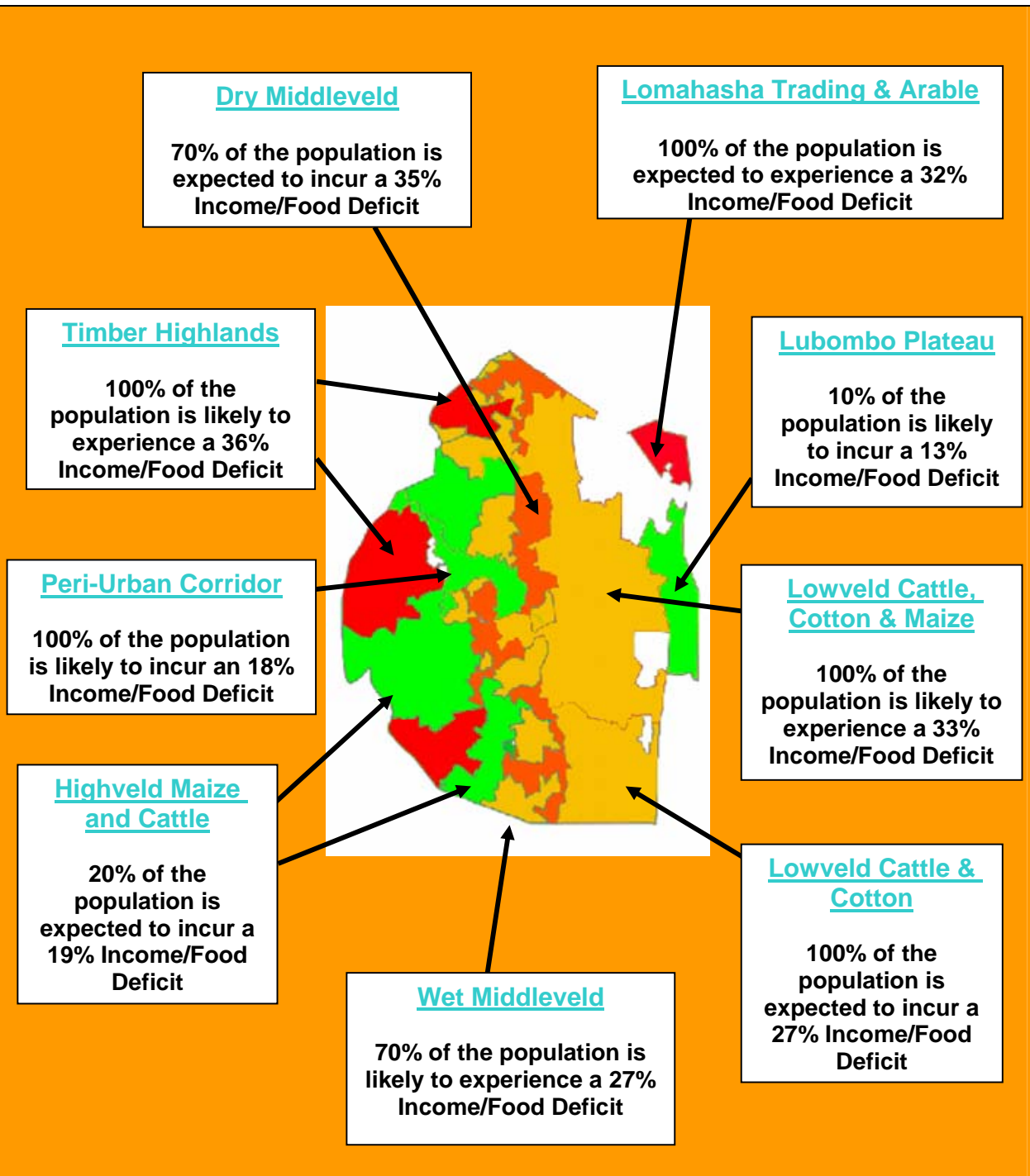


Swaziland Vulnerability Assessment Committee (Swazi VAC) Annual Vulnerability Monitoring Report May 2004

Highlights



NB: This VAC study uses the current official population growth rate of 2.4% (CSO). Income/Food deficits are calculated using 400gms/person/day. For more details on the map above, especially to delineate Middleveld and Highveld areas please refer to the map (figure 1) in the report.

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Acronyms

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
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

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During the process of this assessment, a number of organisations and Government ministries were involved namely: the Central Statistical Office (CSO) from the Ministry of Economic Planning and Development (MEPD), the Ministry of Agriculture and Co-operatives (MoAC), the Ministry of Health and Social Welfare (MOHSW), the World Food Programme (WFP), World Vision, Lutheran Development Services (LDS), Save the Children Swaziland and the Swaziland Farmers Development Foundation (SFDF). We very much appreciate the human and material resources these organisations and ministries contributed which enabled the success of the exercise.

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MR. GEORGE NDLANGAMANDLA
CHAIRPERSON
SWAZILAND VULNERABILITY ASSESSMENT COMMITTEE

Executive Summary

❖ National economic slowdown

The current national economic slowdown is proving to be exceptionally deep and broad. The structural context constraining livelihood options remain little changed over the past three-to-four years. Depressed employment opportunities, poor agricultural production, plus rising staple food prices and the effects of HIV/AIDS have undermined livelihoods. High levels of household vulnerability combined with the shocks of three years of erratic weather patterns and a lessening of economic growth (2000-2003) precipitated a crisis for many Swazi communities. Poverty is endemic on Swazi National Land (SNL) where 70% of the population contribute to the agricultural sector's modest 10% share of GDP.

❖ Falling employment, disposable income and livestock levels

Several factors affecting the vulnerability of Swazis underlie the current emergency situation. Economic growth has been quite limited since the mid 1990s with a significant fall-off of Swazis employed in South Africa as the decade progressed. Employment levels within Swaziland have been at a virtual standstill for several years in private and public sectors. The reduction of incomes and remittances in Swaziland has had significant implications for the ability of many households and communities to purchase food and other essential household items and access basic social services. In addition, the reduced disposable income of families has resulted in fewer casual employment opportunities being offered for less well-off members in the communities. Economic hardship and food insecurity has increased in the Lowveld because of a virtual collapse of the cotton industry – reducing incomes of producers and casual labour opportunities for many other households. Livestock condition has been poor countrywide for several years and overall numbers of cattle and goats have been declining, especially in the Lowveld, because of poor grazing conditions and water availability. Animals have had very little chance to recover their condition after each shock has hit.

❖ Late and intermittent rains in the main planting season 2003/4

In the current season late and intermittent rains in all parts of Swaziland between October and December have had a detrimental impact on agricultural production. However, much improved rains between January and March have reduced the anticipated national maize deficit with some maize production in the Highveld, Middleveld and even some patches in the Lowveld. The late rainfall did allow some households in the Middleveld and Lowveld to plant in January but it has been difficult to gauge the extent of land cultivated during this last phase and its possible impact on national production. The improvement in rainfall will not help many households in the Lowveld, dry Middleveld and Lomahasha areas that failed to plant. Above normal rainfall in March and April has damaged maize crops during the drying phase. Legume crops have had a poor season.

❖ Depressed cereal and cotton production and increasing informal maize prices

The downward national production trends outlined in chapter 3 go some way towards highlighting the strain that rural livelihoods have been facing during the past three to four years in securing income and household production to ensure food security and other basic household requirements are met. Following the below normal and erratic rains in the current season, there is depressed agricultural production both by yield and area cultivated compared to the five year average to 2001/2. Combinations of other factors apart from the weather have detrimentally affected agricultural production as exemplified by increasing inability of households to afford the requisite inputs and also the difficulties farmers faced accessing tractors for land preparation at optimal times. Household income earning potential for poor and middle wealth groups has been negatively influenced by the overall production climate but just as importantly it has been dented by declining overall access to markets. Maize and cotton markets, both of which play key roles in rural household incomes, have been depressed by production conditions but also by marketing

arrangements. The informal maize market is large while official maize sales are small overall and recent price levels have not been sufficient to attract sale by farmers. It is fundamental to Swaziland to have a maize production industry with a supporting maize marketing infrastructure that maximises production and incomes. Maize production in 2003/4 represents the fourth consecutive year of below normal cereal production. The cereal balance indicates that even after planned imports are accounted for the cereal gap is almost 75% of current production. Low cereal production has large implications for the food security, well-being and assets of the rural Swazi population. A high maize price, caused by current and anticipated shortages is likely to compound the problem of poor people accessing available food in the coming months and throughout 2004/5. Monitoring of (informal and formal) maize prices needs to be improved and actions within the maize marketing infrastructure need to reflect the importance that maize prices play (as food and cash crop) in people's lives in rural and urban areas.

❖ **Increasing morbidity and mortality associated with HIV/AIDS is entrenching downward national production trends and increasing vulnerability**

Sitting on top of the economic difficulties being faced by rural households previously described has been HIV/AIDS. The virus has increased morbidity and mortality rates, vastly reducing the viability of already weakened livelihood strategies, encouraging and entrenching poverty. Orphan numbers and other chronically vulnerable households are growing at a significant rate contributing to the growing levels of livelihood failure and destitution of many poorer groups throughout the country with an increasing inability of communities to cope. Women and children are taking the brunt of the disease. Regional health services report that they are struggling countrywide and greater levels of morbidity are anticipated in future.

❖ **Vulnerability is increasingly widespread throughout the country**

Vulnerability to food insecurity and livelihood decline can no longer be defined only in terms of the Lowveld. The VAC analysis points to increasing problems across larger sections of the country. The vulnerability of populations depends on the livelihood patterns employed in the different zones of the country and the wealth status of households. Most notably depressed conditions in the Timber Highlands, Lomahasha Trading and Arable and the Dry Middleveld areas are affecting households' income and food access. However, Lowveld communities continue to face very difficult times. Analytical breakdown by socio-economic group demonstrates that in most instances the poor are facing the biggest income/food deficits. The populations in several of the zones previously mentioned are feeling the impact of cumulative shocks over a number of years covering several of the mainstay production sectors.

❖ **Communities prioritise access to water for domestic consumption and cash crop production**

Communities were consulted about what their priorities may be for community development action during the field interviews that were carried out as part of the assessment. The issues raised are highlighted for each zone in the livelihood zone reports (see chapter 4). Access to adequate water sources was described by **all** communities as the biggest impediment not only to household hygiene and sanitation but also to development and income potential – especially through production of cash crops for sale. Others highlighted earth dams as crucial to reduce the vulnerability of livestock during drought periods when water access (and grazing) is poor and cattle condition reduces.

❖ **General lack of awareness of current sectoral policies**

The VAC stakeholder meeting in early May demonstrated that there was a fundamental lack of awareness of the existence of current national policies on health, education, agriculture, water and other key sectors among the VAC stakeholders (covering Government Ministries, NGOs and UN agencies). Furthermore, if current policies were known about few individuals were able to explain what the policies entailed and most doubted the extent of their implementation. There is clearly a need for agriculture and health technical staff for instance, to have read and understood their own current sectoral policies. Lack of current policies (i.e. not draft or statements or action plans) on

key sectors such as agriculture and HIV/AIDS is apparent.

❖ **Responses to income/food deficits**

Table 5 (page 33) provides planners with more concrete ways of analysing the income/food deficit outcomes outlined on the cover page. Cash transfers (that households could use to purchase their food requirements) are incorporated in order to provide decision-makers with alternatives to (the sometimes automatic reliance on) food aid in order to off-set the income/food deficits being faced by the majority of the rural population. While food aid will continue to play an important role in the short to medium term to meet on-going food insecurity in the most vulnerable areas of the country it should **not** be the automatic and only answer for populations affected. Alleviation of chronic poverty will not be achieved by continuous distributions of food aid. Programmes that incorporate cash transfers may provide additional benefits by stimulating a multiplier effect within cash strapped communities across Swaziland. It is becoming increasingly evident in other African countries such as Ethiopia, Lesotho and Malawi that plausible ways, such as cash transfers through distribution of vouchers or other non-food welfare provision (e.g. public works programmes), may be more appropriate to support chronic poverty and chronic food insecurity. Increasingly donors and agencies are viewing these alternatives in a positive light. Table 5 is provided in order to give policy and programme decision-makers with ball-park figures so that the deficits can be understood in monetary/income terms (USD 21.5 million) as well as food tonnages (28,300 MT).

Key Recommendations:

- **A Government led comprehensive disaster response strategy is required** that will meet short and medium/long term needs as a natural development following the disaster declaration by Government. It should provide leadership to the humanitarian and development community including donors that takes on board the income/food deficits outlined in this report, the reasons for them and the numerous responses that may be utilised to off-set them. A wide consultation is important including the UN, NGOs and donors.
- Increasing vulnerability and destitution around the country means that **a centrally administered and integrated social/economic safety net systems needs to be established** in Swaziland led by Government.
- **Creation of sustainable employment** needs to be central to Government objectives.
- **Increasing and improving agricultural production** is very important for rural food access and incomes.
- **Livestock rehabilitation and commercial development of appropriate livestock** is encouraged (bearing in mind issues of over-stocking).
- **Access to water sources by rural communities** for household hygiene as well as small-scale irrigation for cash crops needs to be prioritised.
- Government and civil society need to work harder to ensure that **current policies are widely dispersed and fully understood**. Sectors that do not have policies such as HIV/AIDS and agriculture require national policies and implementation plans.
- Swaziland needs to develop a **sustainable vulnerability monitoring system** housed within Government (with continuing links with and support from the UN and NGOs) that may continue to inform on key vulnerability issues linking together multi-sectoral analyses for policy-makers and programme interventions. Good quality statistics from ministries that is accessible is essential for analysis. Up to date statistics on livestock and crop production, food prices, employment levels etc. are vital for vulnerability analysis. More effort is required by ministries to ensure that information is credible, accessible and timely.

Chapter 1: Introduction

Objectives of the Report

This report aims to provide programme and policy decision-makers with a broad livelihoods based understanding of vulnerability in Swaziland. It outlines the relative vulnerability of households by geographic area and by socio-economic group throughout Swaziland by presenting overall income/food deficits. The income/food deficits outlined in each zone and for each wealth group represents the shortfall of income and/or food that is likely to be experienced by households during the 2004/5 consumption year because of declining food production, cash crop and all other sales, trade, non-food production, livestock, gifts and wild-foods during the 2003/4 consumption year. The actual deficit faced by households will vary according to the extent of the shock experienced, their wealth status and resulting coping strategies employed by households. The diversity of livelihoods throughout Swaziland makes such an undertaking extremely difficult. This large area vulnerability analysis is credible but planners will require more detailed assessments of specific areas before proceeding with interventions.

Background

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. As Swaziland continues to benefit from the United State's Africa Growth and Opportunity Act (AGOA), it is likely that real Gross Domestic Product (GDP) growth will increase, consolidated by an acceleration of real GDP growth in South Africa, which is Swaziland's main export market.¹

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 Tinkhundla. 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.

¹ As long as AGOA status is maintained as this is currently pending approval by the US Congress

Local production and market relations define nine Livelihood Zones (LZs) within the overall parameters of four agro-ecological regions (see figure 1). 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 **Wet Middleveld** and **Dry Middleveld**. As a whole the Middleveld forms a long broken escarpment between the wetter Highveld and drier Lowveld. The Lowveld is currently subdivided into two parts – the dry southern **Lowveld Cattle and Cotton** and the more diversified northern **Lowveld Cattle, Cotton and Maize**. Within the Lowveld there are large tracts of industrial sugar production. The Lubombo Plateau is also divided into two – the more remote **Lubombo Plateau** in the centre and, in the north, the **Lomahasha Trading and Arable** that straddles the main road through to Maputo and Mozambique. The sugar estates, national parks, forest reserves and all urban areas are excluded from the LZs and the estimates of LZ populations.

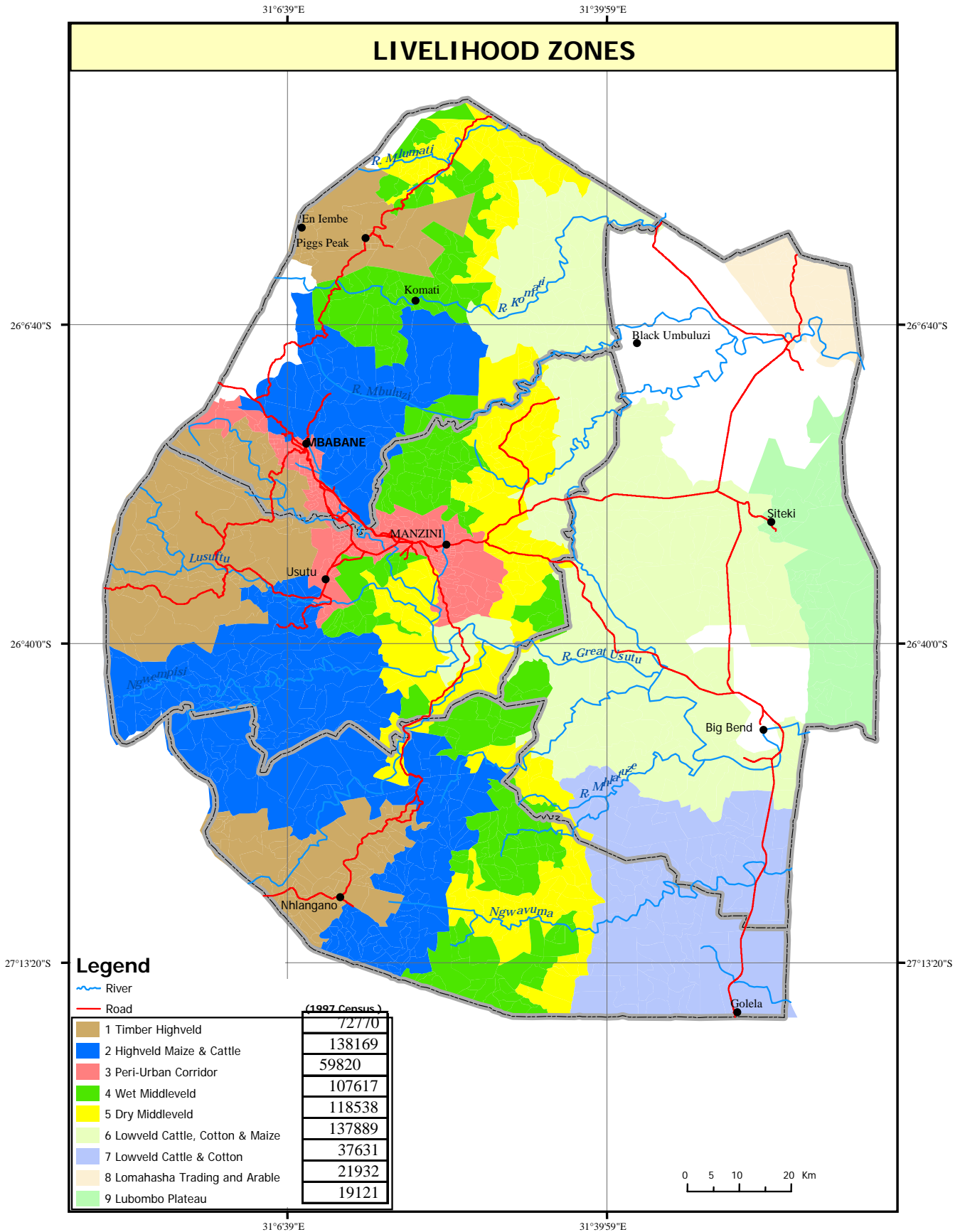
Current Season Context

The current national economic slowdown is proving to be exceptionally deep and broad. The structural context constraining livelihood options remain little changed over the past three-to-four years. Depressed employment opportunities, poor agricultural production, plus rising staple food prices and the effects of HIV/AIDS have undermined livelihoods. The formerly important cotton industry of the Lowveld has more or less collapsed over the past five years. High levels of household vulnerability combined with the shocks of three years of erratic weather patterns and a slow-down in economic growth (2000-2003) precipitated a crisis for many Swazi communities. Poverty is endemic on Swazi National Land (SNL) where 70% of the population contribute to the agricultural sector's modest 10% share of GDP.

In July 2002 Swaziland was incorporated as a beneficiary under a WFP Regional Emergency Operational Plan (EMOP) which is currently still in operation. A total of 144,000 people were originally targeted for a general food distribution (GFD) but this was extended to 217,000 in 2003. The WFP and a consortium of national NGOs formed a partnership to distribute food aid to the most affected areas. The Government of Swaziland provided significant food aid support during 2003 in other affected areas of the country in partnership with WFP. As part of a regionally coordinated monitoring programme three rolling vulnerability assessments were carried out by the Swazi VAC to provide national and sub-national guidance on relative vulnerability levels during 2002 and 2003.

It was hoped that good rains and cultivation in the 2003/4 agricultural season would form a backbone for WFP and their implementing NGO partners to move away from general targeted food aid distributions to less emergency type interventions such as food for training and food for work. Indeed WFP has had plans to move from the current EMOP to a Protracted Relief and Recovery Operation (PRRO) since mid-2003 in which any modality for food distribution may be applied, if appropriate, other than those that are 'free'. The poor outlook for the current season, especially in the Lowveld, has meant that stakeholders remain concerned about the on-going emergency need in a theoretical climate of recovery. Most recently, the start of the PRRO has been delayed until 1st January 2005 and is planned to last for three years. A continuation of challenging circumstances led the new Government of Swaziland to declare a state of national disaster in February 2004 focusing on poverty, drought, HIV/AIDS and soil erosion. A Disaster Management Bill was made a priority by the new Government for discussion by the new Parliament but has not yet been passed and currently the implications of the bill are not fully clear.

Figure 1: Livelihood Zone Map of Swaziland (population 1997 census)



Institutional Background

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, National Emergency Response Council on HIV/AIDS (NERCHA) and the Coordinating Assembly for NGOs (CANGO).

Broadly, 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 the short term, the focus has been on carrying out emergency assessments focusing predominantly on identifying food aid needs. 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 establishment of the Swazi VAC in May 2002, three emergency food security / livelihood assessments carried out in Swaziland in July/August 2002, November/December 2002 and May/June 2003 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 after the declaration of national disaster by the Government of Swaziland. 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 and the report is available. 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 including the rapid collection, analysis and dissemination of credible information" in an attempt to enhance disaster preparedness.

Chapter 2: Vulnerability Analysis – Approach Utilised

Livelihoods Based Vulnerability Assessment Approach

The basic principle underlying the livelihoods based approach² 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 strategies³, 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 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 9 areas and 27 livelihood profiles⁴.

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 next 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 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.

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

² The RVAC and NVACs agreed to adopt this approach at a regional meeting in Pretoria March 2003.

³ 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).

⁴ A report detailing these livelihood profiles is forthcoming. Most aspects of the livelihood baselines are highlighted later on the relevant sections of the report.

income that people turn to when exposed to a hazard). The approach can be summarised as follows:

Baseline + Hazard + Response = Outcome

The Swazi VAC wish to take a holistic picture when analysing livelihoods. The bases for the current assessment are the livelihood profiles developed by the Swazi VAC during November and December 2002. For each of the nine livelihood zones in Swaziland a socio-economic breakdown has been developed to better understand the opportunities and constraints that the poor, middle and better off groups face in their daily lives. A written record of these updated livelihood baselines will be produced in the weeks following this report. It will be circulated to stakeholders.

Analytical Approach 2004

The essential requirement for agreement on the current vulnerability context in Swaziland has meant an array of information has been collected and analysed. In addition, an overarching theme to consult and enable key stakeholders to feed into a combined analysis of the current context allows the Swazi VAC to perform its most important role. The VAC forms an umbrella under which very diverse stakeholders can agree on the depth and breadth of food security and livelihood problems experienced by households in rural and peri-urban Swaziland so that stakeholders have a common framework of analysis to guide their responses. Furthermore, the Swazi VAC has been keen to consult as widely as possible with communities and institutional stakeholders as to the best way forward having agreed the vulnerability context.

There have been four main thrusts to the vulnerability assessment and analytical process:

- **Analysis of secondary data** on production and supply e.g. maize, cotton, sugar cane production, livestock productivity and condition, national food and livestock prices, employment levels and the general economic climate of Swaziland and the Southern Africa region.
- **Participatory community interviews** by combined teams from the Government, UN and NGOs with key informants in 43 Chiefdoms (representing 16% of the total number of Chiefdoms) to identify:
 - current production shocks (food/cash crop production, livestock productivity, fishing, trade, non-food production, livestock/grazing condition)
 - changes in access to markets (employment, cash crops, livestock, trade, non-food production, food availability)
 - changes in prices of food stuffs and livestock
 - priorities for development outlined by the communities

The community interviews were carried out by six teams between 20th and 30th April using a semi-structured interview format. Staff from the Ministry of Health and Social Welfare, Ministry of Economic Planning and Development⁵, Ministry of Agriculture and Cooperatives as well as staff from four different NGOs and the World Food Programme took part in the field work and analysis. A training and familiarisation exercise was held on 19th April. A basic pre-requisite for field staff selection was completion of a Household Economy Approach (HEA) training level 1 or experience with previous vulnerability assessments in Swaziland. The chiefdoms that were visited during the survey were selected in a random purposive manner with sampling support from the Central Statistics Office. Commonly ranges of between five to seven Chiefdoms were selected for interview in each of the Livelihood Zones. If zones had a low number of chiefdoms in total, such as the Lubombo Plateau, fewer interviews were undertaken to reflect the total number in each

⁵ Staff were from the Central Statistical Office of the MEPD

Livelihood Zone.

A report for each livelihood zone was produced by the teams based on the interviews conducted. Included within the reports, teams produced the first cut of the problem specification (or shock) for each livelihood zone as an attempt to measure the impact of current conditions on rural livelihoods. This analysis was combined with other secondary data analysis and consultations with wider stakeholders before a final problem specification was produced that reflects a common understanding of the vulnerability context in Swaziland. These problem specifications for each Livelihood Zone can be seen in figure 24.

Table 1: Breakdown of interviews by Livelihood Zone

<i>Livelihood Zone</i>	<i>Number of chiefdoms visited*</i>
Highveld Maize & Cattle	7
Timber Highlands	6
Wet Middleveld	6
Dry Middleveld	6
Peri-Urban Corridor	4
Lowveld Cattle, Cotton & Maize	5
Lowveld Cattle and Cotton	4
Lomahasha Trading & Arable ⁶	3
Lubombo Plateau	2
Total	43

*For a list of Chiefdoms visited please see Annex 1

- **Multi-sectoral interviews with Regional Development Teams** were carried out in each of the four regions of the country covering relevant issues/problems in the following sectors: education, water & sanitation, agriculture, health, nutrition and child protection. However, in some instances logistical issues and availability of reports at the regional level hampered efforts. The VAC is keen to include more health and nutrition data in its analysis.
- **Synthesis of information, discussion and agreement on the vulnerability context** with the institutions forming the core stakeholder group of the Swazi VAC at a stakeholder workshop held on 6th May 2004 after completion of the field work. This workshop went on to analyse and **make recommendations** on the types of livelihood promotion programmes and policies that may be beneficial.

It is expected that the breadth of data collection and analysis will be sufficient to provide a good understanding of relative vulnerability across Swaziland from geographic and socio-economic standpoints. The collaborative and consultative nature of the assessment and analytical process has been very important. Agreement on the underlying and overt reasons for increasing and/or changing vulnerability of rural livelihoods is paramount if complimentary policies and programmes can be put in place by Government and humanitarian/development agencies to reduce the level of vulnerability by strengthening the resilience of livelihood strategies.

⁶ The baseline was updated in the Lomahasha LZ. Seven interviews were carried out in total in the two chiefdoms with 4 in the Shewula area and 3 in the Lomahasha area.

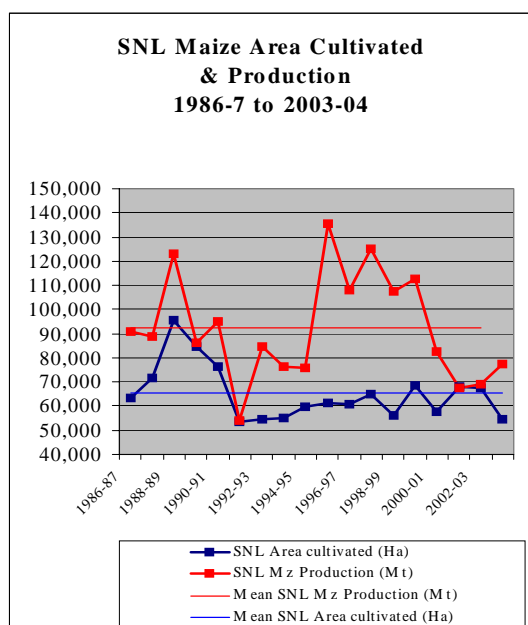
Chapter 3: Hazards and Shocks Affecting Livelihoods – National Trends and Current Year Analysis

Production and Supply Changes

Crop Production and Rainfall

The National Early Warning Unit (NEWU) figures for March 2004 forecast maize production in Swazi Nation Land (SNL) to be 77,540 MT. This year will be the fourth year in a row that maize production will fall below the long term mean of 92,262 MT (source CSO and NEWU). This figure is presented in Figure 2 below as the last in an eighteen-year series. The harvest represents some modest improvement over the 2001/02 and 2002/03 ‘crisis’ seasons and is also less than the ‘poor’ 2000/01 season. Hopes for an agricultural recovery in 2003/04 to support an economic recovery after the cumulative impacts of the three previous years of poor production have been dashed. This year the continuing poor level of maize production will further impact on the livelihoods of rural Swazis who make up 75-80% of the population.⁷ The estimate of the area of crop production is one of the lowest in recent times and is less than last year. A total of 54,470 hectares is estimated with 17,236 ha in the Highveld, 23,642 ha in the Middleveld, 11,064 ha in the Lowveld and 2,528 ha on the Lubombo Plateau.

Figure 2: Area of Maize Cultivated and Maize Production on SNL 1986/7 to 2003/4



There is still some uncertainty about the final outcome for national maize production in 2003/04. The uncertainties centre on:

- The unknown extent of maize cultivation in the Lowveld following the January and February rains.
- How much of it will mature and the possible impact of cob-rot in the Highveld and Middleveld due to very wet and humid conditions in March and April.

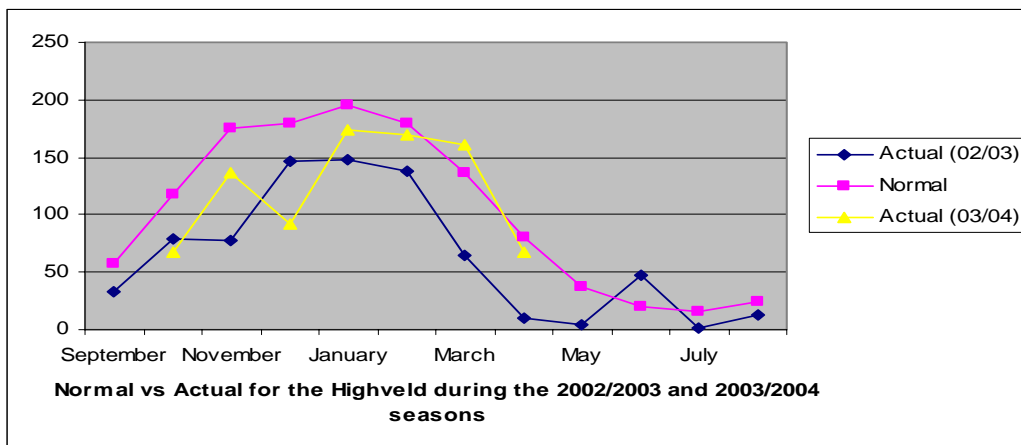
An analysis of rainfall patterns is essential if we are to gain a strong understanding of how the current season compares with previous years and the long-term average. The spatial nature of rainfall determines its effectiveness for agricultural production and is just as important as the overall level. A review of the four rainfall charts below will help analysis.

In the Highveld, figure 3 clearly shows that rainfall this season has been erratic and overall well below normal. A consistent rainfall pattern between October and December is very important for successful germination and early growth of crops. In 2003 rainfall in this period was very low with distinct dry periods in November and December. Maize production was detrimentally affected with farmers being forced to re-plant several times (if they had the resources). The heralded grand return of the rainfall in January and February, though providing a respite, did not even reach the long term normal until March. However, in March and April much of the maize (which had been sown in

⁷ The production figure for 2003-04 is a NEWU forecast estimate. The CSO produced a low figure for area cultivated reflecting the poor conditions for crop establishment (Oct-Dec). It does not account for additional late-planted land brought under cultivation in January as a consequence of the heavy January rainfall.

November and December despite the difficult conditions) required minimal rainfall as maize cobs were entering the drying phase. Above normal rainfall is not helpful for maize yields during this period. In general farmers in the Highveld did not engage in renewed maize cultivation when the rains came in January and February because the season was too far advanced with cool autumn temperatures approaching. In addition, meteorological forecasts warned of below normal rainfall between January and March 2004.

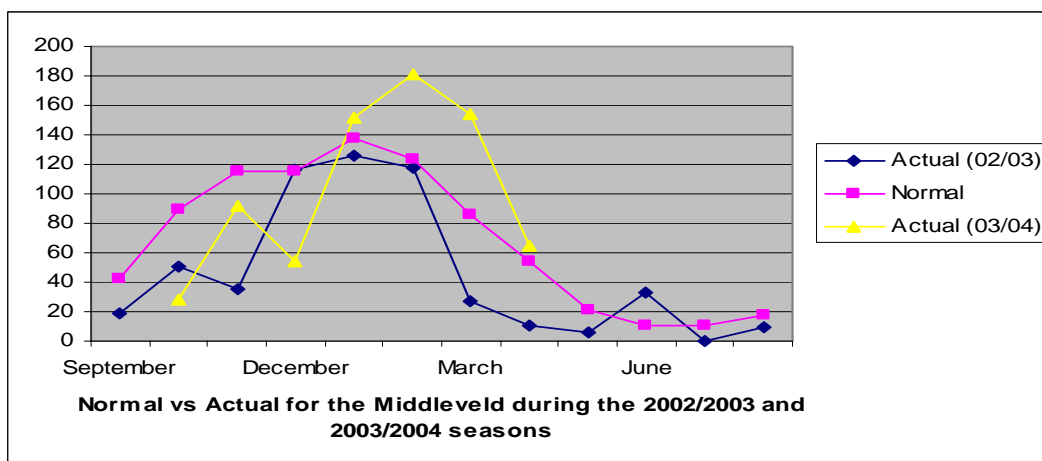
Figure 3: Rainfall in Highveld 2003/4



(Source: MoAC/NEWU)

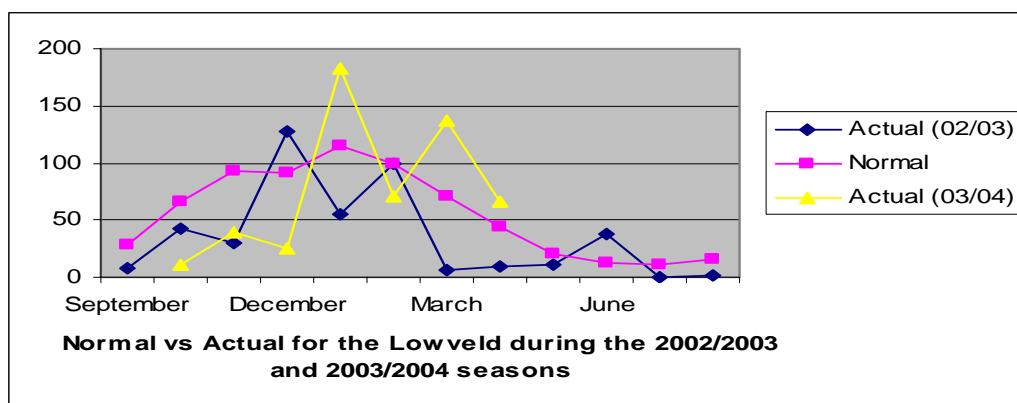
Figure 4 shows that similar situations were experienced by Middleveld communities as those in the Highveld. Rainfall was well below normal levels until January from whence it rapidly went above normal and has continued to be above normal in March and April resulting in some damage of crops predominantly by cob rot.

Figure 4: Rainfall in Middleveld 2003/4



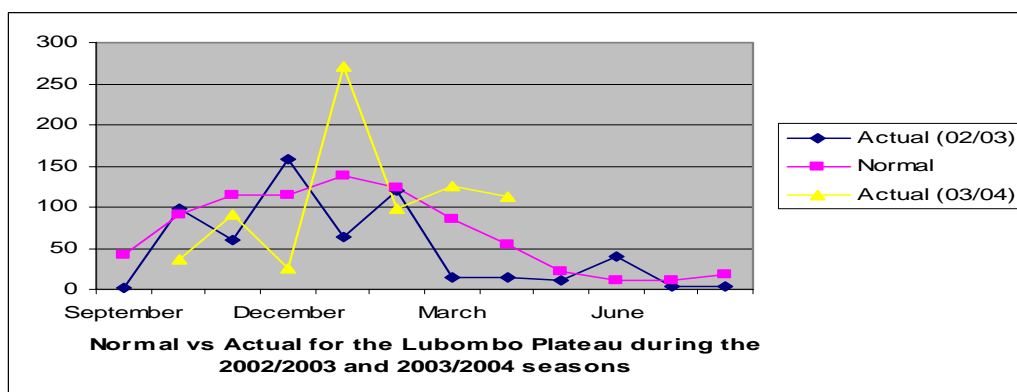
(Source: MoAC/NEWU)

Rainfall in the Lowveld (see figure below) has been highly variable throughout the season. While grazing has improved, maize production has been affected by the regular dry periods in November and December. Far below normal rainfall was experienced up to the end of December. The relatively huge rainfall levels in January provided cultivation possibilities for Lowveld communities because temperatures remain much warmer throughout the autumn than in the Middleveld or Highveld. While cultivation may have been good for some families, many other families failed to cultivate because conditions were so poor up until December and re-planting was not a viable option or economic possibility when the rains came in January and February.

Figure 5: Rainfall in Lowveld 2003/4

(Source: MoAC/NEWU)

A similar pattern has been experienced by communities on the Lubombo Plateau (see figure 6). The temporal variations in rainfall have made agricultural production difficult and below normal harvests are expected in all Livelihood Zones. However, higher overall levels of rainfall on the plateau have meant that the food crop situation is better than in the Lowveld.

Figure 6: Rainfall in Lubombo Plateau 2003/4

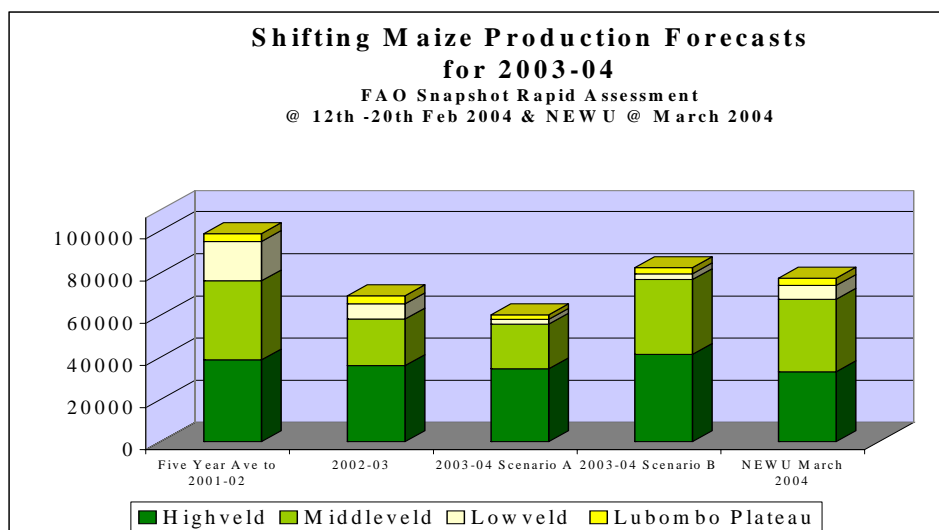
(Source: MoAC/NEWU)

Maize production estimates are very important if vulnerability levels are to be accurately assessed. Maize production estimates tabled between February and March 2004 are shown in the figure 7 below. The February (rapid snapshot) scenarios A and B⁸ and the NEWU March forecast are compared with the five year average to 2001/2002 and with production achieved in the agricultural year of 2002/2003. The three forecasts are significantly below the recent five-year average.

- **Scenario A** presumed a tail-off of good rainfall patterns experienced in February, resulting in maize production that would be worse than last years 'poor' performance.
- **Scenario B** assumed that the rains being experienced in February would continue and be favourable for maize production into March throughout the country. The season has more or less followed the outline for Scenario B.
- **The National Early Warning Unit and National Meteorological Services forecast** (based on area cultivated and Water Requirement Satisfaction Index (WRSI)) predicts 77,540 MT production including an improvement in the likely levels of production in the Lowveld.

⁸ These two scenarios result from the collaborative crop forecasting assessment report (draft) between FAO and MoAC in February 2004.

Figure 7: Maize Production Forecasts, 2003/4



Current expectations are that the 2003/2004 growing season will secure a maize harvest above last year's production but one that will still be well below the five-year average to 2001/2002.

National Cereal Balance Sheet – 2004/5 Marketing Year

Figure 8: National cereal balance sheet for the 2004/5 marketing year (as at 30th April)

	Maize	Wheat	Rice	Total
A. Domestic Availability	85.4	10.3	0.2	95.9
A.1 Anticipated Opening Stocks (as at 1/4/04)	7.9	10.3	0.1	18.3
Formal (monitored)	1.7	10.3	0.1	12.0
On Farm (unmonitored)*	1.4	0.0	0.0	1.4
WFP Stock	4.9	0.0	0.0	4.9
A.2 Forecast Gross Harvest	77.5	0.0	0.1	77.6
B. Total Requirements	160.7	51.9	15.5	228.0
B.1 Domestic Consumption Requirements: Food Use	142.8	44.9	15.0	202.7
B.2 Desired Minimum Stock Requirements	3.0	7.0	0.5	10.5
B.3 Unofficial Exports	2.0	0.0	0.0	2.0
B.4 Seed Use	1.2	0.0	0.0	1.2
B.5 Losses and Other Uses**	11.6	0.0	0.0	11.6
C. Domestic Shortfall/Surplus	-75.2	-41.6	-15.3	-132.1
E. Total Planned Imports	26.4	44.0	4.0	74.4
(Commercial)	22.5	44.0	4.0	70.5
(Food Aid)	3.9	0.0	0.0	3.9
E.1 Received	4.3	5.0	0.9	10.2
(Commercial)	2.5	5.0	0.9	8.5
(Food Aid)	1.8	0.0	0.0	1.8
E.2 Expected	22.1	39.0	3.1	64.2
(Commercial)	18.2	39.0	3.1	60.3
(Food Aid)	2.1	0.0	0.0	2.1
F. Exports	0.0	0.0	0.0	0.0
Planned Exports	0.0	1.0	0.0	1.0
Unofficial Exports	2.0	0.0	0.0	2.0
Exports Completed	0.0	0.8	0.0	0.8
G. Uncovered Gap / Unallocated Surplus	-48.8	2.4	-11.3	-57.7
G. Closing Stocks as at 30th April 2004	1.4	6.4	0.0	7.8

Cereal Supply

The total cereal requirement for the 2004/2005 marketing year⁹ stands at 228,000 tonnes, which is 5.8% higher than last year's figure of 215,500 tonnes. Meanwhile, the total domestic cereal availability is 95,900 tonnes, meaning that at least 132,100 tonnes of cereals have to be imported to cover the domestic shortfall. Total planned cereal imports by the major grain handlers during this marketing year stand at 74,400 tonnes comprising of 26,400 tonnes of maize (22,500 tonnes by NMC and 3,900 tonnes by WFP), 44,000 tonnes of wheat and 4,000 tonnes of rice). This will reduce the **deficit to 57,700 tonnes**. This will be further reduced as WFP is still to avail her planned imports for the period up to the end of this year. However, this will not cover the entire gap and the government will have to decide on other means of covering the significant gap that is likely to remain.

Maize

Total domestic maize availability for the 2004/2005 marketing year is estimated at 85,400 tonnes, comprising of a production forecast of 77,500 tonnes and 7,900 tonnes of opening stock held by traders as at the first of April 2004 (formal/monitored stocks of 1,700 tonnes, on farm/unmonitored stocks and stock held by WFP). Meanwhile, the total maize requirement for the country stands at 160,700 tonnes, comprising of 142,800 tonnes of domestic consumption requirements, 3,000 tonnes of desired minimum stock, 2,000 tonnes of unofficial exports, 1,200 tonnes of seed use and 11,600 tonnes of losses and other uses. A domestic **shortfall of 75,200 tonnes of maize** is therefore projected. The NMC will import at least 22,500 tonnes of maize over the 2004/2005 marketing year. This will bring down the **shortfall to 48,800 tonnes**.

Wheat

Total domestic wheat availability for the 2004/2005 marketing year is estimated at 10,300 tonnes, comprising solely of opening stock held by Ngwane Mills as at the first April 2003. Meanwhile, total wheat requirements for the 2004/2005 marketing year are estimated to be 51,900 tonnes, comprising 44,900 tonnes of consumption requirements and 7,000 tonnes of desired minimum stock¹⁰. A domestic shortfall of 41,600 tonnes is therefore projected for the 2004/2005 marketing year. Total wheat import plans by Ngwane Mills amount to 44,000 tonnes. This will reduce the shortfall to 900 tonnes. On the other hand, total planned wheat flour exports for the 2004/2005 marketing year are estimated at 1,000 tonnes.

Rice

Domestic rice availability for the 2004/2005 marketing year is estimated to be 100 tonnes, wholly comprising of forecasted gross harvest. Meanwhile, total rice requirement is estimated to be 15,500 tonnes comprising of 15,000 tonnes of domestic consumption requirements and 500 tonnes of minimum stock requirements. A domestic shortfall for rice of 15,400 tonnes is therefore projected. Total planned imports for rice are estimated to be 4,000 tonnes which will reduce the gap to 11,400 tonnes.

Analysis of the cereal balance sheet has led observers to conclude that further scrutiny of methods is required because regular, increasingly large annual cereal deficits have not led to malnutrition and food shortages in Swaziland. The current maize deficit is approximately 63% of national maize production for the current year. Either the estimation of cereal requirement is too high or measurements for national crop production underestimate total maize production or a combination of the two results in a gap that cannot be fully explained. NEWU plans to hold a workshop to analyse the approaches used to ensure that the cereal balance sheet becomes as accurate as possible in future and can be used as a credible tool to warn of possible food shortages.

⁹ The marketing year starts on 1st April and ends on 31st March of the following year.

¹⁰ Desired minimum stock requirements for wheat and rice are set at providing consumption cover for two months and one month respectively.

Livestock and Grazing Conditions

The Swazi VAC has attempted to redress the poor monitoring of the livestock production as a part of its livelihood and vulnerability assessments in Swazi Nation Land following the rezoning of the Middleveld into its wet and dry components that was carried out in December 2003.¹¹ Livestock plays a strong role in vulnerability analysis because the level of assets held by households is one major factor deciding their vulnerability. In times of stress it is common for households to sell livestock to maintain food security and other basic livelihood or household items. Grazing condition is implicit within the following discussion. Rainfall levels, proliferation of weeds, nutritive value of the various forms of grazing and access to grazing lands and veterinary services are all important issues that play a role in livestock condition and productivity. Veld conditions in the north-east of the country (Lomahasha, Lubombo and Lowveld LZs) have been seriously affected by the rapid spread of the Chromolena Odorata (Sandanezwe) weed. In other areas of the country a more long-standing weed (Lantana Camara) is reducing grass availability and quality for livestock grazing. The figures summarized below enable one to better assess current conditions in relation to historical trends. Tables 2-4 and Figures 9-14 summarise trends in cattle, goats and sheep numbers by agro-ecological zone¹².

Cattle

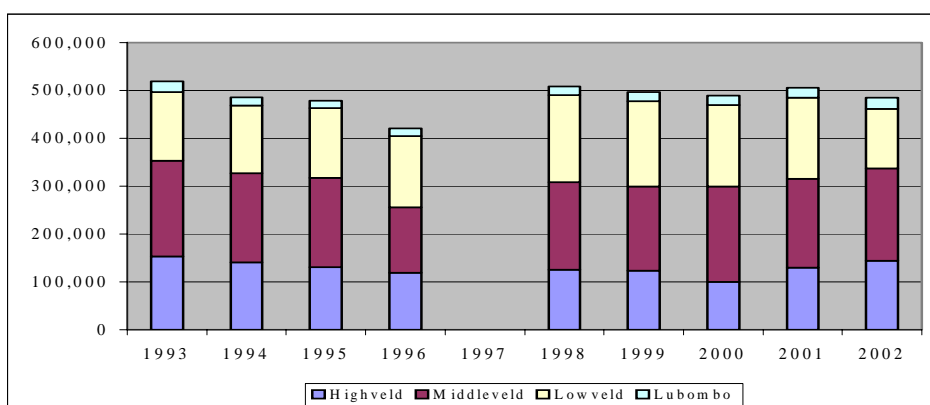
The figures in table 2 and figure 9 indicate that the Lowveld has experienced significant reduction in the cattle numbers in 2002 – a loss of approximately 46,000 head which represents a 27% reduction the Lowveld herd. This is a major loss of wealth and production. Critically, drought conditions in 2003 and 2004 may have further reduced cattle numbers through loss of stock to death by starvation and by accelerated sales of cattle as a coping mechanism.

Table 2: Cattle Population Estimates 1993-2002 (SNL)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Highveld</i>	153,403	140,594	130,585	118,946	n/a	125,151	123,679	99,587	129,931	144,463
<i>Middleveld</i>	199,620	186,301	186,150	136,827	n/a	183,356	175,667	199,083	184,956	192,377
<i>Lowveld</i>	143,587	141,997	146,520	148,683	n/a	182,017	178,133	170,665	170,085	124,248
<i>Lubombo</i>	22,028	16,380	15,075	16,344	n/a	17,378	18,718	20,229	20,369	23,717

Source: MoAC Livestock Section Statistics

Figure 9: Cattle Population, 1993-2002 by Agro-Ecological Zone (SNL)



¹¹ NB Arable land only occupies about 11% of the total surface area in the Swazi mixed farming system, many assets and rural livelihoods are based around hundreds of thousands of cattle, goats and sheep

¹² Figures for 1997 are not available from the Livestock Department, MoAC

Analysis of information from cattle auction records provides some insight on a number of indicators – average monthly weight of cattle, monthly cattle prices per kilogram and total monthly off-take figures.

Figure 10: Cattle Condition – Average monthly Weight in KG – 1995-2003 (Sale Records)

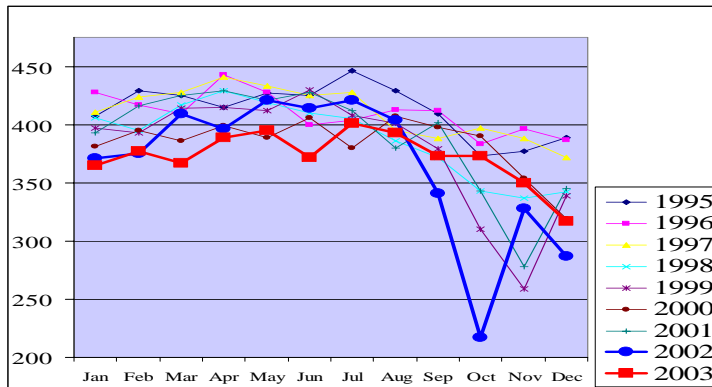


Figure 10 corroborates the ‘starvation grazing conditions’ in the dryer parts of the country between August 2003 and January 2004 with cattle condition dropping to the second lowest record in December. The evidence indicates that the late dry season and early rainy season normally coincides with the period of lowest body mass. In December 2003 the situation became critical. Reports confirmed that 4,260 head

of cattle had died by January 2004. Veterinary Department reports depicted a serious situation for the surviving herd – "many starving, emaciated cows would abort, die during calving, suffer uterine prolapse or fail to nurse calves. In addition, feeble and weak animals were hampering the dipping process. Many had to be manually hauled out of dip tanks". Clearly the conditions had a major impact of productivity of the livestock herd. For farmers who could afford the costs, the MoAC supplied a modest supply of hay bales from South Africa.

Up to January 2004, accounts of grazing and cattle condition in the Lowveld, Dry Middleveld and Lubombo were therefore very depressed and conditions were assumed to have seriously affected productivity and income from livestock and livestock products in the first half of 2003-2004. Added to the problems of drought was the issue of widespread stock theft. Since December the improved rainfall situation turned a desperate situation around. Despite the earlier stock losses, it is now suggested that cattle farmers feel comfortable about carrying their stock through the approaching winter/dry season and the grazing situation for the surviving animals has improved considerably in all parts of the country.

Figure 11: Cattle Sales – Off Take KGs, 1995-2003

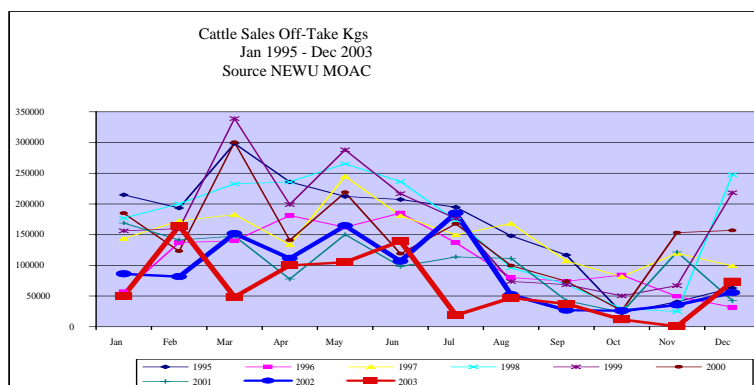


Figure 11 indicates that cattle off-take between August 2002 and June 2003 is the lowest in the data series. It provides some indicators for the estimates of ‘poor’ to ‘very poor’ levels of livestock production likely in the 2003/2004 season. Cattle condition and off-take trends perhaps highlight the significance of the cumulative

impact of several years of poor conditions on this component of livelihoods.

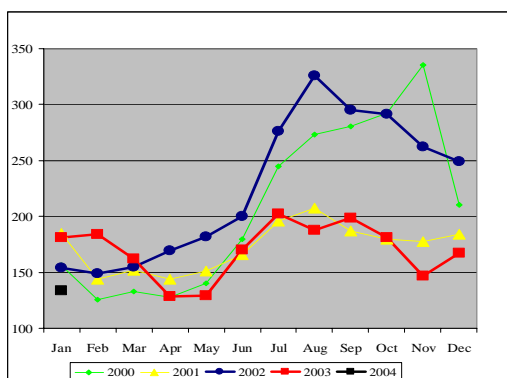


Figure 12 provides an additional indicator of the negative impact of the grazing conditions (July 2003 to Jan 2004) on total milk deliveries to Parmalat Swaziland. While not directly comparable, it is highly likely that milk production on even quite favourable SNL could be 40-60% of normal and much less in the drought affected areas.

Figure 12: Milk Deliveries (Litres) 2000 to 2004

This information plus the judgements of Swazi VAC members have been used to factor in ‘slightly depressed grazing conditions’ as a current

hazard/shock likely to affect access to income and food among rural livelihoods in 2004/5. While meat and milk prices have gradually increased over the years, the increases have been modest. Prices have not altered much in relation to the massive variability in supply.

Goats

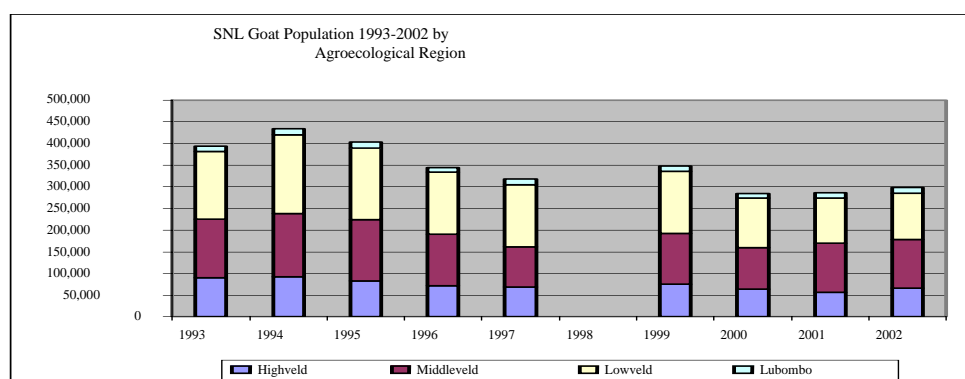
Table 3 and figure13 indicate that the number of goats found in the SNL in all agro-ecological zones has declined significantly since the mid 1990s. Goat herd numbers have fallen by about 100-130,000 head. The Lowveld has carried a large part of the overall decline registering a 30,000 fall in numbers of between 1999 and 2000. Declines are seen in all zones apart from the Lubombo Plateau.

Table 3: Goat Population Estimates 1993-2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Highveld</i>	90,470	92,462	83,608	72,121	69,500	nd	75,363	64,537	57,242	66,214
<i>Middleveld</i>	135,123	145,510	140,284	118,475	92,391	nd	117,590	95,696	112,966	112,513
<i>Lowveld</i>	155,963	181,343	164,628	143,494	143,003	nd	142,192	113,384	103,800	106,515
<i>Lubombo</i>	11,770	14,592	14,192	9,972	12,801	nd	12,798	10,202	12,318	13,107

Source: MoAC Livestock Section Statistics

Figure 13: Goat Population, 1993-2002 by Agro-Ecological Zone (SNL)



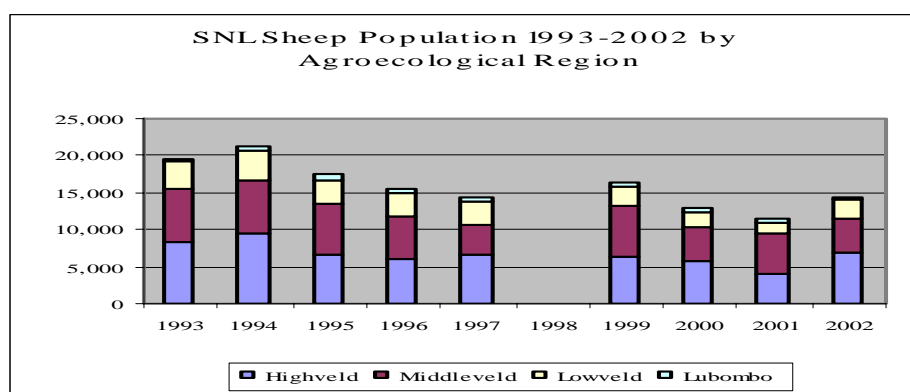
Sheep

Table 4 and Figure 14 below indicate that the number of sheep found in the SNL has also declined since the mid 1990s. The total numbers of sheep are much smaller with declines in all agro-ecological zones.

Table 4: Sheep Population Estimates 1993-2002 by Agro-Ecological Zone

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Highveld</i>	8,461	9,438	6,679	6,049	6,575	nd	6,462	5,780	3,957	6,810
<i>Middleveld</i>	7,152	7,247	6,732	5,675	3,949	nd	6,747	4,482	5,472	4,769
<i>Lowveld</i>	3,523	3,971	3,361	3,280	3,163	nd	2,714	2,164	1,501	2,400
<i>Lubombo</i>	529	676	705	448	612	nd	553	489	450	473

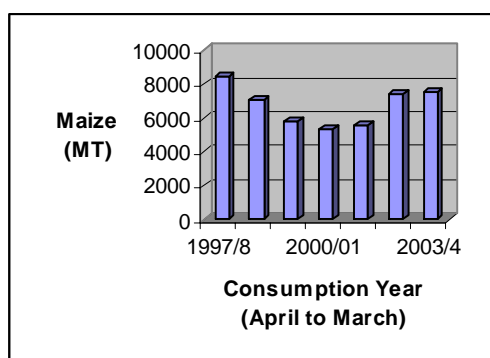
Source: MoAC Livestock Section Statistics

Figure 14: Sheep Population, 1993-2002 by Agro-Ecological Zone (SNL)

Cash Crops

Maize

Official national maize purchases as a cash crop in Swaziland have always been low. The figure below demonstrates that official maize purchase by the National Maize Corporation normally oscillates between 5,500 MT and 8,000 MT of maize per annum.

Figure 15: Annual Total Purchases of Maize by NMC From Swazi Farmers

In 2003/4 consumption year the quantity of maize purchased in Swaziland by NMC (and sold to millers for retail) accounts for only 5% of the total maize requirement for the country and approximately 10% of total maize purchased by households in Swaziland¹³. It is clear that the informal maize market is very important accounting for much higher levels of sale and purchase. Closer analysis is important if we are to have a fuller understanding of how poor people access food, particularly with a view to comprehending the impact of price changes.

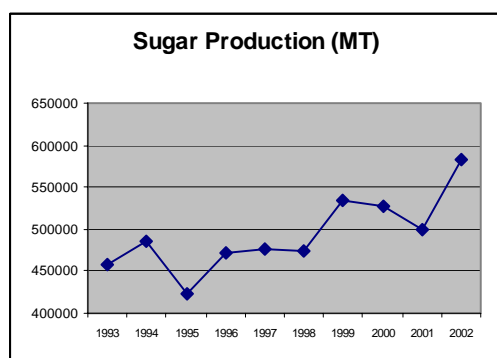
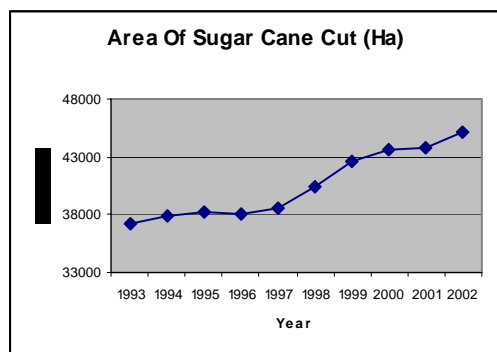
Sugar Cane

The sugar cane industry continues to be very important in the rural economy of Swaziland. Sugar cane production both in terms of land cultivated and metric tonnes of sugar have increased virtually year on year since the 1960s. However, there has been a marked increase in recent years with sugar cane production presently covering 45,126 hectares of land. The 2002 season (one of below normal

¹³ If we assume that 50% of the (NEWU) maize requirement for the country is purchased (rather than grown) because we know from the VAC livelihood baselines that 50%-60% of households countrywide access their food through purchase rather than through their own cultivation.

rainfall) produced the best quality cane yield in the previous five years.

Figure 16: Area of Sugar Cane Cut (Ha)

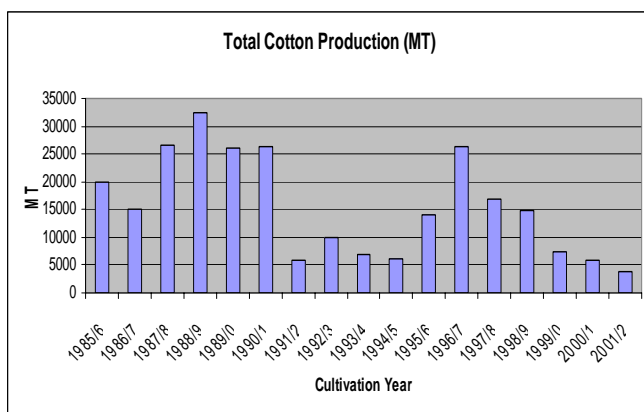


Sugar cane production is rapidly catching up the falling maize production when comparing land coverage in Swaziland. Small holder cultivation of sugar cane increased in 2002/3 to 2,718 hectares producing 259,612 MT of cane, however this only accounts for 5.6% of total production. Heavy use of water in the Lowveld by the sugar cane industry does mean that there are some significant trade-offs or opportunity costs. Other crops such as cotton or maize have received nothing like the level of production support. The comparative advantages of sugar cane should be exploited by Swazi growers but monoculture of one cash crops leaves communities and companies (and Government tax revenue) vulnerable to shocks, particularly if there is upheaval in global sugar markets. Furthermore, local casual employment level created by the sugar industry is important but employment creation by sugar cane may not be as high as other cash crops e.g. labour intensive cotton production. Local casual employment provides essential rural incomes in rural areas, and can make the difference for a household between poverty and improving living conditions.

Figure 17: Sugar Production (MT)

Cotton

Cotton production has been a significant source of income for many families in the Lowveld and Lowveld margins during the past 20 years (see figure 18). At its height, in the late 1980s and early 1990s, it is estimated that 16,000 families were directly involved in growing the crop. Given the labour intensive nature of production it provided piecework employment and income to approximately 15-20% of the rural work force. Production was land extensive up to 10-15 hectares



per grower. Yields have varied between seasons commonly undulating between 800 and 1000 KG per hectare.

Figure 18: Cotton Production (MT)

(Source: Swaziland Cotton Board)

The industry has been in a very serious decline since 1998/1999. The worst year was probably 2002/2003 when only 57 MT of cotton seeds were purchased and production was only 1,221 MT. The ‘depressed’ status of the cotton industry has undermined livelihoods in the

Lowveld, dry Middleveld, and Lomahasha areas by significantly reducing household income over the past 5 years. Yet, cotton is one of the few crops that will grow in the drier areas of the country without irrigation and farmers appear keen to grow if prevailing marketing conditions are good. There are some signs that there is likely to be a slight recovery in 2003/2004 cultivation season which could be built on given new marketing and ginnery ownership arrangements.

This year the supply of cotton seed has doubled (130.7 MT) compared to last year and it is estimated that 3,500 households have approximately 6,535 hectares under cultivation. Production this year is however characterised by late plantings and yield estimates Kg/Ha are unavailable. Farmers have received support with agro-chemicals for pest control from the Swazi Cotton Board. However, many farmers remain in debt to banks, Vunisa or the Cotton Board following failed production and credit repayments in the last few years making future production difficult. Due to late planting (in January and February) there is now the additional threat of cattle damage to unfenced crops. The crop is expected to yield a total delivery of 4,000-5,000 MT – which despite the increase compared to last year, would represent the fifth lowest level of production on record. Production will be purchased by a new partnership company (Sikhulile) made up of the Swazi cotton Board and two South African companies at a current price estimate of E3.10/Kg for deliveries made to the ginnery at Big Bend. Total deliveries are unlikely to be sufficient to justify the reopening of the ginnery this year as a threshold of 5,000-6,000 MT is the minimum delivery level for cost effective production.

Market Price Changes

Food

The upward shift in maize prices continues to undermine overall welfare and household level food access. The monitoring of maize meal prices between January 1998 and December 2003 indicates that consumers have had to face a sustained 45% increase in the price of the staple food since February 2002. The national food balance figures and the Swazi VAC livelihood profiles confirm that most rural families purchase (rather than grow) the majority of the total maize meal they consume. Much of their normal pattern of access to staple food is via purchases. The current maize meal price (2003/2004) therefore continues to seriously erode the cash income-to-staple food exchange ratio making it increasingly difficult to afford their daily maize based meal as their income to purchase the food is declining in relative terms. This situation has been factored in as a food price shock affecting household food access in the production year 2003/2004.

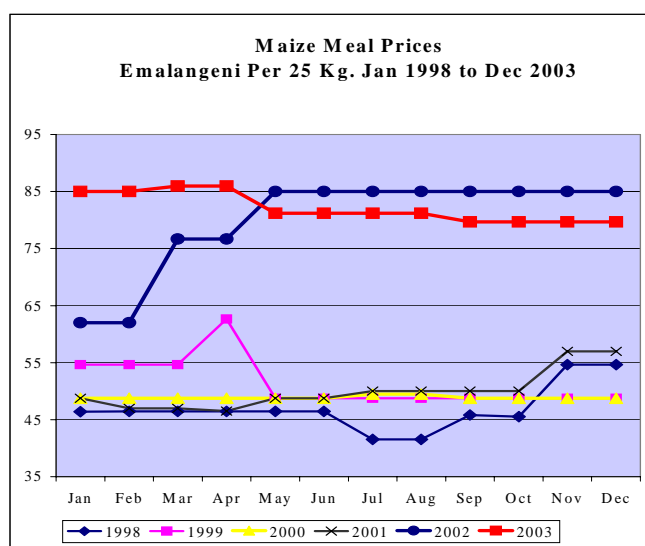


Figure 19: Official Maize Meal Prices, 1998-2003

Figure 19 presents an overview of maize meal prices over the past few years. Maize meal prices in 2002/2003 and 2003/2004 have been 45% above the five-year average (1998-2002). Communities received a major shock when there was a major increase in the maize meal price between February and May 2002. Moreover the current field assessments indicate that over the past twelve months food price inflation (maize/maize-meal, beans and cooking oil) has been about 15%. This continuing but reduced level of inflation in 2003/2004 none the less

further erodes the purchasing power of poor households, increases vulnerability and is likely to reduce access to food or (for wealthier households) increase asset sale to ensure food access.

Securing Swaziland's overall food balance situation has long required significant levels of maize, wheat and rice imports. Given the scenarios mapped out in the 'snap-shot' assessment it was a major concern to see maize prices on the South Africa Futures Exchange (SAFEX) go up from R900 in December 2003 to R1,400 in January and February as fears grew and speculation

heightened about the potential effects of the emerging drought situation in the Southern Africa Region. However, rainfall between late January and April has seen considerable softening of the effects of the drought in Swaziland and in other parts of the region. Critically, the improved outlook of the South African production forecast and the revised opening stock levels has seen the SAFEX maize price fall to R1,100 in April and to below R1,000 in May. The regional food availability picture suggests that, South Africa will be in a position to meet the anticipated levels of commercial cereal exports to meet the needs of Botswana, Lesotho, Namibia, and Swaziland in 2004/2005. However, the probable high levels of importation required to sustain food security in Zimbabwe means that regional shortages remain a possibility.

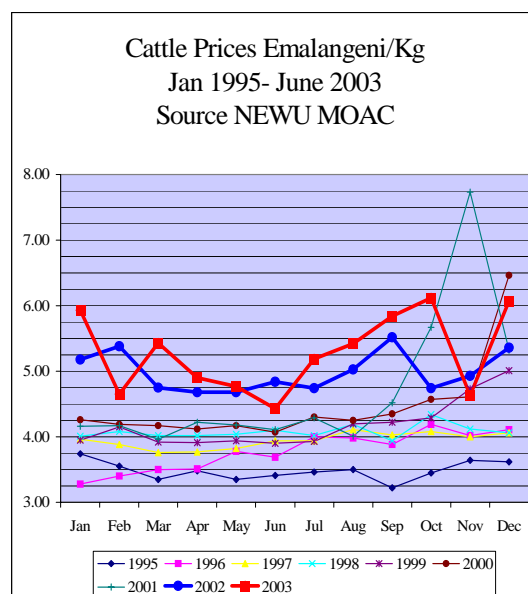
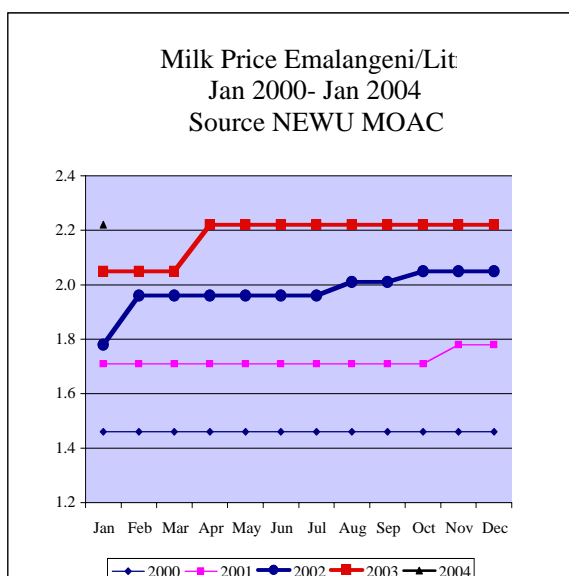
The Swazi government minimum producer price for maize in 2003/04 was E950 per 1MT. The National Maize Corporation has been buying and selling maize at E1,300 and E1,590 respectively. This is however significantly below the March 2004 prices observed in the informal sale of maize monitored by the NEWU in the four main agro-ecological regions of the country. Informal sector prices for maize are much higher partly because many households purchase in small quantities and are unable to secure economies of scale (Highveld E1800-2140, Middleveld E2140-2400, Lowveld E2860-3200 and Plateau E2200-2400). These figures support the VAC field reports that farmers with maize stocks have been reluctant to sell to the NMC because of low official prices. The other important feature to note is that the areas with the highest food prices coincide with the areas most affected during the past three years of adverse production. Informal maize prices are reported to be high in the Lowveld so that maize vendors can make up the shortfall of sale during the final week of each month (when food aid has been consumed by households). The figures also suggest that staple maize price inflation in the informal markets may be much higher than indicated in figure 19 which is based on NMC records. A more careful monitoring of informal maize markets is required.

Milk and Meat

Milk and cattle prices (see below) indicate that there have been significant increases in prices of the main livestock products of meat and milk. This has certainly acted as a cushion against inflation for those relatively better-off wealth groups selling these products. For consumers however, these meat and milk price trends contribute to the overall erosion of food access at the household level.

Figure 20: Milk Prices (Emalangeni) 2000 - 2004

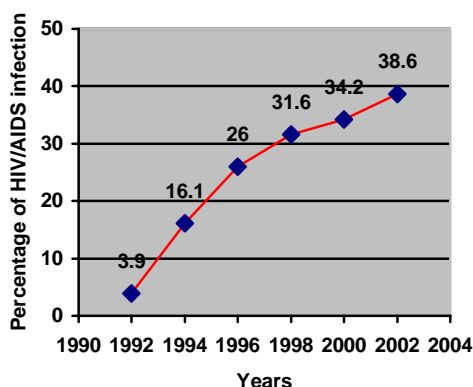
Figure 21: Cattle Prices (Emalangeni), 1995 - 2003



HIV/AIDS Pandemic

The current impact of the HIV/AIDS pandemic is exacting a very heavy burden on the population and the economy¹⁴. The prevalence rate of HIV/AIDS is now the highest in the world in 2002 – and a rapid drop in the prevalence rate is not anticipated in the near future. Increasing rates of morbidity and mortality are exacting a huge toll on the ability of households to produce food and earn income while at the same time increasing household expenditure on health and related costs. Few HIV/AIDS sufferers are able to access ante-retroviral support either because they are not available or because access/cost is prohibitive. Children are particularly affected by HIV/AIDS with an increasing number of orphans and very vulnerable child headed households resulting from the over extended kinship networks. The cost to average household income of chronic illness has not been determined in Swaziland.¹⁵ The ability of Government services to respond to the problems has been eroded by illness and mortality of Government and private sector staff¹⁶.

Figure 22: HIV/AIDS Prevalence Rates, 1992-1994 (ante-natal clinic data)¹⁷



The 2003 HIV/AIDS, demographic and livelihoods VAC survey¹⁸ in *rural* Swaziland confirmed that rates of natural increase have lessened in rural areas down to approximately 2.0% growth per annum. This reduction was not solely the result of the long-term trend of declining fertility rates in Swaziland. The death rate among the rural population was found to be high and increasing. In addition, a fair proportion of these young and normally unexpected deaths occurred after a bout of chronic illness, some indication that AIDS related complications play a determining role in the increasing death rate. These results should be seen against a backdrop of rising HIV prevalence rates as measured at selected ante-natal clinics in the country.

The survey confirmed the presence of relatively high rates of chronic illness among the rural population, even in age groups where one would normally not expect this to occur. The 2003 VAC survey in Swaziland found high rates of orphanhood among children below the age of 15 years. At present, 6% of children (totalling 19,206) aged 0-14 years are the predicted course of the epidemic, characterised by deaths among young adults, the proportion of orphaned children is set to rise in the coming years. This will have numerous social and economic implications, both on care-giving households, as well as the country as a whole. Access to education for these orphans is one determinant of whether they will be in a position to actively contribute to Swaziland society and economy as they grow older. It is important to monitor how many of these orphans are indeed regularly accessing education and build on current initiatives (by NERCHA, UNICEF and other NGOs etc.) to ensure education and health provision for these often vulnerable children.

One of the pre-survey expectations was that the study would show higher age dependency ratios at the national and sub-national levels, as a result of increasing deaths among adults. However, the

¹⁴ The National Emergency Response Committee on HIV/AIDS projects that out of a population of about 900,000, as many as 120,000 children under the age of 15 (or 16.7% of the total population) will have lost both parents. As a result of concerns by stakeholders the Swazi VAC has undertaken a national statistically based survey since June 2003 to analyse the impact of HIV/AIDS on the demography of the rural population and their livelihoods (see sources). This should be forthcoming in a matter of weeks.

¹⁵ The Swazi VAC plans to do a case study survey in the Lowveld to analyse the economic costs of HIV/AIDS on income levels.

¹⁶ A study (by MoAC et al 2002) portrays the impact of the disease on the Agricultural and Private Sector in Swaziland.

¹⁷ 8th HIV Sentinel Serosurveillance Report, Ministry of Health and Social Welfare, 2002

¹⁸ Available at: www.sarpn.org.za/documents/d0000784/index.php

results of the survey indicate that changes in the age structure, as a result of declining fertility, more than compensated for deaths among those in the most productive age groups. When taking into account household members who reported bouts of chronic illness, and thus are not likely to be productive (income earners/home makers etc.) in the usual sense, the Swaziland VAC survey found that the “effective dependency ratio” in rural Swaziland was between 20% and 35% higher than the standard dependency ratio. The effective dependency ratio will, of course, vary by area and household. Therefore individual households who lost productive members, or who took in orphans from households that have dissolved, or who have ill members, may be faced by a “dependency” crisis: children, sick members and elderly persons depending on fewer or no productive adults that may bring food and/or income into the household.

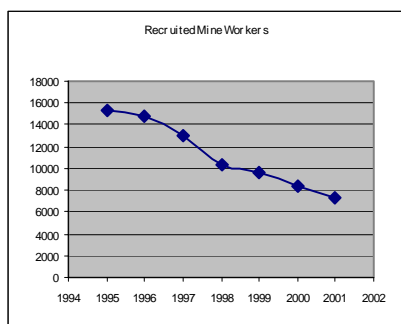
The VAC survey highlights a strong need for a demographic and health survey in Swaziland. Besides generating accurate fertility and infant mortality data, such a survey should investigate other reproductive health matters, not the least is the current use of barrier methods. This will indicate how successful current information, education and communication (IEC) campaigns are in convincing the population of Swaziland to change behaviour patterns in order to stop the epidemic from spreading any further.

Another aspect to note is the need for accurate population-based HIV prevalence data. Recent population-based surveys conducted in Zambia, Kenya and South Africa found that surveillance data may over-estimate the HIV prevalence rate in the population (ORCMacro, 2003; Shisana, et al 2003). Stronger statistical prevalence data will give more credibility to the outputs of models predicting the course of the epidemic as well as population projections.

In combination with the above shocks and hazards and the fact that this year will be the fourth in a series of bad years there are concerns about a growing and cumulative ‘humanitarian crisis’ in the worst affected areas in the country where many households are unable to sustain viable livelihoods in the face of cumulative shocks. Swaziland’s high level of income inequality ensures that a high proportion of the population is poor and constantly vulnerable to shocks. The levels of vulnerability have considerably worsened given three years of depressed food production and rural incomes¹⁹.

Employment

Employment and remittances have played a vital role sustaining rural and urban livelihoods in Swaziland and indeed are more important than many other forms of food access and income such as crop production. National employment levels have been virtually static in the public and private sectors in Swaziland. The average annual growth rate of employment in the private sector was 0.7% between 1994 and 2000 and for the same period was 1.4% for the public sector. Private and public sector employment post 2000 were predicted to decline slightly resulting in 63,201 private sector jobs and 28,646 public sector jobs in 2004. While it is difficult to obtain up to date statistics



on employment, particularly on the informal sector, it is clear that employment opportunities, while desperately important for livelihoods throughout Swaziland, have been depressed. Plans to curtail the civil service payroll are likely to reduce employment levels and remittances to rural areas further.

Figure 23: Swazis employed in SA mines

(Source: Bureau of Labour, Employment Statistics Unit, Ministry of Finance)

Employment opportunities for Swazis in South Africa have been consistently declining with far fewer Swazis employed in

¹⁹ GDP figures, at constant prices, for SNL Agricultural Crops indicate real contributions of crops 2000-2002 being 33% below their contributions 1996-98.

the South African mines. Between 1995 and 2001 there was a drop of employment by 54% and the trend has continued since 2001. As a result incomes arriving in Swazi homesteads throughout the Kingdom have been declining as miners have been retrenched. In most cases these miners have not been re-skilled and re-employed and in some cases have become a drain on household resources. Many are waiting for further (disputed) outstanding financial settlements that may or may not come.

Informal employment opportunities for rural households, most commonly as off-shoots from agricultural production (both for subsistence maize production and cash crop production such as maize, sugar cane and cotton), have been depressed. It is almost impossible to quantify informal employment opportunities in a statistical sense. However, our field studies show that four years of below normal cereal production and a collapse of the cotton industry has meant that local employment opportunities that usually ensure food security by providing income for food purchase are far fewer than they used to be. Furthermore, in many communities the wealthy households, commonly those that received remittances from miners or other labourers working in South Africa or Swaziland towns, have less disposable income to perform the role that they used to – that of employing poorer households to do agricultural weeding, herding, domestic work, purchase of mats, and many more piece-meal jobs that sustained poorer households.

Chapter 4: Assessment Outcomes²⁰

Based upon the methodology / approach outlined in chapter two a problem specification has been developed for each livelihood zone that reflects the current shocks or hazards that communities and households have had to face during the past twelve months. The problem specifications are livelihood zone specific but the outcomes for each zone disaggregate the impact by socio-economic group.²¹ Production and supply conditions as well as market access and prices are the main components that are incorporated within the problem specification. A zonal simulation is carried out using the Riskmap 1.2v computer software programme. The outcome of the simulation is a final income/food deficit or indeed surplus that represents changes in income and food access for households. Many factors contribute to and embody rural livelihoods in Swaziland and therefore this vulnerability analysis takes a livelihood based approach. Relative vulnerability of households broken down by geographic area and socio-economic group varies by the types of shocks or hazards that are in existence and the types of livelihood pursuits being undertaken by households. In order to illuminate the process two simple examples follow:

Example 1: A poor Lowveld household may rely heavily on casual labour in the agricultural sector and non-food production (e.g. mat making) and trade (e.g. brewing marula) to meet annual income/food requirements. A drought will not directly affect food access in a significant way because few crops are commonly grown by the household itself. However, employment opportunities may be depressed in the agricultural sector – reducing household income. The household will only be seriously affected if other employment markets are similarly depressed and/or markets for brewing or non-food production decline thereby substantially reducing household income and alternative coping strategies.

Example 2: If there is a better off household that relies mostly on its own farming ability to produce 40-50% of annual food needs and relies heavily on the sale of cash crops (e.g. cotton or maize) to be able to purchase the varied food stuffs (beans, vegetable oil, soup powder, salt) it requires for consumption and normal household non-food items – it will be hit very hard by a drought that reduces food crop and cash crop production. However, the overall vulnerability and deficit of the household will mostly be judged by the assets (e.g. livestock/cash savings) that the household may utilise to make up the income/food deficit and the ability of household members to turn to employment as a coping strategy to earn income. Clearly an increase in food prices will be detrimental if the household suddenly has to purchase 80-90% of its food requirements (which it normally grows on the farm), and falling livestock prices could make food security even more expensive as more cattle/goats may have to be sold to ensure food and basic household items are met.

Calculating vulnerability is a sophisticated and difficult endeavour and understanding the complexity of exchange entitlements is vital. These exchange entitlements revolve around the relative value of cash, asset prices and incomes to prices and market operations (e.g. if maize prices increase and labour rates stay the same, a poor household that relies on maize purchase from employment income for survival will suffer reduced access to food). More detailed participatory community assessments are vital as a follow up to the broad area conclusions within this report giving early warning of vulnerability. We must ensure that vulnerability at the household level is properly understood and considered by planners, particularly when it comes to targeting. Specific

²⁰ This chapter is presented assuming readers have absorbed the methodological approach in chapter 2

²¹ Based on the baseline livelihood profiles for the poor, middle and better off groups developed in the Nov/Dec 2002 VAC assessment

indices to capture HIV/AIDS within the analysis are not included but are assumed within the general trends and decline in production and market operations.

In the next section the problem specification and resulting income/food deficits are outlined for each livelihood zone (figure 24). After this table 5 goes on to provide planners with more concrete ways of analysing the income/food deficit outcomes. It provides a breakdown of the deficits by providing possible credible cash alternatives to off-set the income/food deficits. It is very easy to run the simulation with different values for maize purchase. The current analysis uses the value of E4.9 (USD 0.77) for the purchase of 1KG of maize meal in the rural areas. The basis for this value is the average from field interviews carried out by the VAC teams during the national assessment – during which answers given by respondents were cross-checked with local retail outlets. If households are able to purchase in bulk (up to 20kg tins or 50kg bags) the 1kg maize meal value will reduce because economies of scale will have been achieved. However, poor households are rarely able to purchase in bulk and thereby benefit from economies of scale.

Cash transfers (that households could use to purchase their food requirements) are incorporated as a response in order to provide decision-makers with alternatives to (the sometimes automatic reliance on) food aid in order to off-set the income/food deficits being faced the majority of the rural population. Food aid will continue to play an important role in the short to medium term to meet on-going food insecurity in the most vulnerable areas of the country. However, alleviation of chronic poverty will not be achieved by continuous distributions of food aid. Programmes that incorporate cash transfers may provide additional benefits by stimulating a multiplier effect within cash strapped communities across Swaziland. It is becoming increasingly evident in other African countries such as Ethiopia, Lesotho and Malawi that plausible ways, such as cash transfers through distribution of vouchers or other non-food welfare provision (e.g. public works programmes) may be more appropriate to support chronic poverty and chronic food insecurity. Increasingly donors and agencies are viewing these alternatives in a positive light. Table 5 is provided in order to give policy and programme decision-makers with ball-park figures so that the deficits can be understood in monetary/income terms as well as food tonnages.

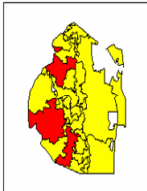
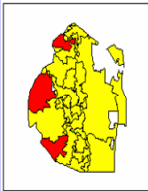
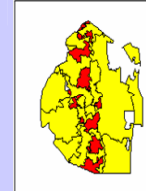
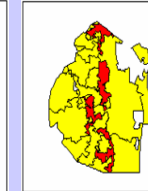
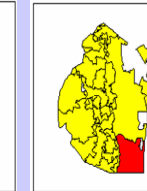
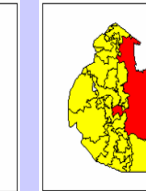
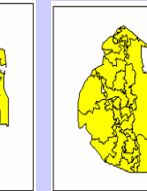
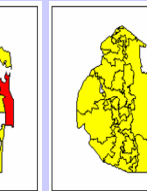
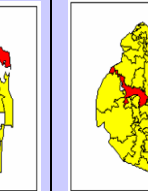
A description of the reasoning for the problem specifications is summarised for each of the nine livelihood zones after table 5. Analysis of vulnerability is based on how households normally access food and income and how these may have changed as a result of shocks during 2003/4. The problem specifications for each zone are judgements by the VAC based on a synthesised analysis of secondary data, community interviews and stakeholder consultations. Each of the zonal reports concludes with a summary of the problem specification and breakdown of income/food deficit by wealth group. The simulation has resulted in a histogram for each livelihood zone showing the 'final result' of the May 2004 simulation. The graph indicates how the estimated income/food deficit 2003/2004 is distributed across the wealth groups. The first decile represents the poorest and the tenth decile represents richest top 10%. (NB the population in each decile is equal to one tenth of the base population in each area.) It is important to note that the simulation takes no account of the use of cash savings or the bartering of other highly disposable cash-like assets for lack of any credible evidence. These coping mechanisms in addition to shifting /reducing expenditure from other areas (such as health, education and other areas of consumption such as clothing etc.) will play a role in offsetting the assessed deficits especially for middle and better-off groups.

The income/food deficits that result from the simulation vary quite considerably by socio-economic group in several zones and planners should take note. Only the mean figure for each zone is included in figure 24. In most instances a more **accurate** picture can be understood by studying the wealth group breakdowns for each livelihood zone.

Figure 24: Income/food deficits for populations by Livelihood Zone

Overall Income/Food Deficits – All Zones

Swaziland VAC Annual Vulnerability Assessment - May 2004

		1	2	3	4	5	6	7	8	9
Livelihood Zone		Highveld Maize & Cattle	Timber Highlands	Wet Middleveld	Dry Middleveld	Lowveld Cattle & Cotton	Lowveld Cattle, Cotton & Maize	Lubombo Plateau	Lomahasha Trading & Arable	Peri Urban Corridor
	Location									
Rural Pop 1997 @ 2.4%/Annum		162,000	85,000	126,000	135,000	44,000	157,000	23,000	26,000	71,000

Current Hazards/Shocks

Production & Supply

Changes in "normal" production and supply conditions Index 100=Normal (Index range 0-300)

Food Crops	50-60%	50-60%	50-60%	50-60%	20-30%	30-40%	50-60%	0-20%	50-60%
Grazing	80-90%	80-90%	60-70%	70-80%	70-80%	70-80%	90-100%	80-90%	70-80%
Wild Foods	50-60%	50-60%	70-80%	50-60%	50-60%	70-80%	50-60%	50-60%	80-100%
Relief/Gifts	30-40%	30-40%	40-50%	30-40%	30-40%	30-40%	30-40%	30-40%	80-100%
Cash Crops	20-30%	30-40%	50-60%	30-40%	0-10%	30-40%	70-80%	0-20%	50-60%

Access to Markets

Changes in "normal" market access - Index 100=normal (or one of 5 categories of depressed market access 75-100, 50-75, 25-50, 0-25 and 0)

Employment	50-75%	50-75%	75-100%	50-75%	25-50%	50-75%	50-75%	50-75%	100%
Livestock	75-100%	75-100%	75-100%	50-75%	50-75%	100%	100%	75-100%	75-100%
Cash Crops	75-100%	75-100%	75-100%	75-100%	75-100%	75-100%	75-100%	50-75%	75-100%
Non-food Production	75-100%	50-75%	50-75%	75-100%	50-75%	75-100%	100%	50-75%	75-100%
Trade	100%	75-100%	100%	75-100%	50-75%	75-100%	100%	50-75%	100%
Food Purchase / availability	100%	75-100%	100%	100%	75-100%	100%	100%	75-100%	100%
Food Price	125%	125%	125%	125%	125%	125%	125%	125%	125%

Outcomes

Income/food deficit - after using available coping/response strategies

% of pop with an income/food deficit	20%	100%	70%	70%	100%	100%	10%	100%	100%
Affected Population	32,400	85,000	88,200	94,500	44,000	157,000	2,300	26,000	71,000
Mean annual income / food deficit	19%	36%	27%	35%	27%	33%	13%	32%	18%

Table 5: Income/food deficits broken down by SEG off-set by cash transfer and food support options

NB: Calculations use 400gms/pers/day in order to allow comparison with the CFSAM. Also, 1MT maize meal (local rural prices) = 762USD

		Poor Wealth Group														
No.	Livelihood Zone	Total Population	Est % of total Pop is 'poor'	Est Total Poor Pop	Affected Poor Population	X	Estimated Income / Food Deficit 2003 / 2004	=	Income / Food Deficit (MT)	or	Total Income Transfer US \$ (using current rural purchase prices of maize meal per Kg of US \$ 0.76)	or	Total Income Transfer required per affected person in US \$	or	Total Income Transfer required per affected Family of 6 persons in US \$	
1	Highveld Maize & Cattle	162,000	38%	61,560	12,312	X	19%	=	342	or	\$260,250	or	\$21.14	or	\$126.83	
2	Timber Highlands	85,000	33%	28,050	28,050		34%	=	1,392	or	\$1,061,010	or	\$37.83	or	\$226.95	
3	Peri Urban Corridor	71,000	31%	22,010	22,010		12%	=	386	or	\$293,839	or	\$13.35	or	\$80.10	
4	Wet Middleveld	126,000	48%	60,480	60,480		30%	=	2,649	or	\$2,018,556	or	\$33.38	or	\$200.25	
5	Dry Middleveld	135,000	48%	64,800	64,800		39%	=	3,690	or	\$2,811,561	or	\$43.39	or	\$260.33	
6	Lowveld Cattle, Cotton & Maize	157,000	29%	45,530	45,530		35%	=	2,327	or	\$1,772,856	or	\$38.94	or	\$233.63	
7	Lowveld Cattle & Cotton	44,000	48%	21,120	21,120		45%	=	1,388	or	\$1,057,339	or	\$50.06	or	\$300.38	
8	Lomasha Trading & Arable	26,000	28%	7,280	7,280		37%	=	393	or	\$299,668	or	\$41.16	or	\$246.98	
9	Lubombo Plateau	23,000	26%	5,980	644		13%	=	12	or	\$9,314	or	\$14.46	or	\$86.78	
		829,000		316,810	262,226				12,578		\$9,584,393					
		Middle Wealth Group														
No.	Livelihood Zone	Total Population	Est % of total Pop is 'middle'	Est total middle Pop	Affected Middle Population	X	Estimated Income / Food Deficit 2003 / 2004	=	Income / Food Deficit (MT)	or	Total Income Transfer US \$ (using current rural purchase prices of maize meal per Kg of US \$ 0.76)	or	Total Income Transfer required per affected person in US \$	or	Total Income Transfer required per affected Family of 6 persons in US \$	
1	Highveld Maize & Cattle	162,000	41%	34,850	0	X	0%	=	0	or	\$0	or	\$0.00	or	\$0.00	
2	Timber Highlands	85,000	56%	90,720	90,720		37%	=	4,901	or	\$3,734,329	or	\$41.16	or	\$246.98	
3	Peri Urban Corridor	71,000	47%	33,370	33,370		20%	=	974	or	\$742,496	or	\$22.25	or	\$133.50	
4	Wet Middleveld	126,000	40%	50,400	27,720		24%	=	971	or	\$740,137	or	\$14.69	or	\$88.11	
5	Dry Middleveld	135,000	40%	54,000	29,700		30%	=	1,301	or	\$991,255	or	\$18.36	or	\$110.14	
6	Lowveld Cattle, Cotton & Maize	157,000	51%	80,070	80,070		31%	=	3,624	or	\$2,761,464	or	\$34.49	or	\$206.93	
7	Lowveld Cattle & Cotton	44,000	35%	15,400	15,400		9%	=	202	or	\$154,195	or	\$10.01	or	\$60.08	
8	Lomasha Trading & Arable	26,000	53%	12,190	12,190		35%	=	623	or	\$474,657	or	\$38.94	or	\$233.63	
9	Lubombo Plateau	23,000	58%	15,080	0		0%	=	0	or	\$0	or	\$0.00	or	\$0.00	
		829,000		386,080	289,170				12,597		\$9,598,533					
		Better Off Wealth Group														
No.	Livelihood Zone	Total Population	Est % of total Pop is 'better off'	Est total better off Pop	Affected Better Off Population	X	Estimated Income / Food Deficit 2003 / 2004	=	Income / Food Deficit (MT)	or	Total Income Transfer US \$ (using current rural purchase prices of maize meal per Kg of US \$ 0.76)	or	Total Income Transfer required per affected person in US \$	or	Total Income Transfer required per affected Family of 6 persons in US \$	
1	Highveld Maize & Cattle	162,000	21%	17,850	0	X	0%	=	0	or	\$0	or	\$0.00	or	\$0.00	
2	Timber Highlands	85,000	11%	17,820	17,820		34%	=	885	or	\$674,054	or	\$37.83	or	\$226.95	
3	Peri Urban Corridor	71,000	22%	15,620	15,620		24%	=	547	or	\$417,061	or	\$26.70	or	\$160.20	
4	Wet Middleveld	126,000	12%	15,120	0		0%	=	0	or	\$0	or	\$0.00	or	\$0.00	
5	Dry Middleveld	135,000	12%	16,200	0		0%	=	0	or	\$0	or	\$0.00	or	\$0.00	
6	Lowveld Cattle, Cotton & Maize	157,000	20%	31,400	31,400		33%	=	1,513	or	\$1,152,793	or	\$36.71	or	\$220.28	
7	Lowveld Cattle & Cotton	44,000	17%	7,480	7,480		11%	=	120	or	\$91,538	or	\$12.24	or	\$73.43	
8	Lomasha Trading & Arable	26,000	19%	4,370	4,370		15%	=	96	or	\$72,926	or	\$16.69	or	\$100.13	
9	Lubombo Plateau	23,000	16%	4,160	0		0%	=	0	or	\$0	or	\$0.00	or	\$0.00	
		829,000		130,020	76,690				3,161		\$2,408,372					
						TOTAL MT		=	28,335	or	\$21,591,299	or	129,547,792	Emalangeneni		

Highveld Maize and Cattle Livelihood Zone

Livelihood Patterns

High maize production levels are common in the Highveld Maize and Cattle (HMC) zone. Production is usually greater than any other areas because rainfall is conducive and usually fairly reliable in quantity and quality. Even during drought seasons, this zone has been able to produce surpluses although production may be considered to be below normal. People in this zone predominantly depend on crop production and purchases as their main food sources. The poor wealth group gets 10-15% of their food needs through crop production and 35-45% through purchases. Wild foods and gifts and relief contribute about 10-15% and 15-20% respectively. For the middle wealth group own crop production and purchases contribute 20-35% of their food needs and meat/milk contribute about 15-25% of their needs. The better off wealth group are also dependent on their own production, meat/milk production and food purchases combining as the main food sources (at 30-40%, 15-25% and 35-45% respectively).

Most poor people in this zone depend on employment/remittances as their main source of income but non-food production and trade also make important contributions to overall income (poor: 35-40%, middle & better off groups: 20-35%). Livestock and cash crop sales play an important role as an income source, particularly for the middle (10-25% and 20-35%) and better off groups (20-25% and 20-30% respectively).

Current Situation

While production is expected to be below normal this cropping season, it is still the highest in all the livelihood zones in quantitative terms. Overall land area put to maize is much lower than normal. Food production is projected to be at 50-60% of normal in this zone although the vast majority of this production will be by the middle and the better off wealth groups. The poor on the other hand are anticipated to produce very little maize or nothing at all. This is attributed to the late start of the season because of below normal rainfall between September and December and the succession of unsuccessful replanting attempts during this critical planting period. Most poor farmers were unable to afford successive replanting. Lack of inputs (because of their high cost) contributed to the low production with difficulties accessing tractors being reported as common. Ploughing at the optimum time is essential and it was reported that tractors would be available late when soil moisture was reduced thus limiting germination prospects.

Cash crop production is expected to be very low at 20-30% of normal. Difficult climatic conditions forced farmers to concentrate on production for their own consumption before production for sale. Maize is the only major cash crop in the zone and it was greatly affected by the abnormal rainfall pattern during the first half of the winter season. Furthermore, March and April are usually months with increasingly sparser rainfall to accommodate the drying of the maize cobs, but a high level of precipitation during these months in 2004 has caused cob rot among the maize plants reducing yield expectations.

In November and December a total of over 2000 cattle deaths were recorded in this zone due to lack of grazing areas and drinking water. However, livestock and grazing area conditions have improved a great deal following the rainfall in the first three months of 2004. Overall rainfall levels remained below the long term average in January and February. Only in March did current year rainfall exceed the long term average. The livestock that survived the dry period are now enjoying the benefits of these late rains. Gifts / relief have recorded normal levels. This is because in this zone, they are not a prominent feature as such this season is not different from the others.

Access to Markets and Prices

The employment market has been affected and is judged to be between 50-75% of normal. This is due to the closure of mines and industries both locally and in South Africa. This closure has resulted in retrenchments which meant a significant decline in access to income to cater for food purchases. The few operating industries, particularly textile industries have an uncertain life-span as retrenchments can occur suddenly and sustainability of industries is not ensured. Casual labour markets have also been in decline due to declining demand from the agricultural sector. The livestock market has been affected and is considered to be 75-100% of normal due to the fact that the market price is not demand driven. Livestock markets and livestock purchasers do not come so close to communities anymore, forcing sellers to take their livestock further or sell locally for unsatisfactory prices. The non-food production market is also slightly depressed. The market is affected by low availability of natural resources (e.g. grasses) caused by the irregular rainfall patterns. Cash crops markets (and in particular maize) is affected by poor marketing conditions. Records show that on-farm storage has been high with low levels of sale to NMC because of low prices. However, informal maize marketing systems such as sale to the Lowveld have continued driven by higher maize purchase prices. Trade and food purchase markets have not changed and are still operating normally.

Food prices have increased slightly with recordings of 125% of normal due to the fact that local traders charge prices determined by them incorporating the transport costs, whole prices etc. and transport costs have been increasing. Livestock prices have also increased slightly due to various factors such as good livestock condition due to improved grazing areas, weight and breed of the livestock will trigger an improved price for sellers.

Community Priorities

Water and employment were the two main priorities for communities in the zone. Improved water access is required for domestic and irrigation purposes. Currently the communities are using water from dams and rivers for domestic purposes which is subjected to pollution resulting in disease out-breaks as livestock utilise the same water sources. Access to water for irrigation purposes will assist during drought periods to sustain their crop yields. The communities have developed income generating schemes such as poultry and bee keeping and handicraft, and have approached government through the development fund to kick-start income generation projects with financial support. They have also raised funds to contribute to capital costs of drilling boreholes and have approached NGOs for assistance. Communities feel that government is better placed to assist them with capital projects however NGO's are quick in response.

Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	50-60%	80-90%	50-60%	30-40%	20-30%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	75-100%	75-100%	75-100%	100%	100%	125%

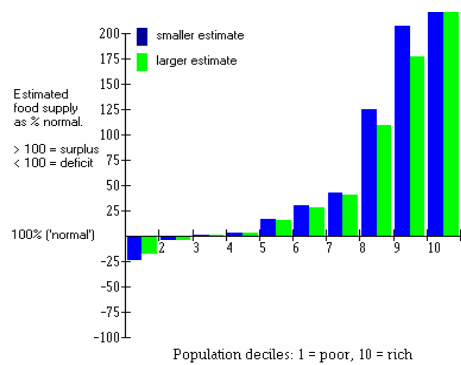
NFP = Non-Food Production

Zone Outcome

The **poor** in the HMC normally derives their food access from food crops (13%), meat/milk (7%), fishing (7%), wild foods (13%), gift /relief (18%) and purchases (41%). These total 100% of the requirement. As a consequence of the shocks and hazard impacts specified for the 2003/2004 year the simulation has estimated the outcome for the year to be - food crops (8%), meat/milk (6%), fishing (7%), wild foods (7%), gift/relief (7%) and (due to losses in cash income and food price inflation) purchases have fallen (30%). These total only 65% of requirements. This defines an initial "crude deficit" of 35% of total food access. The simulation then systematically assesses the impact of all eight possible coping strategies on reducing this initial 'crude deficit'. Seeking additional employment was the only coping strategy that managed to reduce the deficit by 10% to 25%. Re-distribution of income and food to poor households contributed a further 6% **leaving a**

final result of 19%. Interventions that are able to increase the supply of employment available to the poor would strengthen their main coping strategy.

The **middle** and **better-off** households in the HMC did not incur any deficits this year.



Timber Highlands Livelihood Zone

Livelihood Patterns

Livelihoods in this zone are highly influenced by employment levels offered by the forestry companies. The main sources of food are own crop production, purchases and milk/meat. The poor get 10-15% of their food from cultivation of their own crops while the middle and rich groups get 30-50% and 20-60% respectively. Milk/meat contributes more to the middle and rich groups as sources of food than the poor group because they have access to livestock assets. Purchases are also prominent particularly in the poor group as farming production is low (40-60%), while the middle and rich groups get 30-40% and 25-40% of their food through purchases respectively. High purchase levels make households vulnerable to food price increases. Wild foods also contribute to food needs in this zone especially for the poor and middle groups (10-20% and 10-15% respectively).

Sources of income are highly dependent on employment/remittances and sale of cash crops and therefore dips in the employment and cash crop markets can be a problem especially when combined with an increase in food prices. For the poor group, 50-80% of their income comes from employment/ remittances while the middle and rich groups get 25-45% and 15-35% respectively. Income to households from cash crop sales contributes 25-45% for the middle and 30-40% for the rich. Contribution of income from sale of livestock varies within the groups from 10-15% for the poor (mostly chickens), 5-10% for the middle and 10-20% for the better off.

Current Situation

Crop production will be below normal for this zone due to the delayed and sub-normal rainfall pattern which resulted in less than the normal area planted and some failed crops. Replanting was possible for those farmers that had the resources for additional inputs. Significant numbers of households did not re-plant because they had lost hope that reasonable rains would occur and the season was somewhat advanced by the time the rains finally arrived. Furthermore, difficult access to tractors and other inputs at optimal planting times is cited by farmers to have reduced production. Yields have been negatively affected by the high rainfall during March and April when increasingly dryer conditions are required to support the maize drying process before harvesting and storage.

Cash crops in this zone include maize, vegetables and sweet potatoes. Production is expected to be at 30-40% of normal. This is attributed to the high rainfall which has damaged the maize crop and made vegetable yields almost zero. Sweet potato production on the other hand, has become more popular due to low input costs and easier production. Wild food production is low compared to normal due to the increases in forestry production and construction of roads and dams and below normal rainfall. Gifts and relief are below normal. Communities state that free gifts between households and families are reducing as wealth levels decrease and community social safety nets are increasingly under pressure. Livestock and grazing area condition are much recovered compared to the early season at 80-90% of normal with a slight depression due to the low overall rainfall received in the Highveld.

Market Access & Prices

Employment is 50-75% of normal because the textile factories that started operating in 2000/2001 are mostly closed and the ones that continue to operate have retrenched many of their staff and future prospects are uncertain. The closure of mines and retrenchment by the forest companies also had a negative impact on the employment market. Non-food production is 50-75% of normal due to shortage of raw materials (e.g. grasses) which are normally rain-fed. Livestock, cash crop, other trade and food purchases markets are slightly below normal. A foot and mouth outbreak affected livestock markets in some areas. The food prices show an increase due to

excess demand against supply and low level sale of maize stocks. Livestock prices have increased slightly because of their improved condition and reduced supply because of cattle losses through the recent food and mouth disease outbreak.

Community Priorities

The main problems communities cited in this zone are employment, health, agriculture and water. The communities were keen to engage in new income generation and employment opportunities that may come from NGOs or Government. Most communities are far from their nearest hospital. In the advent of HIV/AIDS and increasing illness in the communities, it was reported that hospitals have become more important but are no longer able to admit patients. The hospitals prefer outpatient care but transport costs are large for regular visits. A greater number of local clinics were desired by communities that can offer the appropriate services. Access to agricultural inputs was also cited as difficult, particularly because of associated transport costs. Farmers have to travel independently on buses to carry fertiliser and seeds and several journeys may be required. Communities wish to see agricultural input storage facilities and outlets closer to them. The communities state they lack clean domestic water as they use water from rivers and dams which are not hygienic and may be polluted. Dam construction for irrigation was also suggested to be important to mitigate the impact of dry periods in the cultivation season.

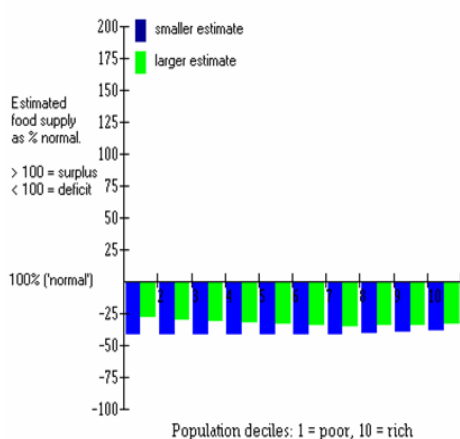
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	50-60%	80-90%	50-60%	30-40%	30-40%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	75-100%	75-100%	50-75%	75-100%	75-100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** in the TH normally derives their food access from – food crops (14%), meat/milk (2%), fishing (4%), wild foods (16%), gift/relief (8%) and purchases (56%). The simulation has estimated the outcome for the year to be - food crops (8%), meat/milk (1%), fishing (4%), wild foods (9%), gift/relief (3%) and purchases at (33%). This adds up to only 58% of requirements or an initial “crude deficit” estimate is 42% of total food access. The simulation then systematically assesses the impact of coping strategies on reducing this initial ‘crude deficit’. Again seeking additional employment was the only coping strategy that managed to reduce the deficit by 8% **to a final result of 34%.**



The **middle** wealth group in the TH normally derives their food access from – food crops (33%), meat/milk (17%), fishing (3%), wild foods (11%), gift/relief (3%) and purchases (33%). The simulation has estimated the outcome for the year to be - food crops (17%), meat/milk (15%), fishing (3%), wild foods (6%), gift/relief (2%) and purchases (11%). This totals only 54% of requirements or an initial “crude deficit” estimate of 46% of total food access. The simulation then systematically assesses the impact of coping strategies on reducing this initial ‘crude deficit’. Again seeking additional employment was the only coping strategy that managed to reduce the deficit by 9% **to a final result of 37%.**

The **better-off** wealth group in the TH normally derives their food access from – food crops (47%), meat/milk (21%), gift/relief (2%) and purchases (30%). The simulation has estimated the outcome for the year to be - food crops (25%), meat/milk (18%), gift/relief (2%) and purchases at

(12%). This totals only 57% of requirements or an initial “crude deficit” estimate is 43% of total food access. The simulation then systematically assesses the impact of coping strategies on reducing this initial crude deficit. Again seeking additional employment was the only coping strategy that managed to reduce the deficit by 9% **to a final result of 34%**.

The livelihoods of all relative wealth groups in the Timber Highlands appear to be vulnerable to the shocks of food price inflation and to the declining employment opportunities. That said their only main coping strategy is to attempt to increase their supply of labour to off-set their deficit purchasing power and reduced food crop production. Interventions that are able to increase the supply of employment available or the real wages in the industry would improve the situation of forestry workers.

Peri-Urban Livelihood Zone

Livelihood Patterns

Livelihood patterns within the Peri-Urban Corridor are quite diversified, reflecting the increase in formal and informal opportunities to access income and food. Despite the close proximity to markets, crop production by households still plays an important part in annual food access for all socio-economic groups but especially the middle and better off. Milk and meat products (from their own livestock) are more important for poorer groups than in other zones. Purchase of food is important for all groups ranging mostly from 30-50% of annual food requirements for households. Income types are highly diversified because of the close proximity of marketing opportunities. Employment / remittances (both formal and informal), livestock sales, cash crop, non-food production and other trading activities all combine to form the core of livelihood and food access in the zone. Livestock and cash crops contribute in a smaller way to the poor groups' income pattern than to the middle and better off groups.

Current Situation

Overall maize production in the zone is judged to be below normal. Some households have been able to cultivate while many others have faced production constraints. Most households faced maize cultivation difficulties during the dry period up to December and uncertainty about the weather conditions in general has limited overall land cultivated. Poorer households have been suffering from lack of access to inputs. Some of the maize successfully germinated during November and December has suffered from the high moisture levels in March resulting in cob rot. Maize remains the dominant crop in the zone with few families engaging in bean production. Late and heavy rains have detrimentally affected the bean harvest of those households that took the opportunity.

The reduction in size of landholding available for households is the limiting factor in the production of maize, particularly as a cash crop. Urban / peri-urban pressures in the zone mean that available land is increasingly being utilised for construction of settlements. The quantity of land available for arable agriculture is reducing. Furthermore, land is also being taken up for road construction and other infrastructural developments such as electricity and thereby reducing the land available for grazing by livestock. Grazing has also been affected by the Chromolena weed (Sandanezwe). It was stated that, if the situation was not tackled, the grazing land that is currently available would be made redundant in five to ten years because of the weed. Overall the condition of livestock is much improved since January because of the good level of rains and improving pastures.

Market Access & Prices

Access to markets and levels of formal and informal employment are central to the economic and social welfare of the zone. The employment situation is judged to be normal. A much smaller percentage of jobs and income is earned from agriculturally based jobs than in other zones e.g. in the Lowveld and therefore the zone has been less affected by the downturn in agricultural production. Livestock markets were affected by the poor condition of cattle in the last few months of 2003, however the much improved condition of cattle has enhanced the marketing situation considerably. Access to official cattle sale yards provides a fair platform for buyers and sellers with sale based on the weight of animals. Demand for meat from the urban areas ensures a virtually constant demand for livestock. Cash crop markets and maize markets in particular have been affected by recent swings in the official price of maize between 2002 and 2004. Previously high prices (in 2002) encouraged increased production but prices were not sustained during 2003 and the NMC reduced its purchasing price by approximately 35% by 2003.

On farm stocks were high as farmers retained their maize in anticipation of higher maize prices and subsequently some maize has been lost because of poor storage practices. Non-food

production is slightly depressed because of below normal rainfall affecting natural resources. Trading activities and food markets were judged to be operating normally.

Food prices were judged to have increased by 25% compared to normal. Livestock prices have increased by as much as 20% when compared to April 2003.

Community Priorities

Access to water for irrigation purposes was cited as the main problem affecting communities. Even in areas where water was available, access was often not possible. Communities expressed a wish to grow high value cash crops such as vegetables and possibly dry season maize. Lack of cooperation and organisation among local government was cited by the community as one limiting factor. It was felt that the Rural Water Supply Branch could help solve some of these problems. Lack of initiative within the community, particularly amongst poorer groups was thought to contribute towards the lethargy.

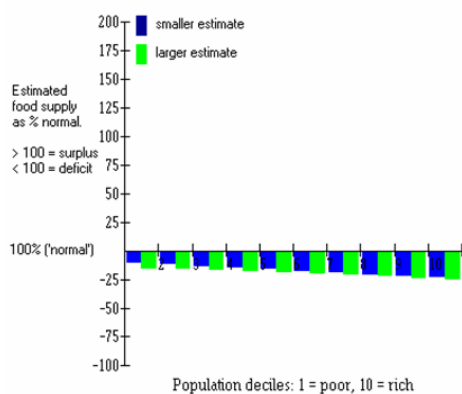
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	50-60%	70-80%	80-100%	80-100%	50-60%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	100%	75-100%	75-100%	75-100%	100%	100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** wealth-group in the PUC normally derives their food access from – food crops (15%), meat/milk (13%), fishing (8%) wild foods (13%), gift/relief (8%) and purchases (43%). The simulation has estimated the outcome to be - food crops (8%), meat/milk (10%), fishing (8%), wild foods (12%), gift/relief (7%) and purchases (38%). This sums up to 83% or an initial “crude deficit” estimate is 17% of total food access. Employment coping strategies reduced the deficit by 5% to a **final result of 12%**.



The **middle** wealth-group normally derives their food access from – food crops (27%), meat/milk (19%), fishing (2%), wild foods (8%), and purchases (44%). The simulation has estimated the outcome for the year to be - food crops (16%), meat/milk (14%), fishing (2%), wild foods (7%), and purchases at (35%). This sums up to 74% or an initial “crude deficit” estimate is 26% of total food access. Employment coping strategies managed to reduce the deficit by 6% to a **final result of 20%**.

The **better-off** wealth-group normally derives their food access from – food crops (36%), meat/milk (26%), wild foods (2%), and purchases (36%). The simulation has estimated the outcome to be - food crops (20%), meat/milk (19%), wild foods (2%), and purchases at (28%). This sums up to 69% or an initial “crude deficit” estimate is 31% of total food access. Employment coping strategies reduced the deficit by 7% to a **final result of 24%**.

Wet Middleveld Livelihood Zone

Livelihood Patterns

This zone exhibits some ecological differences due to variation in altitude (600-800m) and levels of rainfall. This is an important maize producing area rivalling the Highveld in productivity. Drought hazard (for maize production) in any one year is probably in the range of 20-30%. The zone contains around one-sixth of the country's rural population and presents a varied display of primary smallholder production, livestock rearing and non-agricultural employment.

For both better-off and middle wealth groups maize is by far the biggest food and cash crop, whilst the poor are more often seen as labourers working for others. The wealthier groups are estimated to normally provide 40-50% of their staple food needs from their own crops. Wage and salaried employment is more or less confined to these two groups. The ownership of cattle is strong in both groups – 20-30 and 5-10 head respectively, although some amongst the better-off own more than 100 head.

Most poor households have access to land and have significantly larger average family size. They generally have a maize harvest of 1-5 bags, grown on 0.5-1 hectare. Own food production contributes 10-15% to staple consumption. They do not normally sell any crops. The poor do not own any cattle or goats but only a few chickens. Employment (mainly daily labour and seasonal), contributes 50-65% to their income. Non-food production (mainly handicraft, beer brewing, sale of wild foods and poles) contributes 25-40% to income. Trade contributes a further 5-15% of their income.

Current Situation

The current cropping season has experienced a significant reduction in the production of the staple maize crop. The late and patchy start to the rains has been a major factor. Other issues affecting production include shortages of draught power, the high cost of farming inputs and the lack of support from extension services. The production of other food crops such as sugar beans, sweet potatoes and pumpkins is on a much smaller scale. Maize doubles up as the main cash crop and this year saleable maize production is expected to be 50% of normal. Pastures have not developed well this summer and have a low nutritive value. Livestock production is therefore expected to be depressed and below normal. In addition there appears to be limited adherence to rotational grazing practices as the fencing arrangements (in the areas visited) are in poor condition.

Market Access and Prices

The scale of farming activities of middle and better-off farmers normally generates opportunities for casual agricultural wage employment – in weeding, harvesting and in storage operations. Given the production levels for maize this year, trade in casual agricultural wage labour is estimated to be 75% of normal. Concerning livestock trade, cattle sale yards are widely distributed and utilized in this zone. However as a result of the poor quality of cattle linked to the poor grazing conditions, trade in livestock is considered to be 75% of normal. The current maize cash crop market appears to be limited to local sales where farmers secure a better price per Kg than official sales to NMC but face low quantity of sales. The cash crop trade is therefore considered to be operating at 75% of normal. The trade in non-food production is quite depressed – especially for crafts dependent upon special grasses that are in short supply. The Wet Middleveld appears to have normal petty trade and food purchase trading activities in 2003/04. Many areas have close proximity/access to urban centres and are able secure sufficient regular supplies of stock. Food price inflation over the period 2002/2003 and 2003/2004 is estimated to be about 10% and 25% compared to normal. The price of cattle over the same period has gone up by 20%.

Community Priorities

The communities interviewed emphasized water supply developments, gardening schemes, access to health and general infrastructure development. The communities identified poor support by local government staff as a major factor inhibiting development.

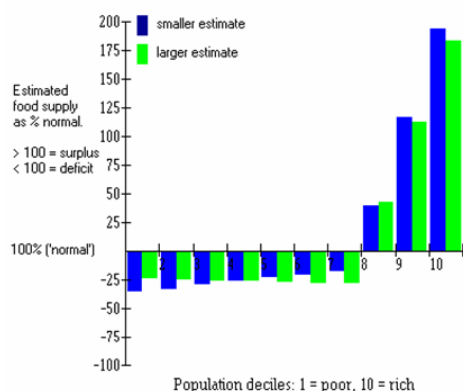
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	50-60%	60-70%	70-80%	40-50%	50-60%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	75-100%	75-100%	75-100%	50-75%	100%	100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** in the WM normally derive their food access from – food crops (13%), meat/milk (2%), wild foods (6%), gift/relief (26%) and purchases (53%). The simulation has estimated the outcome for the year to be - food crops (7%), meat/milk (2%), wild foods (3%), gift/relief (12%) and purchases at (39%). This sums up to 63% of requirements or an initial “crude deficit” estimate is 37% of total food access. Coping strategies of seeking additional employment managed to reduce the deficit by 4%, additional other trade by 2% and redistribution within the community reduced the deficit by a further 1% to a **final result of 30%**.



The **middle** wealth-group normally derives their food access from – food crops (44%), meat/milk (19%), wild foods (2%), gift/relief (2%) and purchases (33%). The simulation has estimated the outcome for the year to be - food crops (24%), meat/milk (12%), wild foods (2%), gift/relief (2%) and purchases at (23%). This sums up to 63% of requirements or an initial “crude deficit” estimate is 37% of total food access. Use of food stocks reduced the crude deficit by 5%, seeking additional employment managed to reduce the deficit by 4% and additional other trade reduced it a further 4% to a **final result of 24%**.

The **better-off** households in the WM did not incur any deficits this year.

Dry Middleveld Livelihood Zone

Livelihood patterns

This area exhibits agricultural production features that fall between the more productive Wet Middleveld and more drought-prone areas of the Lowveld. Drought hazard for maize production is quite high - in the range of 40-60%. None-the-less maize provides the main staple food crop even in the relatively less productive areas of this livelihood zone. Low yields result from the use of hybrid maize seed and the erratic/non-use of inputs by an increasing number of poor farmers who currently make up 50% of all households in this area. Purchased food makes up a high percentage of their food in-take. This in turn results in a high dependence on casual and other employment. Communities in this zone are sensitive to losses of purchasing power linked to the terms of trade for their staples and the relative price of maize. Middle and better-off wealth groups are estimated to have three to five times the income of the poor. A typical “better-off” household would be made up of 5-10 persons, has control over 2-6 ha of land, owns 8-20 cattle and 15-30 goats. The “middle” household has 8-12 persons, 2-3 ha of land, 6-8 cattle and 10-15 goats. In comparison a “poor” household typically has 9-12 persons but only cultivates 0.5-2 ha of land and has 0-1 cattle and 2-5 goats.

Coping strategies for the better-off and middle wealth groups will include - purchasing cheaper and possibly lower quality foods, reducing input costs (including reductions in use of local labour), and utilizing savings and stocks, poorer groups will cope by seeking any type of employment, removing children from school, relying more on gifts, relying on less preferred foods and reducing meals and non-essential purchases. Three years of poor production in combination with the effects of the HIV/AIDS epidemic and other factors has seen the proportion of the poor in this zone increasing. This appears to be coming about as a consequence of increased expenditure on healthcare and the declining availability of household labour, which is lowering household agricultural production and income. There are growing difficulties in obtaining employment. Thus with less disposable income, agricultural inputs are neglected, further reducing yields in what is a downward spiral of increasing poverty.

Current Situation

Due to the late arrival of the rains, maize production in 2003/2004 is expected to be 50% of normal and cash crops are only expected to realize 30-40% of normal. In some areas the reduced production of the maturing maize has been affected by unseasonably heavy rains and moist-humid conditions in March and April. Yields of maturing crops may well be reduced by cob rot and fungal infections. The situation within the zone is by no means uniform. In one community visited (in the far north) conditions have been very favourable and the poor are expected to harvest 5 or 6 50 KG bags of maize per family. Elsewhere, particularly in the middle and lower areas of the Middleveld many communities were affected by the late rains and failed to establish a crop. Moreover many of the poor in these communities have been unable to replant and to take advantage of the rains that came between February and April. In some situations production of sweet potatoes and tarrows has been unaffected by the adverse conditions - highlighting their potential role providing an important alternative to maize mono-cropping.

At the time of the assessment in late April grazing conditions in the Dry Middleveld were judged to be ‘good’ due to the significant level of rains received in February, March and April. The amount of grazing pasture has improved due to the increased extent of fallow lands this year. However, the full potential of the livestock component in the farming system is being lost due to the uncontrolled grazing regime. The adverse weather conditions in September to December seriously affected the flowering process (trees failed to blossom). Access to wild foods and fruits is therefore well below normal this year.

Market Access and Prices

In only one of the communities visited (ka Ndwandwe in Northern Hhohho) will the turnover in agricultural employment be normal. Elsewhere there has been a decrease in employment that is directly related to the reduced area of land under cultivation and reduced levels of production. Trade in livestock is depressed. The Swaziland Meat Industry is no longer buying cattle in the chiefdoms visited and the local market is not reliable. Furthermore, two chiefdoms were affected by foot-and-mouth disease. Trade in maize as a cash crop is depressed as the distance to the Matsapha market is far, transport costs are high and low official maize prices in combination with high production costs renders the exercise non-viable. The trade in non-food production is particularly depressed after three years of drought. Materials including firewood, grasses, likhwane, incoboza, thatching grass and other natural/plant products are scarce. Trading activities are thriving and appear to be normal as many are trying to survive by the running of small roadside businesses – vegetable markets, phone spazas etc. Food markets for staples such as maize, maize-meal, beans and cooking oil have come under enormous pressure over the past few years and by all accounts have expanded to meet the greater dependency on food purchase as a major source of food in these communities. Food price inflation over the period 2002/2003 and 2003/2004 is estimated to be about 20%. Cattle prices over the same period have gone up by 30% due to their scarcity brought about by loss of animals due to drought and foot and mouth.

Community Priorities

Water: In a situation where most of the communities have no access to domestic water and irrigation water for agricultural production and where most of the rivers dry up and there are no dams, almost all the communities identified the need to look into water development issues. Domestic water supplies are inadequate. Water for irrigation would improve livelihoods and nutrition through expanded vegetable production that would be consumed and traded.

Health: Communities cited HIV/AIDS as the main cause of illness and death in their communities and commented on the resulting high numbers of orphans and vulnerable children. Chiefdom of Mashobeni (Northern Hhohho) mentioned a figure of 250 orphans who are now becoming a burden with social community systems seemingly unable to cope given the need to feed, clothe and educate the children.

Education: While there have been a number of responses to assist the community in dealing with HIV/AIDS and its effects there is an urgent appeal to enable the communities to keep these children in school including subsidised or free primary education for orphans and/or primary school feeding schemes.

Other issues included the need to break the tillage constraint and the need to expand local employment opportunities.

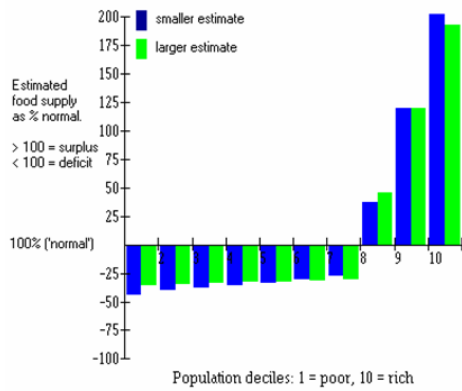
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	50-60%	70-80%	50-60%	30-40%	30-40%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	50-75%	75-100%	75-100%	75-100%	100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** wealth-group in the DM normally derives their food access from – food crops (21%), meat/milk (2%), wild foods (2%), gift/relief (24%) and purchases (51%). The simulation has estimated the outcome for the year to be - food crops (12%), meat/milk (1%), wild foods (0%), gift/relief (9%) and purchases at (32%). This sums up to 54% of requirements or an initial “crude deficit” estimate is 46% of total food access. Coping strategies of seeking additional employment managed to reduce the deficit by 4%, additional petty trade by 3% to a **final result of 39%**.



The **middle** wealth-group normally derives their food access from – food crops (31%), meat/milk (13%), wild foods (0%), gift/relief (7%) and purchases (49%). The simulation has estimated the outcome for the year to be - food crops (17%), meat/milk (9%), gift/relief (2%) and purchases at (30%). This sums up to 58% of requirements or an initial “crude deficit” estimate is 42% of total food access. Coping strategies of using foods stocks reduced the deficit by 4%, seeking additional employment managed to reduce the deficit by 4%, additional other trade by 3% and redistribution within the community reduced the deficit by a further 1% to a **final result of 30%**.

The **better-off** households in the DM did not incur any deficits this year.

Lowveld Cattle, Cotton and Maize Livelihood Zone

Livelihood Patterns

In the Lowveld Cattle, Cotton and Maize Livelihood Zone the socio-economic breakdown defines households' access to food and income and their overall livelihood strategy. The poor gain only 10-20% of food from their own production and commonly purchase the majority of food (50-60%) and supplement with collection of wild foods and gifts from relatives and friends. Clearly food prices are important if households are heavily reliant on purchase, and crop failure in this zone does not necessarily spell a disaster for the poor. Middle and better off groups are much more vulnerable to crop failure because they get 40-50% and 50-60% of their food from their own crop production respectively. Food access is normally supplemented by purchase and milk / meat products from livestock holdings. The poor in the zone are heavily reliant on employment/remittances for the vast majority of their income (70-90%) which in turn is used to purchase food and non-food production sales make up most of the gap. Middle and better off groups have more diversified income strategies with employment / remittances, livestock sales, cash crop sales, non-food production and petty trade all playing a significant role. Rainfall is commonly low in the zone and is often spatially and temporally erratic. Households are still suffering from a crop failure in the 2002/3 season.

Current Situation

Maize remains the dominant staple crop in the LCCM. Late and intermittent rains up to December affected the planting season with low soil moisture making germination challenging. Difficulties of accessing tractors in a timely fashion added to the low area planted during the season. Tractor support is paid in advance and is non-refundable. When adequate rains fall middle and better off farmers are keen to secure tractors for ploughing. However, after rain falls, demand for tractors reaches a peak and only a small percentage of farms are ploughed at the optimum time. When good rains finally arrived in January, national radio forecasts of below normal rainfall and the difficulty of getting hold of tractors caused farmers to limit their overall cultivation. There is a good outlook for crops that were planted late in 2003 and survived through the drier periods and then thrived in the wet January and February period. Unfortunately, the ongoing rainfall in March and April has reduced the effective yield of these plants because a high level of moisture has caused some cob rot. Bean production is typically low in the zone and where it is produced it is mostly by middle income households for their own consumption. Low rainfall radio forecasts encouraged some households to grow beans but the unseasonably heavy rainfall between January and March spoiled the bean harvest. Many households are keen to grow vegetables as cash crops but access to water is the biggest constraint.

Livestock condition and productivity improved during the season but started from a very low point. Cattle death and illness was a major problem during the second half of 2003. It is reported that many cattle aborted thus reducing productivity. However, the improved rainfall in 2004 provided good pasture for livestock and productivity is now good. Access to wild foods has been a problem during the season because the dry period limited growth and development of wild foods. Furthermore, access to the various forested areas has been affected by the forestry industry. The cycle of forestry production means that wild food habitats are detrimentally affected and in some instances access to these areas has been restricted. Increasing poverty is cited as the main reason why many people have become reluctant to give free gifts of food within communities. It is reported that there is now pressure to sell goods rather than give them for free to a needy friend or relation.

Market Access & Prices

Access to employment markets, which play such an important role for poorer households in the zone, has been depressed because much of the employment is based around local cash crop and

other agricultural production (such as cotton). It is reported that some commercial companies are closing down and laying off workers and where casual employment is being offered, foreigners and in particular Mozambicans may take up the labour opportunities accepting a lower wage than Swazis. Access to cash crop markets is slightly depressed because sale of cotton has become more difficult as depots have closed around the country. The depot at Big Bend is the only point of sale for farmers and transport costs can be high. Non-food production, trade and food purchase markets are reported to be normal. Prices have increased for foodstuffs and livestock by 15%. Improved condition of livestock is reported to be the main reason for increases in cattle price, with growing demand and reasonable prices from the Swaziland Meat Industry.

Community Priorities

Access to water is the number one priority for communities in the zone. Communities were keen to access water predominantly for household consumption and irrigation of vegetables and cash crops. Many communities report that they have consulted with rural water supply authorities and studies have been carried out. The communities state they have started to collect community funds to contribute towards water projects and some have started supporting the necessary infrastructure. Access to good quality health facilities was also a priority for communities. Distances to clinics are reported to be too far to travel, especially when ill. In some instances rivers have to be crossed to reach health facilities, making access difficult in the rainy season.

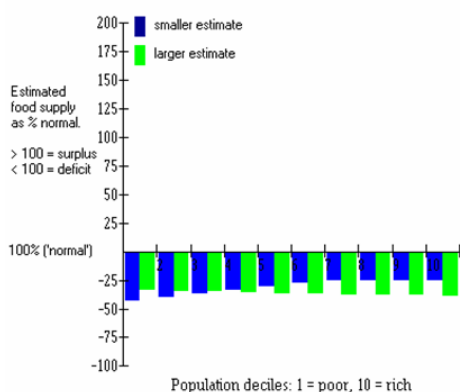
Problem Specification (figures represent % change according to normal – normal = 100%)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	30-40%	70-80%	70-80%	30-40%	30-40%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	100%	75-100%	75-100%	75-100%	100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** wealth-group in the LCCM normally derives their food access from – food crops (15%), meat/milk (2%), wild foods (15%), gift/relief (12%) and purchases (56%). The simulation has estimated the outcome for the year to be - food crops (5%), meat/milk (2%), wild foods (11%), gift/relief (4%) and purchases at (34%). This sums up to 56% of requirements or an initial “crude deficit” estimate is 44% of total food access. The coping strategy of seeking additional employment managed to reduce the deficit by 6% and additional livestock sales reduced it further by 3% to a **final result of 35%**.



The **middle** wealth-group normally derives their food access from – food crops (49%), meat/milk (8%), wild foods (8%), gift/relief (2%) and purchases (33%). The simulation has estimated the outcome for the year to be - food crops (19%), meat/milk (6%), wild foods (6%), gift/relief (0%) and purchases (31%). This sums up to 62% of requirements or an initial “crude deficit” estimate is 38% of total food access. Coping strategies of using seeking additional employment managed to reduce the deficit by 5%, and additional livestock sales reduced it by reduced the deficit by a further 2% to a **final result of 31%**.

The **better-off** wealth-group normally derives their food access from – food crops (55%), meat/milk (12%) and purchases (33%). The simulation has estimated the outcome for the year to be - food crops (19%), meat/milk (9%), and purchases (32%). This sums up to 60% of requirements or an initial “crude deficit” estimate is 40% of total food access. Coping strategies of seeking additional employment managed to reduce the deficit by 5% and additional livestock sales reduced the deficit by a further 2% to a **final result of 33%**.

Lowveld Cattle and Cotton Livelihood Zone

Livelihood Patterns

Agricultural production in the Lowveld Cattle & Cotton (LCC) Livelihood Zone is typically low even in years when rainfall is described as normal. Rainfall may be as low as 200mm per annum. The majority of poor households usually receive only 10%-15% of their annual food requirement from growing their own crops. The picture is similar for the middle income groups with 25%-35% of their annual food requirements coming from their own production. The majority of the food consumed is purchased by both the poor and middle income groups which combined are approximately 88% of the total population of the zone. In order to meet their annual needs the poor gain the majority of their income (which in turn is used to purchase food) from local employment opportunities and remittances (between 50-70%). The middle and better off wealth groups are more diversified and rely on a combination of income from employment, sale of cash crops, livestock sales and other trading activities. Overall, vulnerability of the wealth groups is very different with poorer groups more vulnerable to a fall in employment opportunities while middle and better off wealth groups will suffer more from shocks to cash crop and livestock.

Current Situation

The LCC has suffered from a complicated combination of shocks that have detrimentally affected livelihoods of all socio-economic groups. Rainfall was late and intermittent between September and December 2003 making planting a risky and difficult business. After three years of below normal rains and grazing conditions, cattle productivity was very low and many cattle succumbed to exhaustion and death in the first half of the agricultural season. Many households could not afford to re-plant when significant rains finally came in January. The rains that fell between January and March were unseasonably heavy and their impact was double edged. Improved water access and grazing resulted in a vast improvement in cattle condition but also resulted in the decimation of the legume harvest with a complete failure anticipated. Overall maize production will be very low mostly because of the dry period up to January. The overall maize production for the zone verges on crop failure but some planting of maize in January will provide some production for a number of households.

Cash crops have suffered in a similar manner to food crops because of the temporal variation of rainfall in the zone. Sale of maize surpluses are highly unlikely. Cotton production will be low with an average of 1.5 bales of cotton expected by the few farmers that engaged in production this year. Inaccessibility to inputs and water logging were cited as damaging influences on production. Wild food availability has been suppressed by the dry period and compounded by water logging in the final stages. However, some wild foods (e.g. Mathundvuluka, Mantulwa and Tincozi) have been available following the rains.

Market Access & Prices

Access to employment markets, which play such an important role for poorer households in the zone, has been depressed because much of the employment is based around local cash crop and other agricultural production. In addition reports of increasing levels of retrenchment both nationally and in South Africa, which when combined with increasing morbidity levels, have reduced access to employment markets. Livestock, cash crop, trade and food purchase markets are considered to be depressed. Scarcity of raw materials (e.g. firewood & grasses) for non-food production was affecting access to markets. It was reported that maize is still being transported from the Highveld for sale at high informal prices in the zone despite the food aid provision. Maize availability was depressed because of closure of some retail outlets and distance to markets was increasing.

Food prices have increased in communities alongside the distribution of food aid. It was reported

that prices are inflated because food aid provides household needs for 3 weeks of each month and after this households are forced to purchase on the market – at a time when traders are trying to make up for a slowdown in sales (possibly due to the food aid provision). Livestock prices (and cattle in particular) have increased because pasture is reported to be in the best condition for many years. Households are now keen to hold onto their assets at the present time and forced sale is not widespread.

Community Priorities

Access to water is the number one priority for communities in the zone. Communities were keen to access water predominantly for household consumption and irrigation of vegetables and other cash crops. Roads were also cited as a priority for the communities, particularly because heavy rainfall can damage the roads and sometimes make them useable. Some communities have developed revolving funds to implement water projects and they have requested support from the local Inkundla centres. Several NGOs are working in the area such World Vision and LDS as well as UNICEF, NERCHA and input support from Vunisa for cotton production.

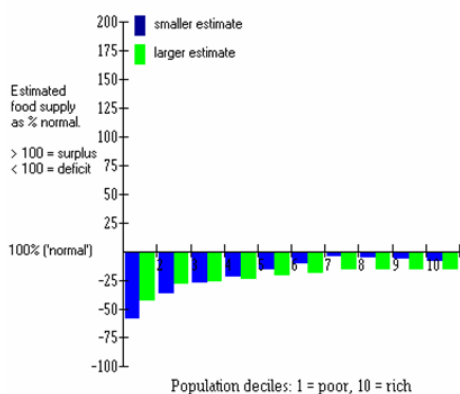
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	20-30%	70-80%	50-60%	30-40%	0-10%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	50-75%	75-100%	50-75%	50-75%	75-100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** wealth-group in the LCC normally derives their food access from – food crops (15%), meat/milk (2%), wild foods (8%), gift/relief (13%) and purchases (62%). The simulation has estimated the outcome for the year to be - food crops (4%), meat/milk (2%), wild foods (4%), gift/relief (3%) and purchases at (24%). This sums up to 37% of requirements or an initial “crude deficit” estimate is 63% of total food access. The coping strategy of seeking additional employment managed to reduce the deficit by 16% and additional petty trade of 2% produced a **final result of 45% - the highest deficit of any group in the country.**



The **middle** wealth-group normally derives their food access from – food crops (30%), meat/milk (15%), wild foods (2%), gift/relief (2%) and purchases (51%). The simulation has estimated the outcome for the year to be - food crops (8%), meat/milk (11%), wild foods (1%), gift/relief (0%) and purchases at (50%). This sums up to 70% of requirements or an initial “crude deficit” estimate is 30% of total food access. Coping strategies of using additional employment managed to reduce the deficit by 8%, additional livestock sales reduced the deficit by 7% and other petty trade reduced the deficit by a further 6% to a **final result of 9%.**

The **better-off** wealth-group normally derives their food access from – food crops (39%), meat/milk (21%), wild foods (2%), and purchases (38%). The simulation has estimated the outcome for the year to be - food crops (11%), meat/milk (16%), wild foods (2%), and purchases at (38%). This sums up to 67% of requirements or an initial “crude deficit” estimate is 33% of total food access. Coping strategies of using seeking additional employment managed to reduce the deficit by 9%, additional livestock sales reduced the deficit by 7% and petty trade further reduced it by 6% to a **final result of 11%.**

Lomahasha Trading and Arable Livelihood Zone

Livelihood Patterns

The current year assessment in Lomahasha has been combined with an updating exercise of the livelihood profiles in this particular area.²² The latest assessment suggests that the emphasis has shifted from the trading to the arable component of the livelihoods and that the zone name might be re-arranged to read Lomahasha Arable and Trading. In terms of the main elements in the ranking is 1 Cash Crops (cotton, maize & groundnuts), 2 Food Crops (maize, legumes & tubers), 3 Livestock, 4 Trade and 5 Employment. Cash and food crops are more important than trade which is ranked fifth as an element in the livelihoods.

Wealth status very much affects the livelihood profiles. The poor normally secure about 15% of the food needs from their own food crop production. The middle and better-off normally produce about 50% of their total food access from their own farms. The poor concentrate on a combination of purchases, gift/relief sources and wild foods to top up the remaining 85% of their food needs. Cash sources for the poor are limited to casual employment/labour, firewood collection, weeding, and fetching water - (58%), non-food production (34%) and some small livestock sales (8%). The middle and better-off benefit from their own livestock as a source of food (12-14%) and food purchases to make up the balance of their needs. Their cash incomes sources are more diverse and include employment, livestock sales, cash crops, non-food production and trade.

Current Situation

Generally very poor food and cash crop production is expected in Lomahasha this year. The main factor has been very poor start to the season and the three-month delay in the plantings of crops. From an initially 'bad' situation, grazing and livestock conditions have improved following the arrival of the rains in mid January. At the time of the March 2004 assessment maize availability was limited and prices were high with only limited amounts of maize being traded into Lomahasha from the Swazi Highveld.

Maize production as 'own food' is likely to be in the range of 0-20% of normal with the poor expected to get 0-6% of normal this year. The other food crops - groundnuts, sweet potatoes, cassava, cowpeas and jugo beans are produced in small quantities. Many of these crops have failed dismally this year. Cotton and maize have been the main cash crops in this area. Cotton production in the Lomahasha has mirrored the collapse of the cotton industry nationally. Cotton has been an important source of cash income and employment in the community in the not too distant past. Livestock has been affected by increasingly difficult grazing conditions as the weed *Chromolena Odorata* (Sandanezwe) is displacing grass throughout the Veld in the north-east of the country. The abnormal weather patterns this year have adversely affected the availability of wild foods and fruits.

Market Access and Prices

Overall employment access is estimated to be quite depressed at 50-75% of normal. All three categories (permanent jobs, seasonal and casual) are down but with seasonal and casual work particularly affected. Seasonal employment in the sugar and citrus sectors has been affected by the fluctuation in production and the emergence of labour-saving mechanisation e.g. new irrigation technology. The opportunities for casual employment in cotton production have been drastically reduced overtime. A reduced area under maize cultivation this year has limited the demand for casual employment. Cash crop markets are constrained. The cotton market is

²² For logistical reasons the November- December 2002 exercise was unable to update the livelihood profiles at that time

depressed by virtue of the closure of local buying stations and distance from Big Bend. The maize trade is depressed by the following factors: distance to the market, high transport costs and low (unattractive) prices.

Local maize grain prices have increase by 10-20% between 2002/2003 and 2003/2004. This has come about as a result of a poor supply and increased demand. Although there is a General Food Distribution (GFD) ongoing in the area vegetable oil and bean prices have increased by 5-17% and 8-16% respectively. Livestock prices have increased significantly (10-40% for oxen, 20-60% for goats and 25-30% for chickens) mostly reflecting their improved condition.

Community Priorities

The four main sectors prioritized by the communities interviewed are:

1. Water; 2. Employment; 3. Agriculture; 4. Health.

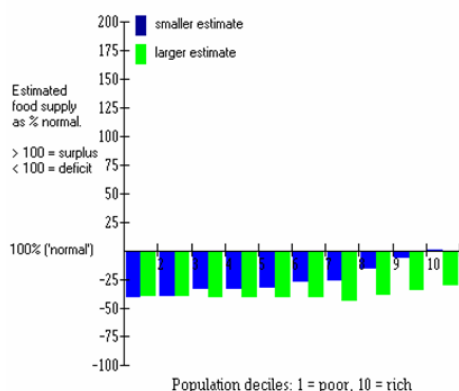
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	0-20%	80-90%	50-60%	30-40%	0-20%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	75-100%	50-75%	50-75%	50-75%	75-100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** wealth-group in the LTA normally derives their food access from – food crops (20%), meat/milk (4%), wild foods (17%), gift/relief (12%) and purchases (47%). The simulation has estimated the outcome for the year to be - food crops (2%), meat/milk (4%), wild foods (10%), gift/relief (0%) and purchases at (27%). This sums up to 43% of requirements or an initial “crude deficit” estimate is 57% of total food access. Employment coping strategies reduced the deficit by 20% to a **final result of 37%**.



The **middle** wealth-group normally derives their food access from – food crops (40%), meat/milk (12%), wild foods (15%), and purchases (33%). The simulation has estimated the outcome for the year to be - food crops (3%), meat/milk (11%), wild foods (8%), and purchases at (21%). This sums up to 43% of requirements or an initial “crude deficit” estimate is 57% of total food access. Employment coping strategies reduced the deficit by 22% to a **final result of 35%**.

The **better-off** wealth-group normally derives their food access from – food crops (43%), meat/milk (14%), and purchases (43%). The simulation has estimated the outcome for the year to be - food crops (4%), meat/milk (12%), and purchases at (42%). This sums up to 58% of requirements or an initial “crude deficit” estimate is 42% of total food access. Employment coping strategies reduced the deficit by 27% to a **final result of 15%**.

Lubombo Plateau Livelihood Zone

Livelihood Patterns

Agricultural production (for food and cash crops) is higher in the Lubombo Plateau (LP) Livelihood Zone than in the Lowveld in terms of household food security because its elevated position stimulates a higher rainfall pattern. Wealth disparities portray stark livelihood differences. While the poor group only gains 0-10% of annual food requirements from food production by the household, middle income (30-40%) and better off (60-70%) households gain much higher levels of food from household cultivation. Subsequently access to food by the poor is dominated by purchase of food which is supplemented by contributions from wild foods and gifts. The majority of income for this food purchase comes from employment which in turn is supplemented by non-food production such as grass mat production. The middle and better off have more diversified income strategies with cash crops (such as cotton and mostly importantly cassava) playing an important role in combination with trading and non-food production activities.

Current Situation

Rainfall was below the long term norm until the beginning of January – when a succession of storms pushed rainfall levels for January and early February well above the long term average. The LP has suffered from below normal production this year adding to a succession of seasons with below normal production. The communities report that cattle theft has reduced the ability of farmers to prepare land and cultivate at the optimum times just after rainfall because oxen are no longer readily available. Delays occur as communities wait for access to the limited supply of Tinkhundla tractors or privately owned oxen for ploughing. Many households gave up on maize cultivation this season because the rains arrived so late. In addition, meteorological forecasts broadcast over the radio provided an outlook of below normal rainfall between January and March 2004 discouraging investment in inputs. For those with the requisite resources, two distinct planting phases took place in the LP. A selection of people planted in December but many plants failed to mature because of low soil moisture levels. Households that retained some inputs planted in January. This crop was anticipated to do quite well but water logging in some areas and above average rainfall during March and April has resulted in some cob rot setting in during the drying phase. When the rains arrived in January, most household focused on sowing of maize seeds and by the time this phase was complete the period for sowing legumes was almost over. Very low legume yields are expected because the unseasonably high rains since January resulted in water-logging in January/February and rotting of plants and fruits in March.

Cash crops have suffered in a similar manner to food crops because of the temporal variation of rainfall in the zone. Sugar cane is not grown on the LP. Cotton production has been quite important for some communities particularly for the middle and better off groups. Difficulties of accessing the market and prices were cited as reasons for low levels of cotton production. The main cash crops are sweet potatoes and cassava. A small reduction in cassava production has been experienced (20-30% below normal) but sweet potato production has seen a major decline (60-70% below normal) mostly because of the erratic rainfall and households prioritising maize production before cash crop production.

High levels of precipitation post January have resulted in vastly improved grazing conditions for livestock. Fewer cattle diseases have been reported this year and cattle condition is reported to be good. Wild food availability is reported to be less than in 2002/3. Fruit formation was limited by the dry period between October and December. Much of the fruit that survived the dry spell was ruined by the deluge of rain during January (with the exception of Tincozi and Mfomfo). Fishing grounds were reported to be operating normally, although only some communities engage in fishing. It is the poor group that normally engage in fishing activities.

Market Access & Prices

Access to employment markets, which play such an important role for poorer households in the zone, has been depressed because much of the employment is based around local cash crop and other agricultural production (e.g. sugar cane related employment, cotton picking, and weeding maize). In addition reports of increasing levels of retrenchment both nationally and in South Africa, which when combined with increasing morbidity levels probably because of HIV/AIDS, have reduced access to employment markets. Cutbacks by the sugar cane industry, mostly because of the dry October – December period, affected many households' incomes in the LP. Livestock, cash crop, non-food production and trade markets are considered to be operating normally. The foot and mouth quarantine for cattle is now a long-standing affair but does mean that livestock marketing is limited to the LP only. Livestock prices have increased by 40-50% compared to the same time last year mostly because cattle are in such good condition. A scarcity of maize meal and beans has increased food prices on the plateau by 10-20% compared to last year. It will be important to continue to monitor these prices because, as shown above, the purchase of maize and other food stuffs is the main route to ensure food security for the majority poor households on the LP.

Community Priorities

Access to water is the number one priority for communities in the zone and this is partly because previously functioning boreholes have broken down. Communities were keen to access water predominantly for household consumption and irrigation of food and cash crops. The communities report that they do not have funds to maintain the water system however efforts have been made by communities to collect funds to contribute towards a scheme that may help support water access. The second priority for communities is access to infrastructure and in particular an improvement in road condition. It was reported that a survey was carried out to map a new road but the project has seen little progress since the previous MP, who was spearheading the effort, was not re-elected. World Vision are carrying out a range of development activities in the communities on the LP and WFP and NERCHA support with food aid support for orphans and vulnerable persons.

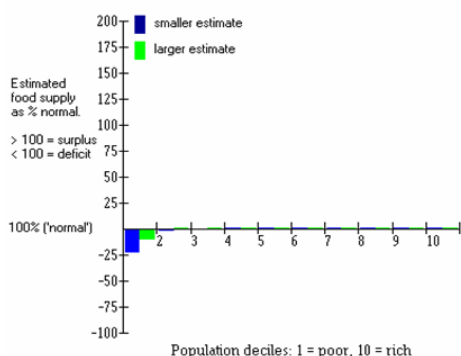
Problem specification (figures represent % change according to normal – normal =100)

Production	Food Crops	L'stock/Grazing	Wild Foods	Gifts/Relief	Cash Crops		
Scores	50-60%	90-100%	50-60%	30-40%	70-80%		
Markets	Employment	Livestock	Cash Crops	NFP	Trade	Food Purchase	Food Price
Scores	50-75%	100%	75-100%	100%	100%	100%	125%

NFP = Non-Food Production

Zone Outcome

The **poor** wealth-group in the LP normally derives their food access from – food crops (4%), meat/milk (2%), wild foods (16%), gift/relief (16%) and purchases (62%). The simulation has estimated the outcome for the year to be - food crops (0%), meat/milk (2%), wild foods (8%), gift/relief (6%) and purchases at (41%). This sums up to 57% of requirements or an initial “crude deficit” estimate is 43% of total food access. The coping strategy of seeking additional employment managed to reduce the deficit by 9% and additional other trade reduced it further by 21% to a **final result of 13%**.



The **middle** and **better-off** households in the LP did not incur any deficits this year but also did not produce a surplus. They are hovering around normal with little to spare.

Chapter 5: Conclusions and Recommendations

This consultative assessment and analysis, falling under the wide umbrella of the National Disaster Taskforce, sets out a framework for planning and analysis based on relative vulnerability of geographic areas and socio-economic groups throughout rural Swaziland. The multi-organisational approach should enable agreement by stakeholders on the current vulnerability context facing rural communities. It is vital that the broad area conclusions giving early warning of vulnerability that are incorporated within this report are followed up by more detailed participatory community assessments by agencies that wish to intervene. This will ensure that vulnerability at the household level is properly understood and considered on a case by case basis, particularly when it comes to targeting of programmes.

A national disaster was declared by the Swaziland Government in February 2004. The response to this disaster declaration by Government, UN and NGOs has overall been muted. Credible livelihoods based information on the state of the rural economy has not been available for decision-makers. The humanitarian community has been looking to the Government to provide the lead in responding to the crisis that was declared.

Vulnerability analysis is not an easy task in Swaziland. Many of the sources used, especially when it comes to multi-sectoral information on agriculture, health, nutrition, water and education are either weak in their analysis or difficult to get hold of. Multi-sectoral analyses are desperately important for policy-makers to make effective decisions that take consideration of the complex patterns of rural (and urban) livelihoods in Swaziland.

Conclusions and Implications

Several factors affecting the vulnerability of Swazis underlie the current emergency situation. Economic growth has been quite limited since the mid 1990s with a significant fall-off of Swazis employed in South Africa as the decade progressed. Employment levels within Swaziland have been at a virtual standstill for several years in private and public sectors. The reduction of incomes and remittances in Swaziland has had significant implications for the ability of many households and communities to purchase food and other essential household items and access basic social services. In addition, the reduced disposable income of families has resulted in fewer casual employment opportunities being offered for less well-off members in the communities. Economic hardship and food insecurity has increased in the Lowveld because of a virtual collapse of the cotton industry – reducing incomes of producers and casual labour opportunities for many other households. Livestock condition has been poor countrywide for several years and overall numbers of cattle and goats have been declining, especially in the Lowveld, because of poor grazing conditions and water availability. Animals have had very little chance to recover their condition after each shock has hit.

The downward national production trends outlined in chapter 3 go some way towards highlighting the strain that rural livelihoods have been facing during the past three to four years in securing income and household production to ensure food security and other basic household requirements are met. Depressed agricultural production (yield and area cultivated) is clear compared to the five year average to 2001/2 following the below normal and erratic rains in 2003/4 season. Combinations of other factors apart from the weather have detrimentally affected agricultural production exemplified by increasing inability of households to afford the requisite inputs and also the inability to access tractors for land preparation at optimal times. Household income earning potential for poor and middle wealth groups has been negatively influenced by the overall production climate but just as importantly it has been dented by declining overall access to markets. Maize and cotton markets, both of which play key roles in rural household incomes, have been depressed by production conditions but also by marketing arrangements. The informal

maize market is large while official maize sales are small overall and recent price levels have not been sufficient to attract sale by farmers. It is fundamental to Swaziland to have a maize production industry with a supporting maize marketing infrastructure that maximises production and incomes. Maize production in 2003/4 represents the fourth consecutive year of below normal cereal production. The cereal balance indicates that even after planned imports are accounted for the cereal gap is almost 75% of current production. Low cereal production has large implications for the food security, well-being and assets of the rural Swazi population. A high maize price, caused by current and anticipated shortages is likely to compound the problem of poor people accessing available food in the coming months and throughout 2004/5. Monitoring of (informal and formal) maize prices needs to be improved and actions within the maize marketing infrastructure need to reflect the importance that maize prices play (as food and cash crop) in people's lives in rural and urban areas.

While there is considerable speculation about why the cotton industry collapsed, it is essential that an in-depth analysis take place to understand the precise reasons for the production and marketing failure between 2000 and 2003 and how the industry can achieve sustainable growth in future (without ending up with indebted farmers and companies). The growth of the textile processing industry in Swaziland (with associated AGOA benefits) clearly demonstrates that there is potential for Swaziland to cultivate and process smallholder and possibly large-scale (and even irrigated) cotton. However, first it is important to understand where exactly Swaziland's comparative advantage in cotton production lies vis a vis the world market and how best to exploit the advantages identified.

Sitting on top of the economic difficulties being faced by rural households previously described has been HIV/AIDS. The virus has increased morbidity and mortality rates, vastly reducing the viability of already weakened livelihood strategies, encouraging and entrenching poverty. Orphan numbers and other chronically vulnerable households are growing at a significant rate contributing to the growing levels of livelihood failure and destitution of many poorer groups throughout the country with an increasing inability of communities to cope. Women and children are taking the brunt of the disease. Regional health services report that they are struggling countrywide and greater levels of morbidity are anticipated in future. Regional health reports indicate that poor supervision of staff, shortages of drugs, overload of patient numbers and lack of support from specialists are resulting in a weakened and under-capacitated health system in many areas. From a more positive point of view, treatment for the disease is reaching greater numbers but the overall targets set for ARV provision (3 by 5) will only make a small impact on the overall number of people infected with HIV/AIDS. A more radical institutional agenda is required to meet the HIV/AIDS threat. Additional resources, institutions and systems are required if HIV/AIDS is to be tackled in Swaziland in a manner that will make a major difference to the population as a whole. ARVs are available and they need to be made accessible to the vast majority of the population or very difficult times may lie ahead.

Communities were consulted about what their priorities may be for community development action during the field interviews that were carried out as part of the assessment. The issues raised are highlighted for each zone in the livelihood zone reports (see chapter 4). Access to adequate water sources was described by **all** communities as the biggest impediment not only to household hygiene and sanitation but also to development and income potential – especially through production of cash crops for sale. Others highlighted earth dams as crucial to reduce the vulnerability of livestock during drought periods when water access (and grazing) is poor and cattle condition reduces.

Another topic that was regularly raised by communities was the difficult access to health provision they were experiencing. The combination of increasing morbidity and isolated communities means that, particularly in the summer rainy season, many people report that ill

people are unable to access health clinics and if they do make the trip they suffer heavy transport cost penalties because of the long distances involved. Several communities linked the health provision issue with a requirement to improve infrastructural development such as roads and bridges to enhance and quicken access to health facilities.

Many communities were keen to see an increase in employment opportunities, agricultural production and other income generation activities were also raised by several communities. It remains clear that Swazi communities continue to want to work for their incomes and have not become too dependent, thus far, on free hand-outs. Overall it is not surprising that communities desire enhanced access to water, improved agricultural production, increased employment and transport opportunities and superior access to health services. Not surprisingly these form the majority of the key tenets of human development. It is important that the communities' views are incorporated within any development or emergency initiatives.

A stakeholder meeting was held on the 6th May to present preliminary findings (of income/food deficits) from the assessment, national production trends and to discuss the reasons for increasing vulnerability among many sections of the rural population in Swaziland. A second main agenda point was to consult stakeholders about possible livelihood recovery interventions and stimulate discussion of relevant policies. The meeting demonstrated that among the VAC stakeholders (covering Government Ministries, NGOs and UN agencies) there was a fundamental lack of awareness of the existence of current national policies on health, education, agriculture, water and other key sectors. Furthermore, if current policies were known about few individuals were able to explain what the policies entailed and most doubted the extent of their implementation. For instance, there is clearly a need for agriculture and health technical staff, to have read and understood current policies. Lack of existing policies (i.e. not draft or statements or action plans) on key sectors such as agriculture and HIV/AIDS was apparent.

In the meeting stakeholders reviewed several topics including increasing agricultural production, HIV/AIDS response, access to basic services such as education and health and water, sanitation and hygiene. The following represent some of the key findings of group discussions at the meeting:

- Lack of a current HIV/AIDS policy
- Small Government budget support is given to HIV/AIDS
- Swaziland's ability to implement some policies or action plans e.g. psycho-social support for children, is severely limited because of capacity constraints with few psychologists available
- Weak coordination of HIV/AIDS service providers and lack of clear definition of OVCs among relevant agencies
- Weak physical and health infrastructure is hampering access to more remote communities
- Lack of reporting infrastructure among HIV/AIDS service providers means there is little monitoring and evaluation, learning and coordination – although coordination of these issues had improved since NERCHA was established but current capacity of NERCHA is a concern considering the scale of the HIV/AIDS pandemic
- More work needs to be achieved on gender equality in relation to Swazi culture to ensure that women are empowered
- Overall confusion was agreed about the current agricultural policy situation
- Irrigation policy was seen to be important particularly in relation to cash crop production in the Lowveld – but it was not known if explicit links were outlined in the policy
- Current initiatives to stimulate agricultural production were judged to be good but better coordination of WFP/FAO/NERCHA/MoAC/UNICEF initiatives is required
- Extension services at MoAC need a full review to evaluate their effectiveness
- Access to tillage needs to be improved
- Access to water needs to be improved for cash and food crop production

- Improved marketing arrangements need to be put in place for maize, cotton and other cash crops (e.g. vegetables)
- Poor coordination of current education interventions was identified (e.g. fees support for OVCs comes from several different institutions)
- If enrolment of children in schools increased (e.g. if primary education was made free) there is a distinct lack of adequate infrastructure and education staff
- A clear explicit education policy is required particularly in relation to vulnerable children
- Increased provision of out-reach services is required in order to meet the health needs of remote communities
- More resources are required to give additional incentives for Swazi health workers to remain within the kingdom
- Groups agreed that there was inequitable access to water and much of the current water act was not enforced, particularly in respect to pollutants
- The water policy lacks a clear action plan and rural people do not know of the existence of such a policy

Income / Food Deficits

The income/food deficits outlined in each zone represent the shortfall of income and/or food that is likely to be experienced by households during the 2004/5 consumption year because of declining food production, cash crop sales, trade, non-food production, livestock, gifts and wild-foods during the 2003/4 consumption year. The livelihood zone reports in chapter 4 outline the reasons for the current findings. High income/food deficits in areas not traditionally vulnerable e.g. the Timber Highlands should not be ignored. This report highlights early warning of vulnerability in such areas and before agencies begin rushing emergency interventions into these areas, more specific studies need to be undertaken to ensure that the outcomes presented in this report are indeed as serious as we expect them to be.

Vulnerability to food insecurity and livelihood decline can no longer be defined only in terms of the Lowveld. The VAC analysis points to increasing problems across larger sections of the country. The vulnerability of populations depends on the livelihood patterns employed in the different zones of the country and the wealth status of households. Most notably depressed conditions in the Timber Highlands, Lomahasha Trading and Arable and the Dry Middleveld areas are affecting households' income and food access. Further research is required in the Timber Highlands to confirm and explore the reasons for the employment difficulties being experienced. In addition Lowveld communities continue to face very difficult times. Analytical breakdown by socio-economic group demonstrates that in most instances the poor are facing the biggest income/food deficits. The populations in several of the zones previously mentioned are feeling the impact of cumulative shocks over a number of years covering several of the mainstay production sectors.

One valuable piece of data that would help to provide a stronger analysis of the situation is knowledge of the existence of household savings and other similar assets. Currently the Swazi VAC does not have detailed enough livelihood baselines to quantify the level of cash savings or similar that better-off or middle income households have that can off-set the deficits outlined in this report. Clearly the presence of savings increases the ability of households to cope with crises and reduces overall vulnerability. However, it is likely that poor households do not have a bank account with savings inside. It is important that in future such savings are factored into vulnerability analyses. Having said the above, few stakeholders are keen to see households unsustainably erode savings or assets (such as livestock) in order to meet immediate basic food needs. The Swazi VAC intends to develop much more detailed livelihood baseline profiles throughout Swaziland **if** the resources required are made available.

The broader level of vulnerability that has been identified throughout the country by the current

assessment is as a result of a combination of factors affecting rural livelihoods. Drought and failed household food production is only one impact that has been felt by the population. Other often more important reasons are outlined below:

- Increasing food (and especially maize) prices
- Reduced incomes due to falling cash crop production (e.g. maize, cotton, vegetables)
- Reduced incomes due to falling livestock prices (especially when livestock sold in times of stress when prices decline further)
- Reduced incomes from sale of non-food production goods (e.g. firewood, mat production from grasses, thatching)
- Reduced income from petty trading (e.g. kiosks) because more people have to focus on meeting basic food needs and cannot afford to purchase other non-food goods thereby reducing levels of trade
- Increasing competition for and decreasing supply of wild foods particularly because of below normal rainfall
- Reduced incomes from remittances as fewer Swazis employed in the mines and other areas of South Africa as well as urban Swaziland
- Depressed employment opportunities for casual labourers because of falling agricultural production (drought and market related)
- Increasing illness and death of household heads and members (HIV/AIDS related) reduces income for households and access to food

Table 5 (page 33) provides planners with more concrete ways of analysing the income/food deficit outcomes. Cash transfers (that households could use to purchase their food requirements) are incorporated in order to provide decision-makers with alternatives to (the sometimes automatic reliance on) food aid in order to off-set the income/food deficits being faced by the majority of the rural population. While food aid will continue to play an important role in the short to medium term to meet on-going food insecurity in the most vulnerable areas of the country it should **not** be the automatic and only answer for populations affected. Alleviation of chronic poverty will not be achieved by continuous distributions of food aid. Programmes that incorporate cash transfers may provide additional benefits by stimulating a multiplier effect within cash strapped communities across Swaziland. It is becoming increasingly evident in other African countries such as Ethiopia, Lesotho and Malawi that plausible ways, such as cash transfers through distribution of vouchers or other non-food welfare provision (e.g. public works programmes), may be more appropriate to support chronic poverty and chronic food insecurity. Increasingly donors and agencies are viewing these alternatives in a positive light. Table 5 is provided in order to give policy and programme decision-makers with ball-park figures so that the deficits can be understood in monetary/income terms (USD 21.5 million) as well as food tonnages (28,300 MT).

In summary, household deficits could be reduced by **all or a combination** of the following ways:

- **Reducing maize prices** (and making maize more affordable) mostly through more efficient maize marketing (possibly by decentralising maize purchase, milling and sale using strategic depots around the country to reduce transport costs)
- **Increasing household food or cash crop production** (for consumption or sale)
- **Increasing trade and non-food production** (to raise income levels)
- **Increasing livestock holdings** (particularly amongst middle and poor groups)
- **Cash transfers** (e.g. poverty vouchers or cash based public works schemes as part of a social/economic safety net system),
- **Creating paid employment** (to increase incomes)
- **Food transfers** (free or for work etc.)
- **Reducing other additional costs incurred by households** (e.g. health care and education costs)

There are no automatic answers to solve these problems and the most effective response is likely to be a **combination** of almost all of the options above. It is important that planners break down the results for each zone by socio-economic group for analysis because different wealth groups are affected in different ways. The livelihood zone reports in chapter 4 give the outcomes or results by wealth group.

Recommendations

Reduction of vulnerability is closely linked with poverty reduction. Vulnerability declines when households have diversified livelihoods (risk minimisation), and have resilience (e.g. access to livestock assets or savings and markets to sell products or increase income through employment). **Coherent livelihood promotion programmes need to be put into place led by Government that increase appropriate agricultural and livestock production and most importantly employment opportunities in order to raise household income levels in the most vulnerable areas of the country.** It is essential that marketing arrangements for crops are conducive for farmers to risk increasing their production levels. Many crops grow well in the Lowveld especially if irrigated (e.g. cotton, water melon, vegetables) but restricted access to markets to sell the produce limits production, sale and household incomes. Livelihood promotion programmes (with requisite policy/marketing support) are essential if vulnerability is to be reduced with an increasing number of people reversing their livelihood decline and moving above the poverty threshold thus reducing the requirement for free hand-outs that commonly increases the dependency of communities on external support.

The recommendations below combine viewpoints from communities across the country, VAC stakeholders and logical outcomes from the analysis presented earlier on in this report.

- **A Government led comprehensive disaster response strategy is required** that will meet short and medium/long term needs as a natural development following the disaster declaration by Government to provide leadership to the humanitarian and development community that takes on board the income/food deficits outlined in this report, the reasons for them and the numerous responses that may be utilised to off-set them. Programmes, with supporting policies are required that will re-build rural livelihoods and reduce vulnerability of households to future shocks. A Government consultation process is important including the UN, NGOs and donors to build strong consensus for agreed action linking together and building on current initiatives.
- There is increasing evidence for the need of **a centralised and integrated social and economic safety net system** in Swaziland in order to provide adequate basic welfare provision and economic sustenance to poverty stricken and increasingly destitute households. The combination of the shocks described above, particularly on poorer households combined with HIV/AIDS, is reducing the potential for sustainable livelihoods and improved living conditions in Swaziland. It appears that an increasing number of households can no longer be described as 'vulnerable to' factors such as food insecurity and poverty or are at 'risk' of such problems, but indeed are 'in' livelihood failure, 'are' food insecure and 'are' destitute. These households need social safety net provision, ostensibly from Government, preferable through cash (e.g. coupon / voucher scheme) or possibly food provision – the former may be more effective and efficient especially in the medium term. Targeting of such support requires assessment on a house by house basis.
- **Improving and increasing agricultural production** is important for rural livelihoods.
 - Policy support in the area of maize marketing is required. **A full study into the declining production levels and marketing arrangements of the maize**

industry (possibly as part of the Comprehensive Agricultural Sector Policy) **is recommended.**

- Many farmers are unable to access/afford agricultural inputs to support production. **Serious consideration needs to be given as to how inputs (especially seed and fertiliser) may become more affordable possibly through subsidies.** In some instances free distributions of inputs may be appropriate – however revolving community seed banks, particularly of traditional varieties, may make such efforts more sustainable. Voucher systems that give people choice about the types of inputs they choose are likely to be more effective than distribution of pre-selected kits. However, any distribution system requires a good quality information component from MoAC/FAO and relevant agencies to support implementation.
 - **Diversified crop production** (as pointed out in the February MoAC/FAO assessment report) is important for the drier areas of the country. These include short-season sorghum and millet varieties, sweet potatoes, cassava, and short-term legumes such as mung beans, haricot beans and oilseed crops such as sunflower should be introduced or expanded. If these crops are destined for more than just household consumption, strong marketing arrangements need to be fully thought through and put in place to support farmers. Initiatives to increase cash crop production without appropriate marketing support can be more damaging than worthwhile to households.
 - **A full study into the viability and comparative advantages enjoyed by the cotton industry** vis a vis global cotton production – with development of plans to boost Swazi cotton production and rural incomes in a sustainable manner that boosts rural smallholder incomes.
 - **Water usage in the Lowveld should be reviewed in order to explore the possible options for more diversified crop production** using current or expanded water consumption possibilities. Reliance on heavily irrigated sugar cane production leaves Swaziland very exposed to problems in the sugar markets and few small holders have the resources to take part in such schemes.
- Livestock figures from around the country suggest that there is **scope for the development and restocking of cattle and goat populations** as part of a livelihoods rehabilitation initiative – especially in the Lowveld. Proposals and initiatives taking this forward clearly have to balance restocking and rangeland management and rehabilitation objectives. Furthermore, cattle productivity from traditional systems is low. Livestock can produce much more income or capital formation if managed in a more commercial manner. Year round feeding systems and access to water are essential if cattle productivity is to be maintained year round.
 - **Access to water services around the country need to be reviewed and clearly prioritised** for health and economic development reasons. All communities visited clearly expressed their desire to see water access as a top priority for Government.
 - **Creation of appropriate employment opportunities** need to be central within all Government plans. Wholly subsistence agricultural production has not and will never be viable in most areas of the country. Swazis do not grow enough from their farms to sustain themselves with food year round. While household agricultural production will always have an important role to play, employment opportunities (both formal and informal often related to cash crop production) all around the country have carried households out of poverty and into a situation of relative wealth. It is important that policy-makers and programme decision-makers increasingly understand the patterns of rural livelihoods so that policy-making, interventions and marketing support are

increasingly effective because they actively support employment initiatives in rural and urban areas.

- **Combating HIV/AIDS** will be central to the development prospects of Swaziland in the coming 10-20 years. Ways to combat HIV/AIDS should be mainstreamed within all Government activities with gender issues and women's empowerment being central to the approach taken – not least because more women at younger ages than men are being infected with HIV/AIDS. A systematic approach incorporating Government and the humanitarian sector is required to prevent new infections through appropriate behavioural change and availability of relevant drugs (e.g. to prevent mother to child transmission). More resources need to be made available as significant new health infrastructure delivery systems are required to ensure a strong and appropriate ARV (and associated medical) response should occur when considering the large percentage of the population judged to be infected throughout the country.
- Government and civil society need to work harder to ensure that **current policies are widely disbursed, fully understood and implemented**. Sectors that do not have policies such as HIV/AIDS and agriculture require national policies and long-term implementation plans.
- Swaziland needs **to develop a sustainable vulnerability monitoring system** nationwide that builds on commitments made by Ministers at several regional SADC FANR Ministers fora since 2000. In order to achieve this:
 - **A vulnerability monitoring system needs to be established** that links with relevant Government and non-Government information systems for analysis and dissemination
 - Additional effort and resources are required to **resurrect Ministries' information systems** and ensure that analytical outputs are made available and utilised in a centralised and coordinated fashion.
 - The VAC needs to be **adequately housed and linked in with present monitoring and other national surveillance systems** (e.g. health, nutrition and poverty). The VAC **requires resources and a small commitment of staff** from MEPD, MoAC and NDTF (DPMs office).
 - While the current analysis is good – it could and should be **greatly improved by developing new more detailed national livelihood baselines** to enable humanitarian agencies and Government Ministries to effectively plan development and emergency policies and programmes that benefit from a full understanding of livelihoods and household income/expenditure. These baselines will cost approximately USD 60,000 and will take 3-4 months.

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Annex 1: Chiefdoms visited

Please find below the list of Chiefdoms that were visited by Livelihood Zone

- **Highveld Maize & Cattle**
 - Mbangweni
 - Motshane
 - Maphalaleni
 - Moti
 - Makhungutsha
 - Macudvulwini
 - Nsangwini
- **Timber Highlands**
 - Mbukwane
 - Magele
 - Luhlangotsini
 - Lamgabhi
 - Satelite
 - Dwalile
- **Wet Middleveld**
 - Bulunga
 - Zombodze
 - KaNdinda
 - Mambatfweni
 - Mashobeni
 - Nkaba
- **Dry Middleveld**
 - Ngololweni
 - Nkambeni
 - Mhlangatane
 - Gundvwini
 - Ka-ndwandwe
 - Mpompota
- **Peri-Urban Corridor**
 - Nkiliji
 - Mbekelweni
 - Elangeni
 - Nhlambeni
- **Lowveld Cattle, Cotton & Maize**
 - Malindza
 - Khuphuka
 - Ngcina
 - Ndabeni
 - Endabeni
- **Lowveld Cattle & Cotton**
 - Lulakeni
 - Zindwendweni
 - Mamisa
 - Moyeni
- **Lomasha Trading and Arable**
 - Matfuntini
 - Tigodzini
 - Mkhangala
- **Lubombo Plateau**
 - Tikhuba
 - Sitsatsaweni