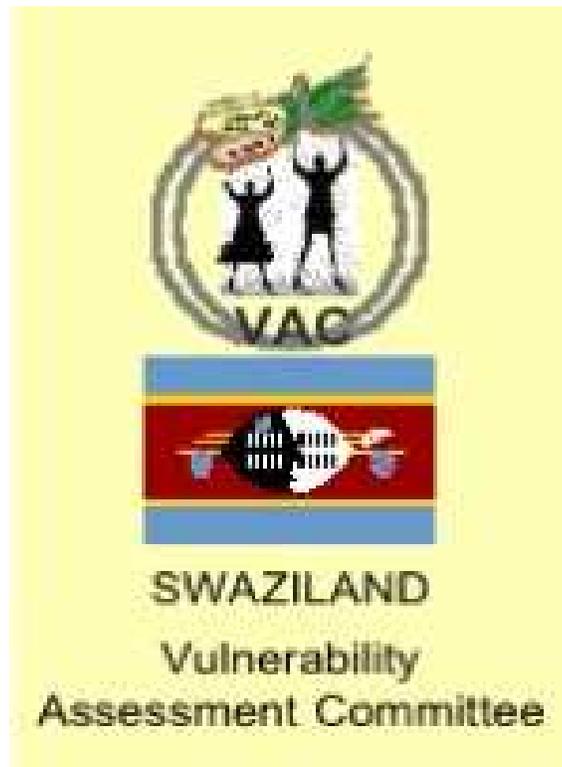




SWAZILAND
ANNUAL VULNERABILITY ASSESSMENT & ANALYSIS
REPORT
2008



July 2008



A - Highlights

- *Compared to the previous agricultural season, there has been a slight improvement in maize production in almost all parts of the country due to the improved rainfall that was received in the past season (2007/08)*
- *Slightly reduced levels of food insecurity will be experienced in most parts of rural Swaziland as about 287, 000 people are expected to face a food and/or an expenditure deficit.*
- *Water levels in perennial rivers and earth dams have slightly improved due to late rains that fell in the 2007/08 season improving rangelands and livestock conditions*
- *Sharp price increases in most basic commodities having a negative impact on disposable income and consumption choices.*
- *Need to develop monitorable indicators for all sectors to establish effectiveness of service delivery mechanisms.*
- *People living with HIV that causes AIDS are particularly vulnerable to food insecurity and about 62, 749 people will be affected.*

B - Acknowledgement

Established in 2002, the aim of the Swazi VAC is to incorporate a unified and deeper understanding of livelihoods in emergency and development programming. Swazi VAC analytical outputs are aimed at informing policy decision-making at the highest levels of Government, local UN Agencies and NGOs.

The Swazi VAC recognizes the assistance it obtains through the good coordination network that exists between the Tinkhundla Centres, Chiefs and their Council in their respective locations. We also thank the government and private sector officials who responded to our questions, provided reports, information and judgments on the current situation.

The planning team constituted mainly of the Swazi VAC Core Team members of Mduduzi Gamedze – MoPWT, Nathie Vilakati (SC), Benjamin Flomo – WFP/Swaziland, Thembumenzi Dube – MEPD, Thulani Maphosa - UNICEF/SNNC, Vakele Gama – NEWU/MOAC, Robert Fakudze – CSO, Masitsela Mhlanga – MoHSW, with key partners namely; Thembi Gama - NERCHA, Phiwa Malima - UNFPA/Swaziland, Zodwa Dlamini-Mtsetfwa – UNICEF/Swaziland, Bagezile Mavuso – WVI/Swaziland, Chiara Brunelli – WFP/HQ, Dr. John Ntambi – UNICEF/Swaziland, and Karina Lopez – AHH/Swaziland provided the overall guidance to the assessments.

Special thanks are due to all the women and men from the chiefdoms, who took part in the discussions and shared aspects of their life experiences with us. We hope we have represented their situation accurately.

Our profound appreciation goes to WFP and RHVP who provided the bulk of the funding for this assessment through the Regional Vulnerability Assessment Committee (RVAC) and WFP Regional and Swaziland Offices. We also extend our gratitude to World Vision International, NERCHA, Swaziland National Nutrition Council, UNICEF and UNFPA Swaziland Country Offices for their financial commitments to this year's Swazi VAC exercise. Government and NGOs support with vehicles during the data collection exercise is also highly appreciated.

Last but not the least, we would like to thank Eric Kenefick - WFP /Regional VAM Adviser OMJ, Phumzile Mdladla – FEWS-NET/Regional Office, for taking their time to be part of this important exercise. The Swazi VAC would also like to acknowledge contribution during preliminary results presentation and editorial support rendered by some of our partners and stakeholders.

Choice Ginindza
Chairperson
Swazi VAC

C – Executive Summary

Swaziland continued to suffer from one of the most devastating dry seasons in recent memory, mainly with regards to crop production. Even farmers, who heeded the advice of the Ministry of Agriculture and Cooperatives and planted, could not realize any harvest due to the late arrival of significant rains to support and sustain their crops. It is expected that about **287, 000 people** amongst the rural population will face a food shortage of **30, 259 MT** or an expenditure deficit of **SZL 85, 666, 624** and there will be need to provide food aid and / or cash intervention to prevent a humanitarian crisis. This number might increase due to a number of factors including the effects of the HIV and AIDS pandemic and the escalating commodity prices.

The performance of the country's economy is rather sluggish and this is having a negative impact in the delivery of basic services and catering for the populations' needs. It is crucial to engage in activities that will stimulate economic growth such as employment creation and diversifying sources of income to reduce the levels of poverty. Well over two-thirds (2/3) of the country's population live in conditions of poverty. The level of unemployment stands at 28.2%.

Prices of food, along with other basic household and non-household (services) commodities have increased by over 100% in some cases and this is not good under such high levels of poverty. The erosion of purchasing power of households coupled with other socio-economic responsibilities lead to asset disposal which is not a desirable situation for sustainable livelihoods.

The health-care system in the country continues to strive towards the provision of services aimed at improving maternal and child health to ensure a healthy nation. The continued inability of households to access adequate food due to poor agricultural performance has resulted in malnutrition in some cases. There are initiatives though that are carried out by the national Government's development partners to reduce the impact of poor food consumption and these include supplementary feeding and school feeding.

The provision of services at the community level is an essential component of development. This assessment made an attempt to establish how the services being provided in the communities are perceived. This is envisaged to result in the concerned sectors engaging with the relevant stakeholders in coming up with strategies to improve service delivery.

D - Acronyms

| | | |
|-----------|---|---|
| AFASS | : | ACCEPTABLE FEASIBLE AFFORDABLE SUSTAINABLE SAFE |
| AIDS | : | ACQUIRED IMMUNE-DEFICIENCY SYNDROME |
| ANOVA | : | ANALYSIS OF VARIANCE |
| ART | : | ANTI-RETROVIRAL THERAPY |
| ARV | : | ANTI-RETROVIRAL |
| CFSAM | : | CROP & FOOD SUPPLY ASSESSMENT MISSION |
| CI | : | CONFIDENCE INTERVAL |
| CSO | : | CENTRAL STATISTICS OFFICE |
| DFID | : | DEPARTMENT FOR INTERNATIONAL DEVELOPMENT |
| DHS | : | DEMOGRAPHIC AND HEALTH SURVEY |
| EA | : | ENUMERATION AREA |
| EMOP | : | EMERGENCY OPERATIONS |
| EPI | : | EXPANDED PROGRAMME ON IMMUNIZATION |
| FANR | : | FOOD, AGRICULTURE & NATURAL RESOURCES |
| FAO | : | FOOD AND AGRICULTURE ORGANISATION |
| FEG | : | FOOD-ECONOMIC GROUP |
| FEWSNET | : | FAMINE EARLY WARNING SYSTEM NETWORK |
| FEZ | : | FOOD ECONOMY ZONE |
| GDP | : | GROSS DOMESTIC PRODUCT |
| GoS | : | GOVERNMENT OF SWAZILAND |
| HHS | : | HOUSEHOLD(S) |
| HIV | : | HUMAN IMMUNE-DEFICIENCY VIRUS |
| LZ | : | LIVELIHOOD ZONE (ALSO KNOWN AS FOOD ECONOMY ZONE) |
| MDG | : | MILLENNIUM DEVELOPMENT GOALS |
| MEPD | : | MINISTRY OF ECONOMIC DEVELOPMENT AND PLANNING |
| MoAC | : | MINISTRY OF AGRICULTURE & COOPERATIVES |
| MT | : | METRIC TONNES |
| NAMBOARD | : | NATIONAL AGRICULTURAL MARKETING BOARD |
| NEWU | : | NATIONAL EARLY WARNING UNIT |
| NGO | : | NON-GOVERNMENT ORGANIZATION |
| NHSP | : | NATIONAL HEALTH STRATEGIC PLAN |
| NMC | : | NATIONAL MAIZE CORPORATION |
| NMS | : | NATIONAL METEOROLOGICAL SERVICES |
| NVAC | : | NATIONAL VULNERABILITY ASSESSMENT COMMITTEE |
| PR SAP | : | POVERTY REDUCTION STRATEGY AND ACTION PLAN |
| RVAC | : | REGIONAL VULNERABILITY ASSESSMENT COMMITTEE |
| SADC | : | SOUTHERN AFRICAN DEVELOPMENT COMMUNITY |
| SC SZ | : | SAVE THE CHILDREN SWAZILAND |
| SC UK | : | SAVE THE CHILDREN UK |
| SFDF | : | SWAZILAND FARMERS DEVELOPMENT FOUNDATION |
| SHIES | : | SWAZILAND HOUSEHOLD INCOME AND EXPENDITURE SURVEY |
| SMI | : | SWAZILAND MEAT INDUSTRIES |
| SNL | : | SWAZI NATION LAND |
| SPSS | : | STATISTICAL PACKAGE FOR SOCIAL SCIENCES |
| SWAZI VAC | : | SWAZILAND VULNERABILITY ASSESSMENT COMMITTEE |
| UNAIDS | : | UNITED NATIONS PROGRAMME ON HIV/AIDS |
| UNICEF | : | UNITED NATIONS CHILDREN'S FUND |
| UNCT | : | JOINT UNITED NATIONS COUNTRY TEAM |
| VAC | : | VULNERABILITY ASSESSMENT COMMITTEE |
| VAM | : | VULNERABILITY ANALYSIS AND MAPPING UNIT (WFP) |
| WFP | : | WORLD FOOD PROGRAMME |
| WHO | : | WORLD HEALTH ORGANIZATION |

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1.0 Background and overview

1.1 Overview of national context

The country has experienced declining agricultural production over the last decade due to impacts of successive years of crop failures. The prolonged drought and climate variability/change (dry spells, high temperature, and erratic rainfall), production under rain-fed conditions and the declining use of improved agricultural technology, increasing commodity prices including inputs, poverty, and the effects of HIV and AIDS have all compounded the situation. On average, there was a slight increase in production from 46,000 tonnes in 2006/07 agricultural season to just 62,000 tonnes for the 2007/08 agricultural season. However, the production will not meet the domestic consumption requirement as indicated in the Food Balance Sheet in section 3 below.

About 78.9% (Census 2007) of the Swazi population is rural-based. Their livelihoods mainly depend on subsistence farming and livestock. However, the same rural population has diversified their income sources ranging from employment in the formal sector to petty trade and seasonal casual labour. In the past, remittances contributed significantly to rural household economies but with the decline in employment opportunities (migrant labour and major company retrenchments) have reduced significantly.

The country's population stands at **1, 018, 449** from the 2007 population census by the Central Statistical Office (CSO) which is a decline in fertility rates. The 2007 Swaziland Demography and Health Survey (SDHS) shows the national HIV prevalence rate at 25.9% for people aged between 15 – 49 years.

1.2 Economy and infrastructure:

The economy of the country has shown a weak performance over the last few years. This weak performance is attributed to a number of factors including a decline in key sectors like agriculture which contributes to the growth of other sectors such as manufacturing. A surge in socio-economic challenges has also resulted in huge expenditures incurred by the national government thus increasing the level of consumptive spending rather than on investment. The change in trade patterns, particularly sugar in preferential markets has also compounded the situation.

There are significant investments aimed at reviving the economy such as development of irrigation infrastructure. This will reduce the dependence on rainfall for production and probably open opportunities for diversification. There are indications of a slight growth in

GDP figures from 2.8 % in 2006 to 3.5% in 2007 (MEPD, 2007). Below is a trend analysis of the GDP between 2000 and 2007.

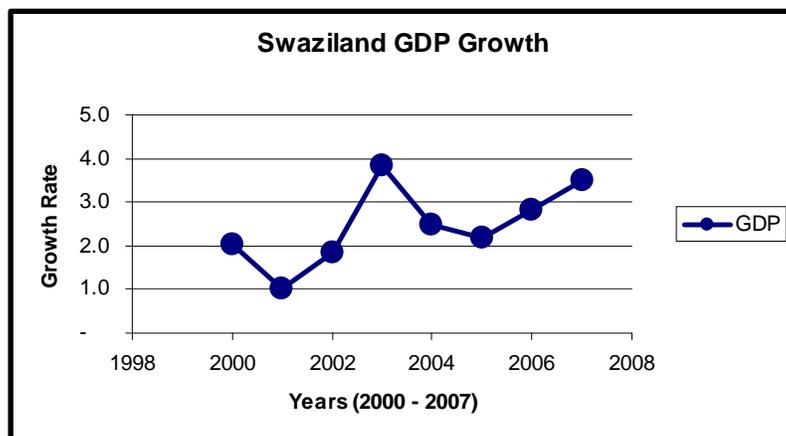


Figure 1: GDP Trends since 2001 to 2007

Below is a sector contribution presentation.

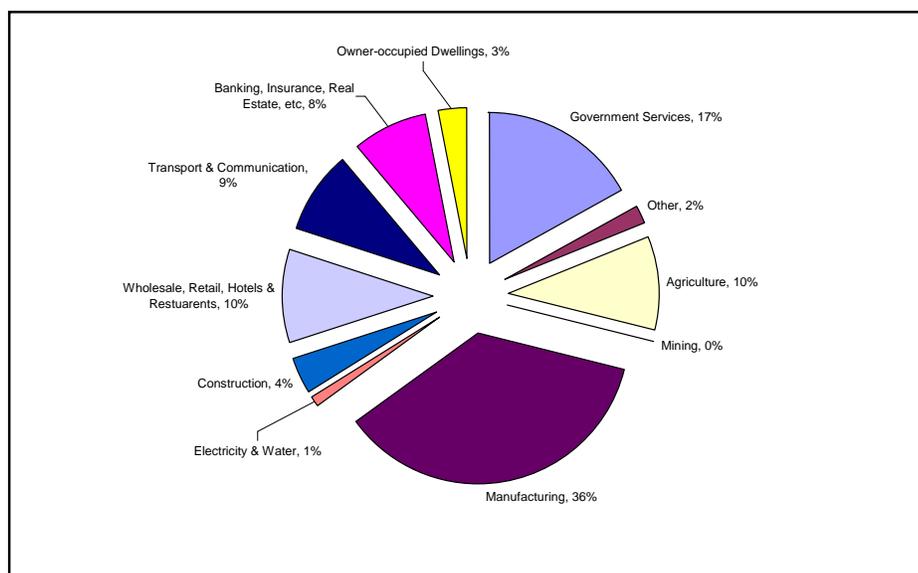


Figure 2: Sector contributors to GDP in 2007

1.3 Agriculture:

The smallholder agricultural sector in the country remains the largest contributor to the livelihoods of the majority of the rural population. The agricultural sector is the main raw material provider for the agro-based industries. Maize is the dominant crop and remains the staple food grown by the majority of rural households in the communal SNL which accounts for about 86% of the land area planted.

1.4 Livestock:

Livestock continues to play an important role in the production system and the livelihoods of smallholder farmers. Livestock population comprising cattle, goats and sheep on Swazi Nation Land (SNL) and Title Deed Land (TDL) as of 2007 stood at 637, 718; 480, 444 and 18, 770 respectively. Most households benefit from livestock through milk & milk products and livestock sales (Swazi VAC Baseline Profiles 2006)

1.5 Health:

Investment in health is a prerequisite for the long – term goal of poverty reduction. This is also contained in the Poverty Reduction Strategy and Action Programme (PRSAP) 2005 – 2015 that views poverty as both a cause and consequences of ill health. Poverty and chronic diseases are interconnected. Poor people are more likely to develop chronic diseases due to sub-standard living conditions; limited access to health care, nutritious food, greater exposure to chronic disease risk factors and higher levels of psychological stress (WHO, 2007).

Due to the effects of AIDS, Swaziland has seen a dramatic increase in morbidity and mortality. Infant's mortality rate for the five years before the SDH survey of 2007 (2001-2006) is 85 deaths per 1,000 live births and the under-five mortality rate is 120 deaths per 1,000 live births. For the period from 1997-2001, infant mortality was 67 deaths per 1,000 and under-five mortality was 90 deaths per 1,000 (SDHS 2007).

According to the SDHS 2006/7 maternal mortality is about 589 maternal deaths per 100,000 live births in Swaziland. That is, for every 1,000 births, about 6 women die of maternal causes. From 2006 to 2008, over 30% of all hospital admissions are attributed to conditions related to AIDS and tuberculosis (TB) and 75% of all outpatient cases had AIDS related complaints.

There are an estimated 130,000 orphaned and vulnerable children (OVC) in the country. About 80,000 of these children are orphaned, mainly due to the effects of HIV and AIDS. The number of OVC is projected to rise up to 200,000 by 2010 (National Plan of Action for OVC 2006 – 2010).

2. Objectives and methodology

2.1 Broad Objectives

The main objective of the 2008 annual assessment is to determine levels of food insecurity and malnutrition.

Specific Objectives include:

- Identify share of households with inadequate food by region and Livelihood zone.
- Identify households that rely on purchasing their food and the effect of that on their expenditure for other needs (school fees, health care) in light of the increasing commodity prices.
- Understanding geographical distribution of vulnerabilities to food insecurity, access to health and malnutrition in the country.
- Identify share of population with regular access to water and sanitary facilities by season, livelihood zones and regions
- Assess availability and use of sector services by region.

2.2 Survey methodology

The data collection was carried out in rural areas of all four regions of the country, using a comprehensive sampling design. This was done to cover all of the seven livelihoods/food economy zones within the country. A total of 104 enumeration areas were selected and for each, 10 households were interviewed, making a total of 1040 household interviews. Two survey instruments were developed by the Swazi VAC core team. A focus group questionnaire was designed for the different socio-economic (wealth groups) interviews to cover a range of topics including: community structure, livelihoods, access to education, health services and markets. The household instrument contained modules on: household demographics, water and sanitation, food sources and consumption, household and productive assets, inputs to livelihood, expenditure, income sources, shocks and food security, women's health and nutrition, child health and nutrition. Training of field enumerators was conducted by the members of the Swazi VAC core team.

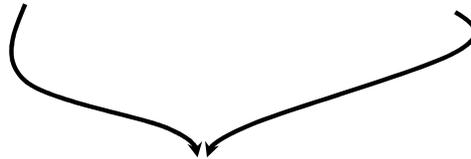
This year data collection was done using Personal Digital Assistant (PDAs) for Household Interviews. Most of the analysis was done using SPSS, EPI Info and MS Excel supported by regional staff from WFP. The statistical analysis was done by administrative regions (Hhohho, Manzini, Shiselweni and Lubombo) and Livelihoods Zones mainly based on one-way analysis of variance (ANOVA). In some cases, composite indicators such as a coping strategy index, food consumption score and dietary diversity indices were developed.

For the convergence of sectoral information for vulnerability, two-step cluster analysis was used. This procedure is an explanatory tool designed to identify natural groupings (or clusters) of households within a data set that would otherwise not be apparent. The algorithm employed by this procedure allows for inclusions of both continuous and categorical variables and allow for automatic choice of optimal number of clusters.

For the livelihood analysis, a problem specification was derived from the data collected from the Focus Group Discussions across all four wealth groups (Very Poor, Poor, Middle and Better-Off). The problem specifications were run on the Food Economy Group (FEG) analysis spreadsheet developed from the 2006 Baseline profile, to determine prevailing levels of food insecurity.

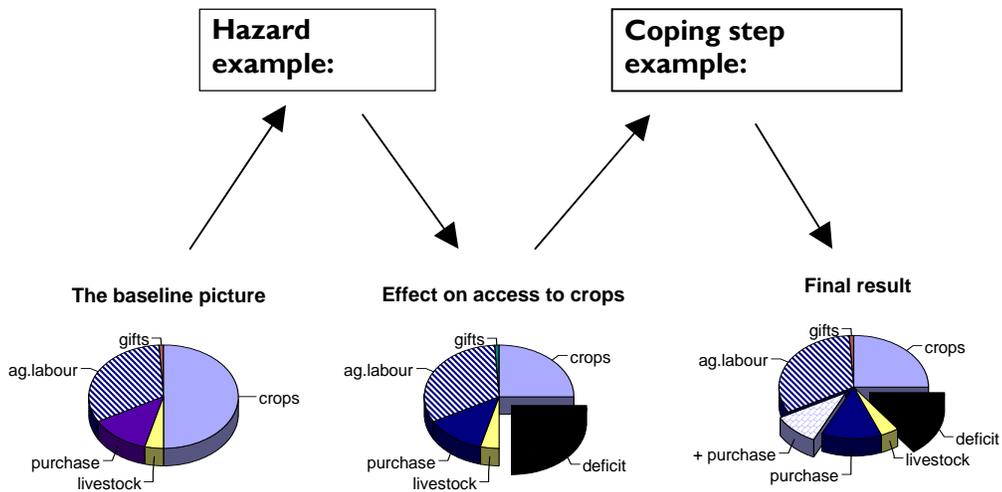
The analysis involved putting together two sets of information; Baseline Data and Monitoring data as shown below.

Livelihood Baseline Data (2006) + Monitoring Data (2008)



On-going Analysis of Current and Projected Situation and Intervention Needs (The outcome)

The Outcome Analysis



Outcome = Baseline + Hazard + Response (a simple example)

Sectoral Analysis

3.0 Food Access and Availability Cluster

3.1 Rainfall Performance for 2007/08 Season

The 2007/08 rainfall season started with significant rains which were received from early October and were about average until the first half of January 2008. The rains started to decline drastically from the second half of January 2008 as seen in Figure 1 below. The decline in rains coincided with a period when temperatures were at the highest recording above 40 ° C in January 2008.

The changes in the occurrence of rains was consistent with the Seasonal Forecast for the 2007/08 season issued in September 2007, which indicated normal to above-normal rains during the October-November-December (OND) 2007 period and a normal to below-normal rainfall during the latter part of the season, the January-February-March (JFM) 2008 period.

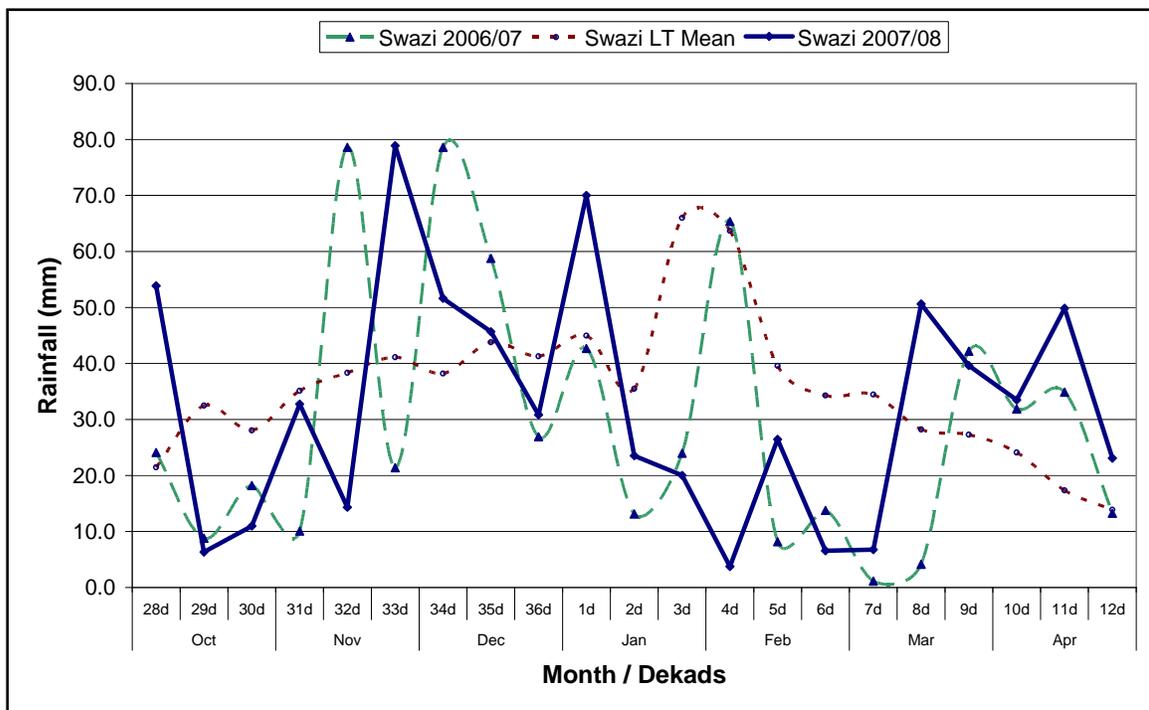


Figure 3: National Rainfall distribution for the 2006/07 season

The areas most affected by the poor distribution of these rains are those in the Lowveld Ecological Zone (Figure 4 below) which covers eastern parts of Hhohho, Manzini and Shiselweni Regions and a better part of Lubombo Region.

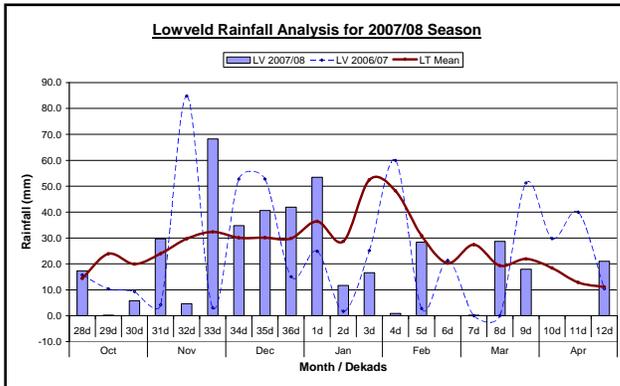


Figure 4: Lowveld 2007/08 Rainfall distribution

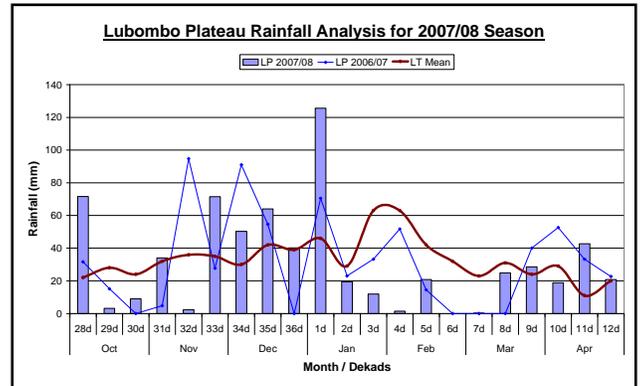


Figure 5: Lubombo Plateau 2007/08 Rainfall distribution

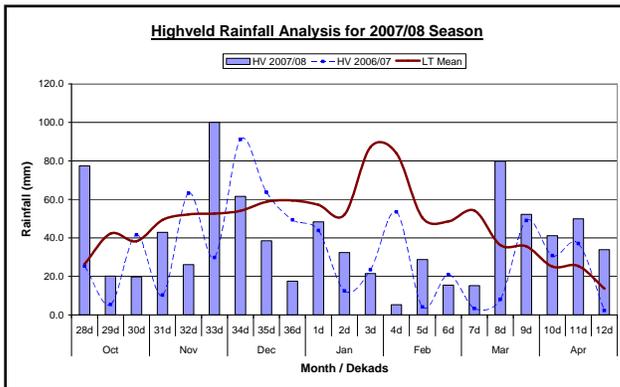


Figure 6: Highveld 2007/08 Rainfall distribution

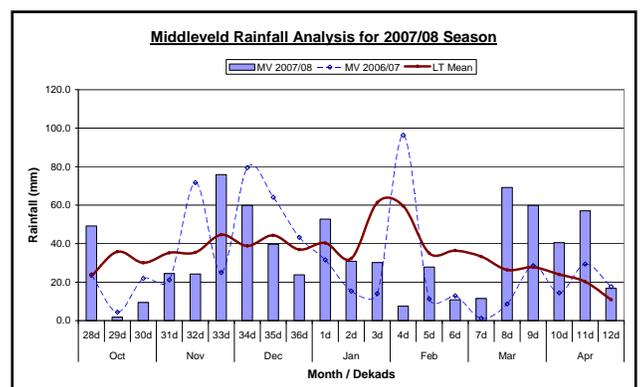


Figure 7: Middleveld 2007/08 Rainfall distribution

The Lubombo Plateau was the second worst affected by the reduction in rainfall especially in the last half of the season (January – March) where dry spells persisted (Figure 5) for about 20 days compared to about 50 cumulative dry spell days in the Lowveld. The other regions also experienced reduced rains but did not experience significant dry spells (Figure 6 and 7).

Cumulative seasonal rainfall for 2007/08 season followed a similar trend to that of the 2006/07 season (Figure 8 below). The rains started to fall below the long-term average and that of 2006/07 in January 2008 until March when it started to increase to above that of last season.

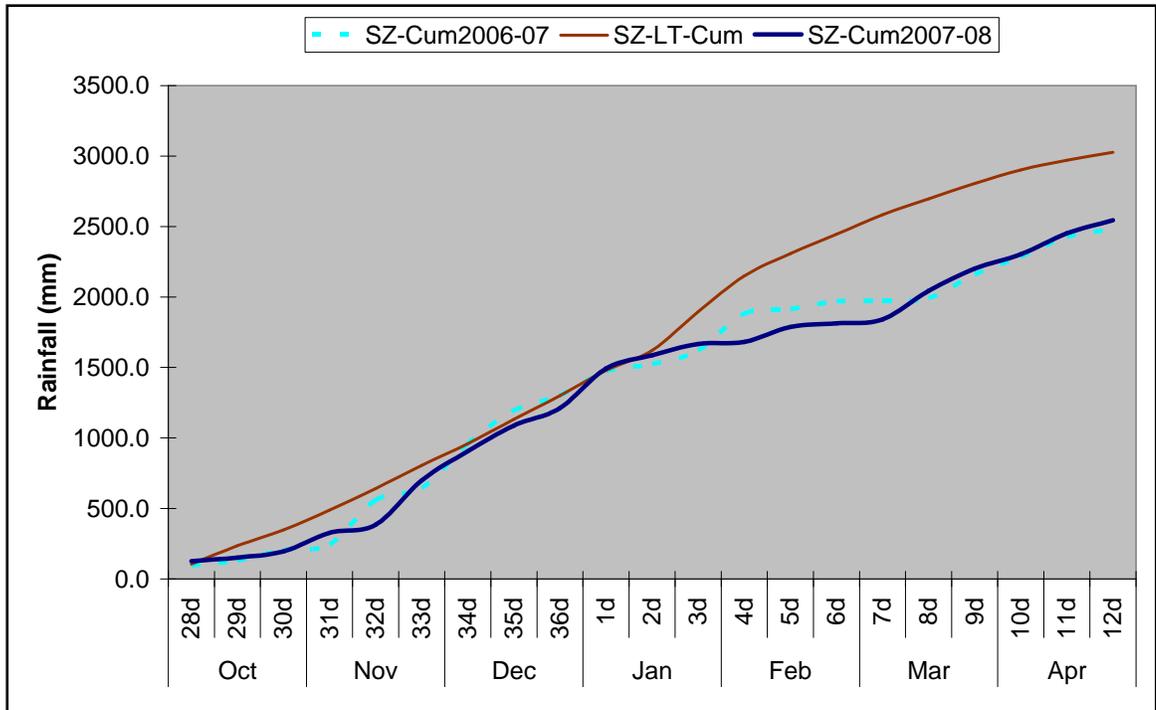


Figure 8: National Cumulative rainfall for the 2007/08 season

3.2 Crop production

3.2.1 Availability of Agricultural Inputs

There has been a significant increase in prices of Agricultural inputs in the 2007/2008 cropping season.

Fertilizer: One of the suppliers of agricultural inputs, Farm Chemicals recorded input sales of 8, 551 Tonnes for 2007/2008 which is a 37% increment compared to 2004/05 sales. However, fertilizer sales in 2007/08 were lower than that of 2006/07 (Table I below) which does not reflect the increase in area planted. Small holder farmers were found to be applying less than the recommended quantities and this practice does not link with their soil types. This could be attributed to the rapid increase in fertilizer prices i.e. a 50kg basal fertilizer increased from SZL 170 in October 2007 to SZL 240 in June 2008.

Table 1: Input availability in the last four (4) seasons in tonnes

| Input Type | | 2004/05 | 2005/06 | 2006/07 | 2007/08 |
|-------------|------------|---------|---------|---------|---------|
| Maize Seed | | n/a | n/a | 689 | 1054 |
| Fertilizers | 2:3:2 (22) | 2150 | 2687 | 3700 | 3652 |
| | 2:3:2 (38) | 858 | 2352 | 2325 | 1530 |
| LAN | | 2346 | 3000 | 3492 | 3369 |

Source: CFSAM 2008

Draught Power: The most common forms of draught power in the country are oxen, donkeys and tractors. Most farmers who prefer using tractors for land preparation rely on private and government owned tractors, which are not always in good operational conditions. The government pool currently consists of 257 tractors; however, poor maintenance of the tractors greatly impedes their effectiveness particularly at critical times in the ploughing season after the early rains.

3.2.2 Area Planted

Area planted to maize shows that most farmers had taken the advice given by the Ministry of Agriculture and Cooperatives to plant. For the current year 2007/08 area planted under maize is 60 355 hectares which is a marked improvement from previous seasons. The table below shows figures for the area planted under maize over the last 5 years.

Table 2: Area planted by agro-ecological zones since 2003/04 season in hectares

| Agro-Zones | 2003/2004 | 2004/2005 | 2005/2006 | 2006/2007 | 2007/2008 |
|--------------|---------------|---------------|---------------|---------------|---------------|
| Highveld | 17 236 | 15 340 | 13 713 | 14 682 | 18 349 |
| Middleveld | 23 642 | 21 840 | 19 114 | 16 645 | 21 824 |
| Lowveld | 11 064 | 15 730 | 11 320 | 13 331 | 15 863 |
| Lubombo | 2 528 | 3 355 | 2 826 | 2 751 | 4 319 |
| Total | 54 470 | 56 265 | 46 973 | 47 409 | 60 355 |

Source: Central Statistics Office (CSO)

3.2.3 Overall Maize Production

Production is derived from area planted and the yields for a specific crop for a given season. The area planted to maize for the 2007/08 season is as stated above (Table 2) where the different regions show an improvement from that of the 2006/07 season. Yields derived from the Water Requirement Satisfaction index (WRSI) show a slight increase in yields for the 2007/08 season (Table 3 below).

Table 3: Average yields for agro-ecological zones in the 2006/07 and 2007/08 seasons

| Agro-Zones | 2006_07 yields (t/ha) | 2007_08 yields (t/ha) |
|------------|-----------------------|-----------------------|
| Highveld | 1.0737 | 1.3178 |
| Middleveld | 1.1738 | 1.0813 |
| Lowveld | 0.5804 | 0.6385 |
| Lubombo | 1.0621 | 0.9464 |
| National | 0.9725 | 0.996 |

Source: National Meteorological Services

Figure 9 below shows the maize production by agro-ecological zone from 2003/04 to 2007/08 seasons.

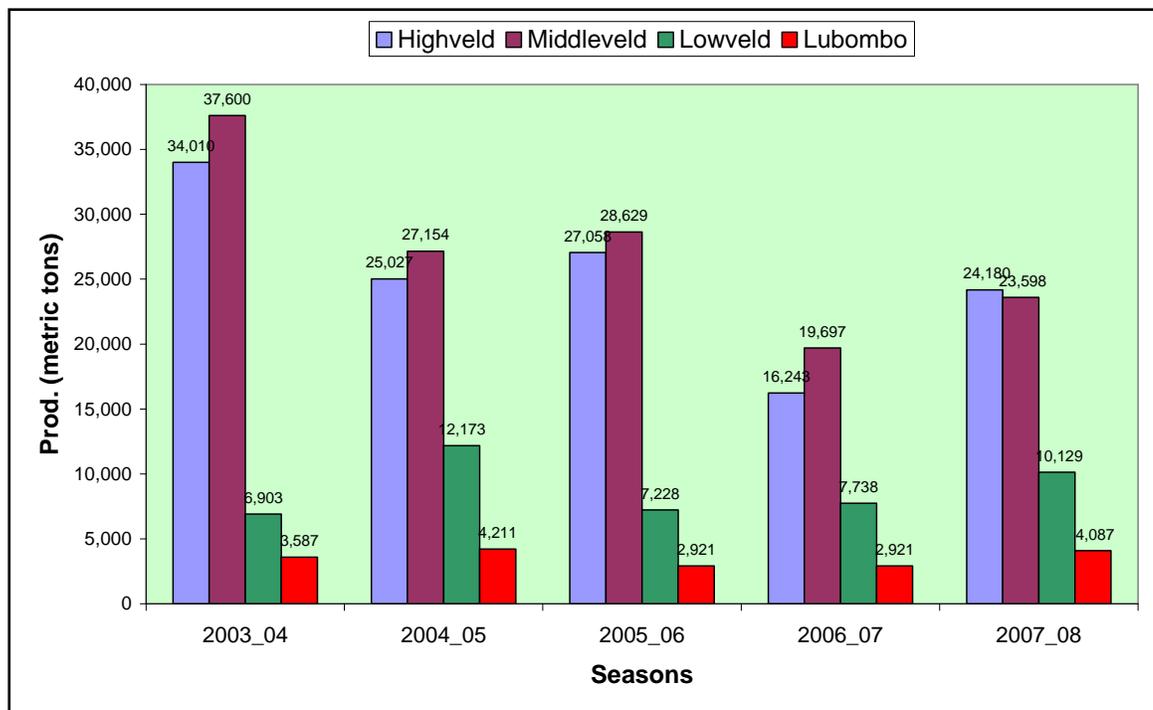


Figure 9: Maize Production for agro-ecological zones since 2003/04 to 2007/08 season

There is a slight improvement in the Lowveld when compared to last season, though insignificant when compared to the cereal requirements of the people living within the zone.

The national maize production forecast stands at **61, 995 MT** for the 2007/08 season which is **33%** above last season's production of **46, 598 MT**.

As reflected in figure 10, maize production has been declining for the past four (4) seasons though area planted has been about average.

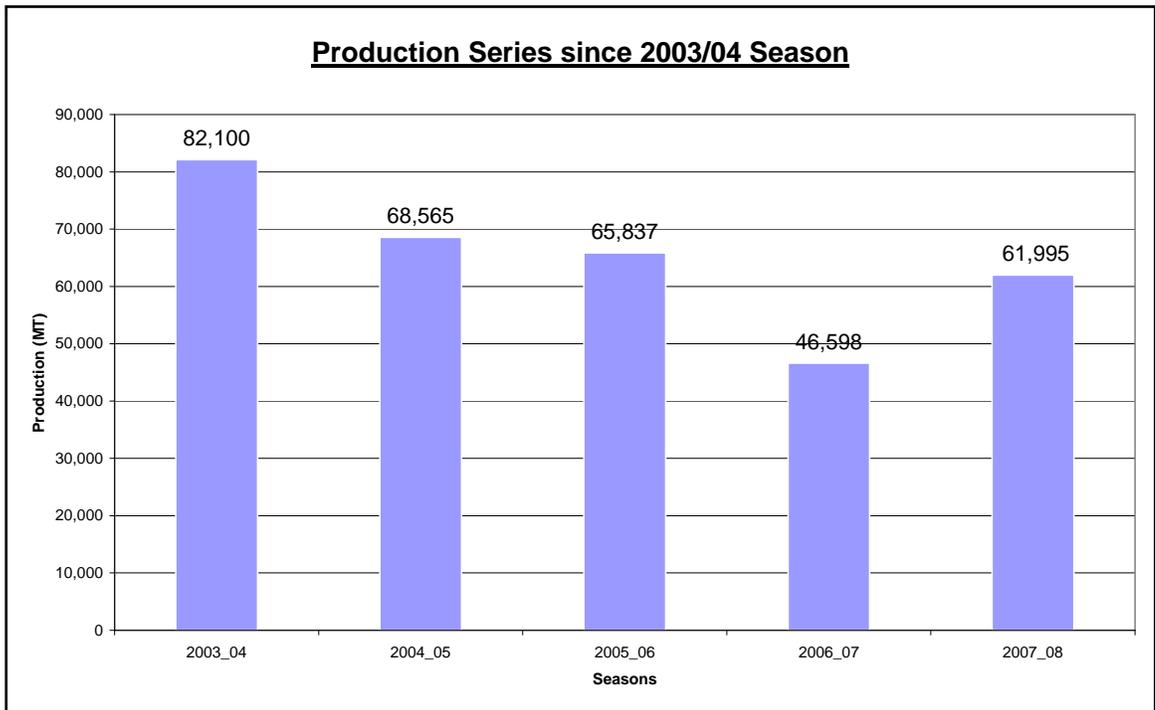
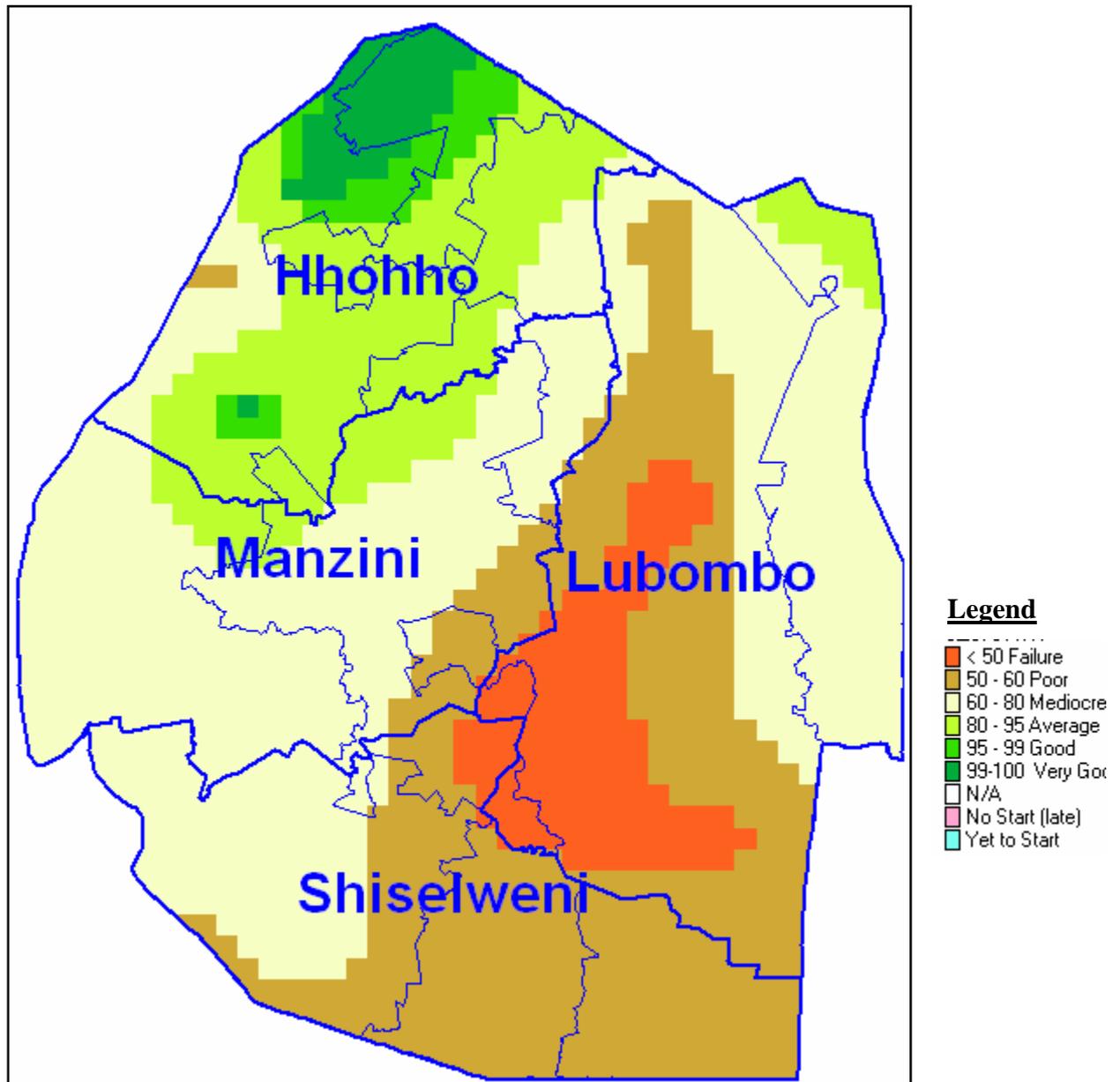


Figure 10: National maize production since 2003/04 to 2007/08 season (Source: N M S)

The water requirement satisfaction index (WRSI) for the 2007/08 season shows poor soil moisture development to support maize growth in most parts of the Lowveld (map 1), some parts of the Lubombo plateau and Middleveld.



Map I: Water Requirement Satisfaction Index at the end of the 2007/08 season

Table 4: Food Balance Sheet for the 2008/09 Marketing Year

| SWAZILAND | | | | |
|---|--------------------|--------------|--------------|----------------|
| ANNUAL CEREAL BALANCE | | | | |
| MARKETING YEAR (April - March) 2008/09 | | | | |
| Mid marketing year population: 1,018,449 | | | | |
| | ['000 metric tons] | | | |
| Thousands of Metric Tons | | | | All |
| | Maize | Wheat | Rice | Cereals |
| A. Domestic Availability | 64.60 | 4.5 | 0.5 | 69.60 |
| A.1 Opening Stocks @ 1st April 2008 | 2.6 | 4.5 | 0.5 | 7.60 |
| A.2 Gross Harvest | 62.00 | 0 | 0 | 62.00 |
| B. Gross Domestic Requirements | 147.5 | 49.6 | 13.4 | 210.50 |
| B1. Domestic Consumption Requirements | 106.3 | 42.6 | 12.9 | 161.80 |
| B2. Desired Minimum Stock Requirements | 3 | 7 | 0.5 | 10.50 |
| B3. Unofficial Exports | 2 | 0 | 0 | 2.00 |
| B4. Seed Use | 1.2 | 0 | 0 | 1.20 |
| B5. Feed | 31.1 | 0 | 0 | 31.10 |
| B6. Other losses** | 3.9 | 0 | 0 | 3.90 |
| C. Domestic Shortfall/Surplus | -82.91 | -45.1 | -12.9 | -140.91 |
| D. Imports | - | - | - | |
| D.3 Planned Imports | 26.74 | 30 | 12 | 68.74 |
| Commercial | 26.74 | 30 | 12 | 68.74 |
| Food Aid | 0 | 0 | 0 | 0.00 |
| D.1 Received | 25.05 | 36.28 | 8.18 | 69.51 |
| Commercial | 20.33 | 36.28 | 8.18 | 64.79 |
| Food Aid | 4.72 | 0 | 0 | 4.72 |
| D.2 Expected | 1.69 | 0 | 0 | 1.69 |
| Commercial | 6.41 | -6.28 | 3.82 | 3.95 |
| Food Aid | 0 | 0 | 0 | 0.00 |
| E. Exports | 0 | 7.27 | 0 | 7.27 |
| Commitments Shipped | 0 | 7.27 | 0 | 7.27 |
| Commitments Not Yet Shipped | 0 | 0 | 0 | 0.00 |
| F. Import Gap/Surplus | 56.17 | 15.1 | 0.9 | 72.17 |
| G. Forecasted Closing Stock | 0.00 | 0 | 0 | 0.00 |
| H. Current Stock @31st March, 2008 | 2.47 | 6.17 | 0 | 8.64 |
| Notes; | | | | |
| <p>N.B: na stands for not applicable, n/a stands for not available * on-farm stocks are based on last marketing year's unallocated surplus with a 15% adjustment for storage losses. **Losses and other uses are estimated as 15% of gross harvest</p> | | | | |

3.3 Market Impacts on Food Security

Markets involve a chain of players and the interaction that takes place between the various players ensures that the transaction of goods and services facilitates access by consumers. The functions of exchange, transportation, storage and value addition determine the effectiveness of the market especially in the food security context. In market analysis as far as the scope of this assessment is concerned, the objective has been to understand the interaction of supply with demand, prices of goods, availability and access by all sections of society.

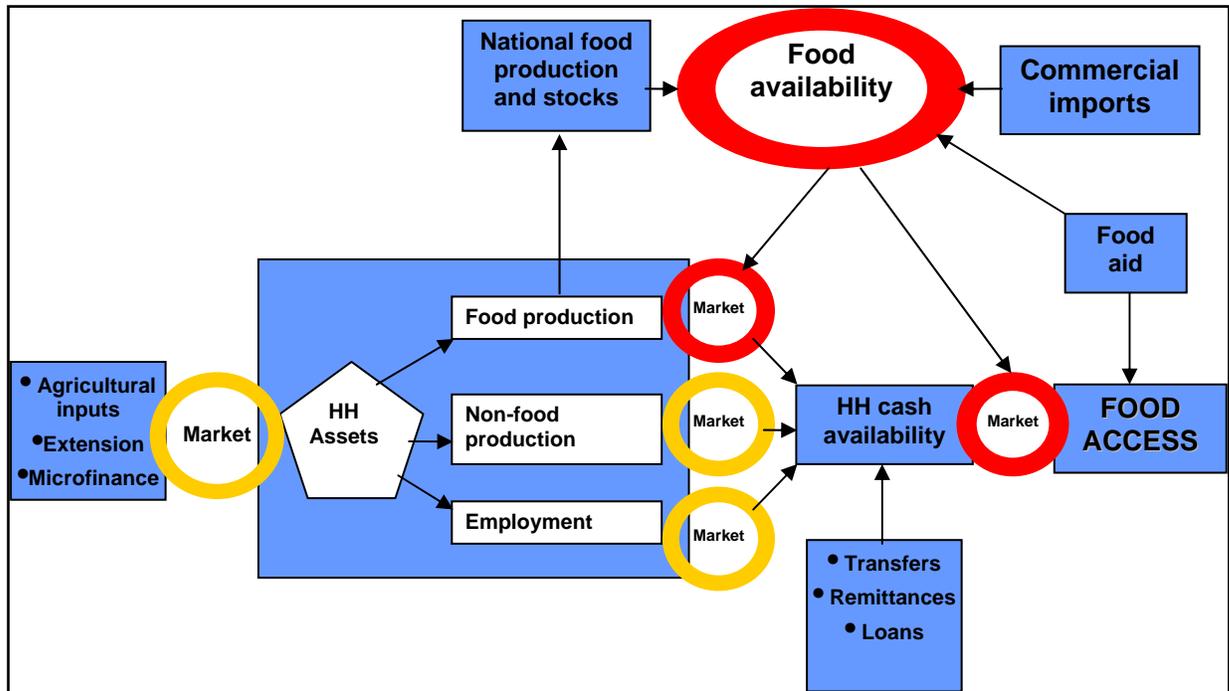


Figure 11: Market interactions for Food Access & Availability (Source: WFP regional bureau marketing unit)

The rising trend in international food prices that affect the rest of the world is attributed to a wide range of factors that the country cannot deal with successfully in isolation unless drastic changes occur at a global level. However, in the short to medium term, locally designed and suited adaptation strategies could minimise the impact on human livelihoods especially the poor. Some of the reasons advanced for the escalation of food prices are growing demand for food in developing economies, increasing crude oil prices and the utilization of food crops for bio-fuel production.

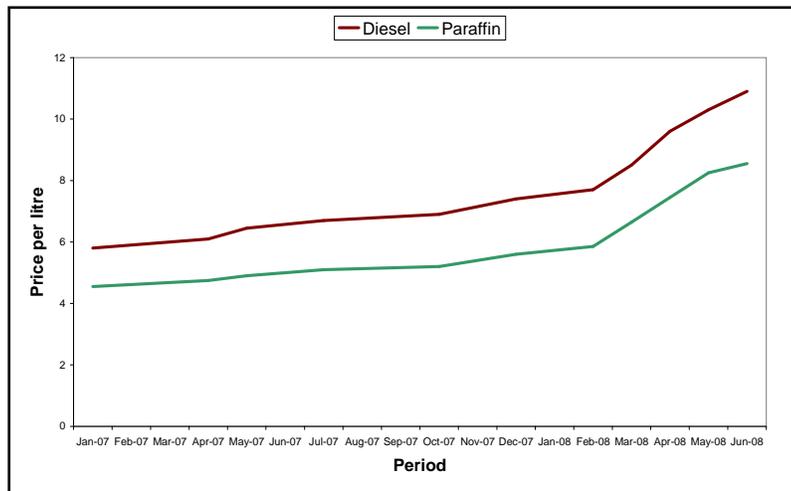


Figure 12: Price trends of diesel and Paraffin since January 2007

The impact of price rises has been experienced across a wide spectrum of goods and services. A detailed illustration of the trend in price hikes over the last twelve (12) months is illustrated above and below. The effect of price increases is shown across a range of commodities particularly those that constitute the typical household food basket. Commodities such as cooking oil, rice, maize meal, meat and chicken show a steep increase in price. Also illustrated is the cost of the different energy sources such as paraffin, petrol and diesel. Paraffin is mainly used as a source of energy for many poor households for cooking and illumination. Petrol and diesel are mainly used for locomotives and provide for transportation and draught power. An escalation in the price of these commodities easily translates to the cost incurred by consumers.

The above graph shows the increase in diesel and paraffin prices between July 2007 and June 2008. Diesel which is mainly used by transportation vehicles has increased by 67% in the period under consideration. Indications are that this kind of trend may be observed in the long-term and the cost of

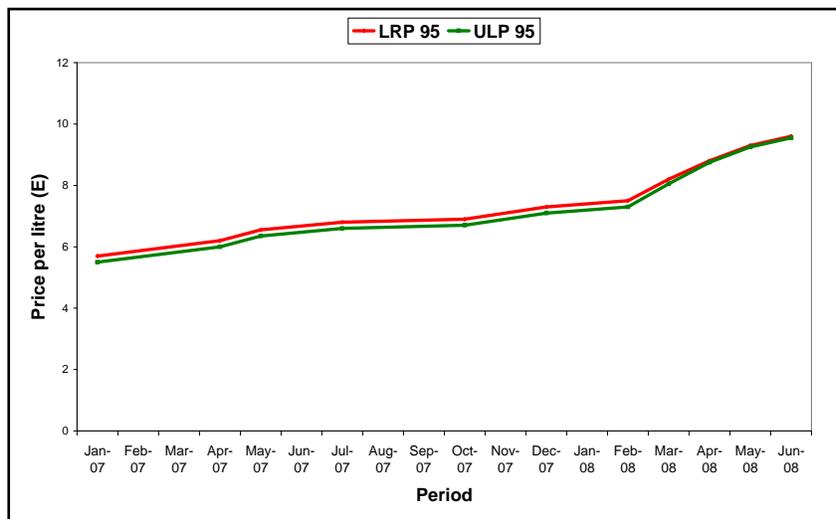


Figure 13: Price trends of Lead Replacement and Unleaded Petrol

transportation will likely go up as well. Draught power for agricultural production and haulage will also result in increased costs of production, further worsening the impact on food

commodities. Poor households rely on paraffin for domestic energy and this also depicts increases of over 70% in the period under review. The rising costs for such commodities have a bearing on household disposable income.

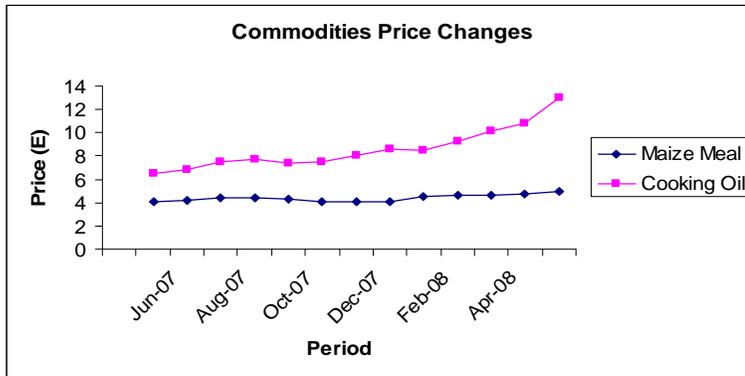


Figure 14: Price trends for maize meal and cooking since May 2007

Cooking oil shows an over 100% price increase in the period under review and forms a key component of relief packages for food insecure households. The per kilo (SZL/kg) price of maize meal has been steady (Figure 14) over the period under review compared with the next best substitute, rice; that has increased by over 100% in the same period. Bread has also seen drastic increases which will have a negative impact on households where it is a main dietary contributor.

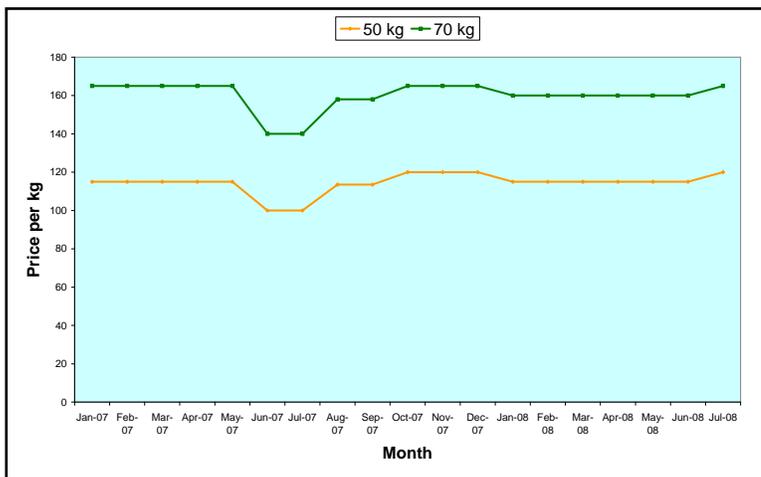


Figure 15: Price of 50kg and 70kg Maize Bags trends

Maize prices for 50kg and 70 kg bags obtained from National Maize Corporation (NMC) show a steady trend from January 2007 to July 2008. There is a need to continuously monitor trends in the maize market as a staple food commodity and a major crop produced by most farmers in the country.

4.0 Livelihoods Analysis by Region

The national level of vulnerability analysis depicts a decline in the numbers of people affected compared to 2007 Swazi VAC Annual Assessment. The total number of vulnerable people in the whole country as per 2008 VAC Assessment is **287, 634**, which is lower when compared to findings of 2007 VAC (345, 012). This drop is due to improved own food production as reflected earlier in the report (3.2.3 Overall Crop Production).

A summary of the findings is presented at the end of each of the regions indicating the metric tonnage requirement which can alternatively be met by the provision of cash equivalent.

The tables below present problem specifications that were used to simulate the shocks faced by households in each of the livelihood zones.

Table 5: Problem specifications for sources of food by Livelihood zone

| Source of food | HCM ^a | TH ^b | MMV ^c | DMV ^d | LCM ^e | PUR ^f | LP ^g |
|----------------|------------------|-----------------|------------------|------------------|------------------|------------------|-----------------|
| Crops | 9% | 59% | 42% | 35% | 23% | 43% | 16% |
| Agric. Labour | 50% | 50% | 50% | 50% | 15% | 27% | 16% |
| School feeding | 66% | 66% | 66% | 0% | 0% | 0% | 0% |
| Food aid | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Table 6: Problem specification for income sources by Livelihood zone

| Source of income | HCM | TH | MMV | DMV | LMC | PUR | LP |
|-----------------------|------|------|------|------|------|------|------|
| Livestock & Products | 100% | 100% | 65% | 100% | 77% | 43% | 100% |
| Crops | 100% | 0% | 100% | 29% | 50% | 27% | 16% |
| Agriculture Labour | 50% | 19% | 0% | 25% | 25% | 100% | 54% |
| Self-employment | 100% | 100% | 0% | 100% | 100% | 100% | 100% |
| Petty trade | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Gifts / social grants | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

^a Highveld Cattle and Maize

^b Timber Highlands

^c Moist Middleveld

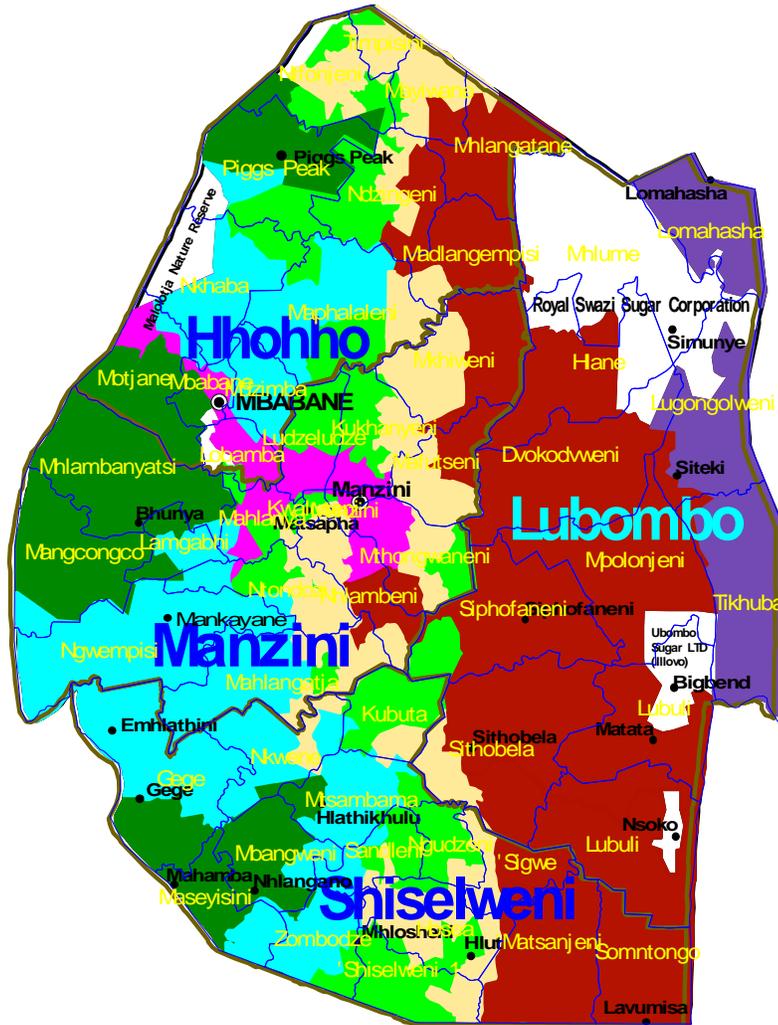
^d Dry Middleveld

^e Lowveld Cattle and Maize

^f Peri Urban

^g Lubombo Plateau

4.1 NATIONAL SUMMARY ANALYSIS



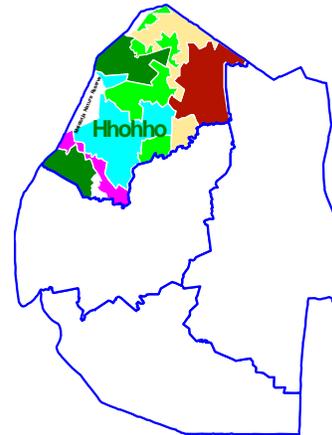
Map 2: Tinkhundla and Livelihood zones by administrative regions

Table 7: People facing a deficit in livelihood zones within the four regions of the country

| Region | HCM | TH | WMV | DMV | LVC | LBP | PUR | Total |
|--------------|---------------|--------------|--------------|---------------|----------------|--------------|---------------|----------------|
| Hhohho | 7,005 | 2,471 | 2,112 | 20,996 | 23,328 | - | 18,706 | 74,617 |
| Manzini | 10,750 | 1,928 | 4,031 | 25,108 | 11,074 | - | 22,693 | 75,584 |
| Shiselweni | 12,498 | 5,439 | 2,528 | 15,177 | 16,835 | - | - | 52,478 |
| Lubombo | - | - | 184 | 2,916 | 77,984 | 3,872 | - | 84,955 |
| Total | 30,253 | 9,838 | 8,855 | 64,196 | 129,221 | 3,872 | 41,398 | 287,634 |

4.2 HHOHHO REGION

The Hhohho region comprises of the following livelihood zones; a) Highveld Cattle and Maize, b) Timber Highlands, c) Moist Middleveld, d) Dry Middleveld, e) Lowveld Cattle and f) Peri-Urban. The most affected livelihood zones within this region presented in a chronological order are; a) Lowveld Cattle and Maize with 21, 706 people b) Dry Middleveld with 19, 554 people, and c) Peri-Urban with 17, 534 people d) The Highveld Maize and Cattle, Timber Highlands and the Moist Middleveld are the least affected with only 6, 246; 2, 230 and 1, 967 people respectively. In total **69, 238 people** will face a food deficit of **7, 972 metric tonnes** or an expenditure deficit of **SZL22, 885, 610**.



The map shows the different livelihood zones in the Hhohho region. The table below further shows the number of people affected in this livelihood

Table 8: Summary of Vulnerable Population in Hhohho Region by Livelihood Zone

| Livelihood Zone ^h | Highveld Maize & Cattle | Timber Highlands | Moist Middleveld | Dry Middleveld | Lowveld Cattle & Maize | Peri-Urban Corridor | Total |
|------------------------------|-------------------------|------------------|------------------|----------------|------------------------|---------------------|--------------|
| Number of Vulnerable People | 6 246 | 2 230 | 1 967 | 19 554 | 21 706 | 17, 534 | 69, 237 |
| Cereal Requirement | 722 | 181 | 73 | 1 858 | 2 711 | 2, 427 | 7, 972 |
| Cash Requirement | 1 562 513 | 567 896 | 242 651 | 6 990 422 | 7 352 324 | 6, 169, 802 | 22, 885, 608 |

4.3 MANZINI REGION

Manzini region has six livelihood zones. The total rural population affected stands at **67, 194** facing a food deficit of **7, 573 metric tonnes** or an expenditure deficit of **SZL21, 655, 371.80**. The least affected zones in this region are; a) Timber Highlands with 1, 794 people, and b) Moist Middleveld with 3, 425 people. The Dry Middleveld and Peri-Urban Corridor are the worst affected zones with 21, 046 and 20, 793 vulnerable people respectively. Both the Highveld Cattle and Maize and Lowveld Cattle and Cotton are moderately affected with 9, 986 and 10, 149 respectively.



The map shows the different livelihood zones in the Manzini region. The table below further shows the number of people affected in each livelihood zone.

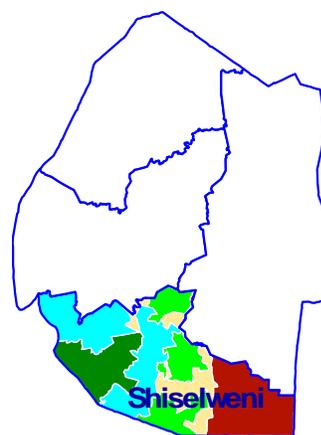
^h Colours on all the Tables for “Summary of Vulnerable Population” are linked to colours on the map

Table 9: Summary of Vulnerable Population in Manzini Region by Livelihood Zone

| Livelihood Zone | Highveld Maize & Cattle | Timber Highlands | Moist Middleveld | Dry Middleveld | Lowveld Cattle & Maize | Peri-Urban Corridor | Total |
|-----------------------------|-------------------------|------------------|------------------|----------------|------------------------|---------------------|------------|
| Number of Vulnerable People | 9 986 | 1 794 | 3 425 | 21 046 | 10 149 | 20 793 | 67 193 |
| Cereal Requirement | 1 155 | 146 | 127 | 1 999 | 1 268 | 2 878 | 7 573 |
| Cash Requirement | 2 497 830 | 456 872 | 422 463 | 7 523 943 | 3 437 706 | 7 316 558 | 21 655 372 |

4.4 SHISELWENI REGION

Compared to last year (2007), the region has shown a slight decline in the number of people affected by shocks in the current year (2008). The most affected livelihood zones are; Lowveld Cattle and Maize with 16, 318 people, followed by the Dry Middleveld with 14, 505 people and 11, 675 people for Highveld Cattle and Maize. Timber Highlands and Moist Middleveld are moderately affected with 5, 089 and 2, 454 people respectively. The total food deficit for the region stands at **5, 271 metric tonnes** with a cash equivalent of **SZL15, 231, 546.51** to assist the **50, 041** people.



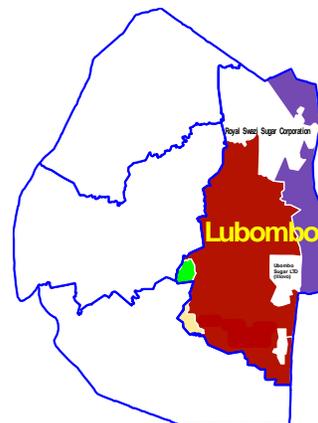
The map shows the different livelihood zones in the region. The table below summarises the outcomes of the analysis showing population affected by livelihood zone and food and expenditure deficits faced by those populations.

Table 10: Summary of Vulnerable Population in Shiselweni Region by Livelihood Zone

| Livelihood Zone | Highveld Maize & Cattle | Timber Highlands | Moist Middleveld | Dry Middleveld | Lowveld Cattle & Maize | Total |
|-----------------------------|-------------------------|------------------|------------------|----------------|------------------------|------------|
| Number of Vulnerable People | 11 675 | 5 089 | 2 454 | 14 505 | 16 318 | 50 041 |
| Cereal Requirement | 1 350 | 414 | 91 | 1 378 | 2 038 | 5 271 |
| Cash Requirement | 2 920 386 | 1 295 992 | 302 623 | 5 185 375 | 5 527 171 | 15 231 547 |

4.5 LUBOMBO REGION

Over the years, the Lubombo region has had the highest number of people classified as vulnerable to food insecurity. Lubombo has continued to have the highest number of vulnerable people in the country even this year. The most affected livelihood zone in the region is the Lowveld Cattle and Maize with 72, 913 people. The other three livelihood zones namely Moist Middleveld, Dry Middleveld and Lubombo Plateau are moderately affected with 160, 2, 506 and 3, 445 respectively. In total, the **79, 024** vulnerable people will require **9, 443** metric tonnes or **SZL25, 894, 097.93** to bridge the food or expenditure deficit.



The map shows the different livelihood zones in the Lubombo region. The table below further shows the number of people affected in each livelihood zone.

Table 11: Summary of Vulnerable Population in Lubombo Region by Livelihood Zone

| Livelihood Zone | Moist Middleveld | Dry Middleveld | Lowveld Cattle & Maize | Lubombo Plateau | Total |
|-----------------------------|------------------|----------------|------------------------|-----------------|------------|
| Number of Vulnerable People | 160 | 2 506 | 72 913 | 3 445 | 79 024 |
| Cereal Requirement | 6 | 238 | 9 107 | 92 | 9 443 |
| Cash Requirement | 19 764 | 895 831 | 24 697 431 | 281 071 | 25 894 097 |

4.6 Food consumption analysis

Information on the different foods and food groups consumed by the household was collected using a 7 day recall in order to use food frequency and dietary diversity as an indicator of the household food security. From the data, the food consumption score was calculated using weights assigned to foods/food groups based upon their nutrient density. From the food consumption score, households were classified as having poor, borderline or adequate consumption. Weights are given to selected food items in line with their food groups as shown on the table below.

Table 12: Food groups and associated weights

| | FOOD ITEMS | Food groups | Weight |
|-----------|---|---------------------------|---------------|
| 1 | Maize , maize porridge, rice, sorghum, millet, pasta, bread and other cereals | Cereals and Tubers | 2 |
| 2 | Cassava, potatoes and sweet potatoes | | |
| 3 | Beans, Peas, groundnuts and cashew nuts | Pulses | 3 |
| 4 | Vegetables and leaves | Vegetables | 1 |
| 5 | Fruits | Fruit | 1 |
| 6 | Beef, goat, poultry, pork, eggs and fish | Meat and fish | 4 |
| 7 | Milk yogurt and other diary | Milk | 4 |
| 8 | Sugar and sugar products | Sugar | 0.5 |
| 9 | Oils, fats and butter | Oil | 0.5 |
| 10 | Condiments | Condiments | 0 |

Results from the both 2008 and 2007 assessments show that adequate consumption still remains high. Lubombo and Shiselweni are the worst affected regions with a statistically significant reduction in the number of people with adequate consumption when comparing 2007 and 2008 assessments as shown in the figure 16 below:

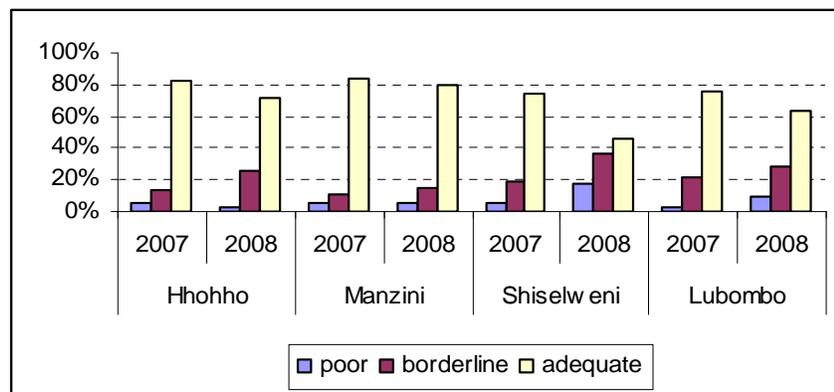


Figure 16: Comparison of food consumption by Region

From the assessment it was observed that the majority of households obtain food in one or more of the following ways:

- Grow and consume from their own stocks
- Purchase from markets
- Transfers from relatives or members of the community
- Casual labour
- Transfers in the form of food assistance
- Gathering wild foods or hunting/fishing

Purchase, own production and transfers are the main contributors to household food consumption. This is mostly evident in Hhohho, Shiselweni and Manzini. Figure 17 below illustrates the consumption sources across the different regions:

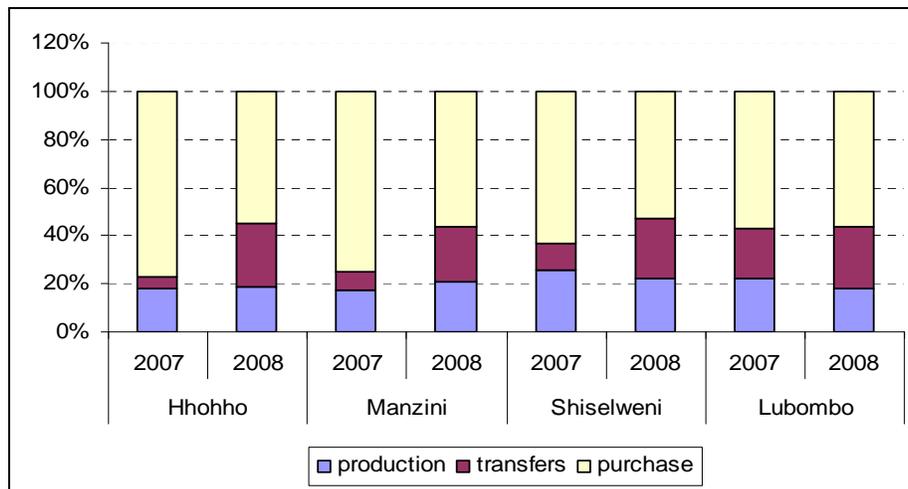


Figure 17: Consumption sources by Region

5.1 Water and Sanitation

In order to keep the country informed on access to safe water and adequate sanitation facilities during dry and rainy seasons and whether people are paying for potable water or not, these issues were incorporated into the 2008 VAC assessment. Non availability of safe water and adequate sanitation facilities has an effect on the nutrition status with high negative consequences on young children (0-5years) and to people with compromised immunity.

From the assessment it was observed that there were no remarkable differences between access to safe water during the dry and the rainy season. Manzini and Shiselweni regions were the worst affected regions with regards to access to safe water with coverage below 50%. Lubombo region is slightly above 50% and Hhohho region is about 62% as shown on the figure 18.

Most people purchase water and when stratified by region, households in Lubombo are most likely to pay for water throughout the year (28%). About one-quarter of the households in Manzini pay for potable water, as compared to about 17% in Hhohho with the least being Shiselweni at 7% of the households.

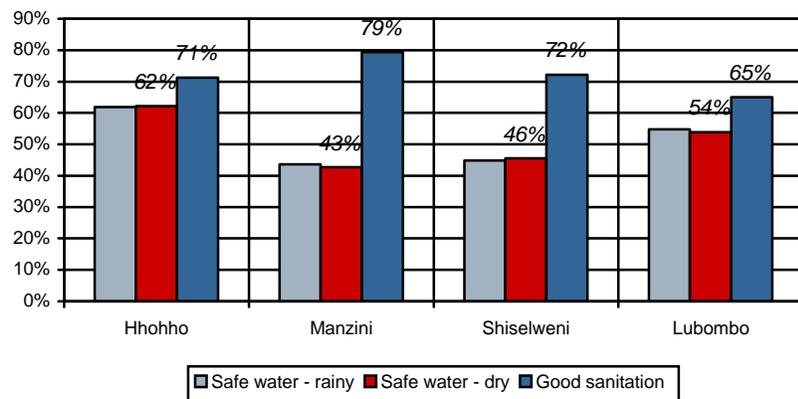


Figure 18: Water and Sanitation by Region

Access to improved sanitation is slightly higher than access to water across all the regions with Manzini region showing the highest at 79% and the lowest being Lubombo at 65%.

5.1.1 Hand washing practices

Hygiene practices show that most people do wash their hands after using the toilet and when dirty. The results also show that people wash their hands before cooking and eating. Notably, a majority of the people were found not to wash their hands after cleaning the child especially in the Shiselweni and Lubombo regions.

Table 13: Hand Washing Practices

| | Before cooking | Before eating | After using toilet | After cleaning child | When Dirty | Never |
|-------------------|----------------|---------------|--------------------|----------------------|------------|-------|
| Hhohho | 86% | 97% | 97% | 76% | 80% | 13% |
| Manzini | 91% | 93% | 97% | 68% | 85% | 4% |
| Shiselweni | 83% | 92% | 84% | 43% | 80% | 6% |
| Lubombo | 63% | 92% | 94% | 43% | 63% | 5% |

Based on the findings, it is recommended that resources to facilitate good sanitary facilities to all households in all the regions should be provided.

5.2 Health, Nutrition, HIV and AIDS cluster

5.2.1 Maternal Health Services

Maternal health plays a pivotal role in the reduction of maternal mortality. Receiving quality maternal health services for a mother during pregnancy, at the time of delivery and soon after delivery is important for her health and that of the child. Findings from the study showed that access to maternal health services by a skilled provider is nearly universal at 80 % across all households.

5.2.2 Access to Antenatal Care Services

ANC services are accessed by a majority of pregnant women. About 68.9 % of ANC services were delivered by nurse midwives and only 9% of pregnant women have been seen by a doctor for ANC services. The findings also show that about 20.5% of pregnant women have not attended any ANC services.

5.2.3 Family Planning

According to 2006-07 SDHS, decisions about beginning sexual activity, marrying, having children, and using contraception directly affect family health and the risk of contracting or transmitting the HIV virus. Findings from the study showed that about 66% women in Lubombo are not using any form of contraception whilst Shiselweni has about 65%, Hhohho is about 60% and Manzini is at 57%.

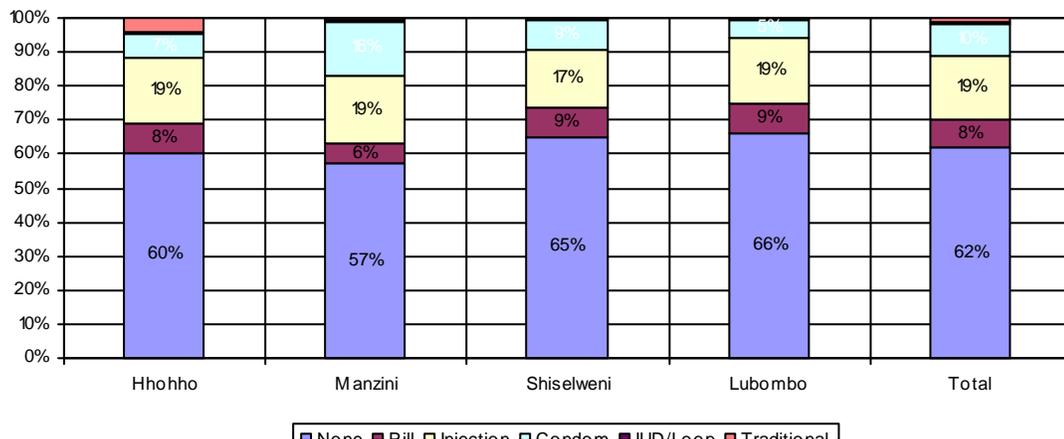


Figure 19: Family Planning Methods

A component of abortion related deaths in the household tool was incorporated with the view of assessing the number of abortion related deaths in all the regions which can indicate neglect of safe motherhood and reproductive health needs of the poor. Findings from the assessments show that the majority of the abortion related deaths are mainly in the Lubombo region (19.5%) and Hhohho (15%) as shown by the graph below.

The assessment showed that there is very low access to community based contraception distributors, with Lubombo at 37% and being the highest.

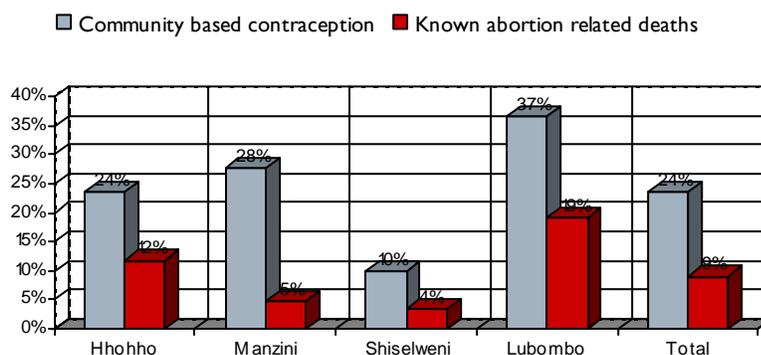


Figure 20: Community based contraception distributors and abortion related deaths

5.3 Nutrition

5.3.1 Nutritional Status of Children 6-59 months

The height and weight data obtained in the assessment were used to compute the three separate indices of children’s nutritional status that include: height-for-age, weight-for-height, and weight-for-age. The indices are calculated using new growth standards generated by WHO from data collected in a Multi-centre Growth Reference Study (WHO, 2006).

Acute malnutrition shows that there is no significant difference of the nutritional status in the past two assessments from 2006 – 2007. It is noticed though that Shiselweni has shown an increase from 0.4% (95% CI: 0.0-1.2%) in April 2007 to 3.3% (95% CI: 0.4-6.2%) in June 2008 (Table 14). Levels of acute malnutrition are also not significantly different between the Food Economy Zones with the highest being 3.4% recorded in the Moist Middleveld and 2% in the Highveld Maize and Cattle.

Table 14: Acute malnutrition levels by region

| Region | April 2006 | | April 2007 | | June 2008 | |
|-------------------|------------|-------------|------------|-------------|-----------|-------------|
| | % | CI | % | CI | % | CI |
| Hhohho | 2.7% | (0.7 - 4.6) | 0.9% | (0.0 - 2.1) | 1.3% | (0.0 - 3.0) |
| Manzini | 1.6% | (0.2 - 2.9) | 0 | - | 0.6% | (0.0 - 1.7) |
| Shiselweni | 1.0% | (0.0 - 2.4) | 0.4% | (0.0 - 1.2) | 3.3% | (0.4-6.2) |
| Lubombo | 1.0% | (0.0 - 2.2) | 1.7% | (0.0 - 3.6) | 1.1% | (0.0 - 2.7) |
| Average | 1.6% | (0.6-3.2) | 0.8% | (0.1-2.1) | 1.6 | (0.6-2.8) |

Stunting in all the regions remains above 35% which according to the WHO thresholds are at alarming levels. Lubombo Plateau has reached alarming levels of 51% and the Peri Urban at 43% while other food economy zones are in the upwards of 30%.

Underweight prevalence has remained between 4-12% in the regions though on average it has been around 7%. When the findings are stratified by age group, it can be seen that there is an increase of malnutrition from 6-23 beyond which it starts to decrease. From the current assessment there is a significant increase of underweight children in 6-11 months while there is a reduction of nutritional status between 12-47 months. Meanwhile 48-59 months has remained constant as shown on the graph below.

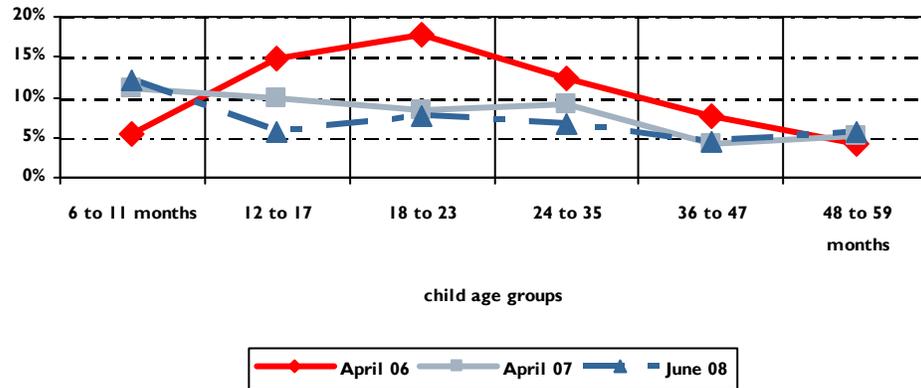


Figure 21: Child underweight by age

5.3.2 Women Nutritional Status

Anthropometric data on height and weight were collected for women of child bearing age group 15-49 years in the assessment. Using these data, two indicators of nutritional status are presented; the percentage of women age 15-49 with very short stature (less than 145 cm) and the body mass index (BMI) for women and men age 15-49. A cut off point of 18.5 is used to define thinness or acute under nutrition and a BMI of 25.0-30kg /m² or above usually indicates overweight while above 30kg/m² is obesity.

Findings continue to show that more than 50 % of the women of the reproductive age group are overweight to obese in all the regions. There were very few women found to be malnourished and this has been the same trend in the past two assessments from 2006 to 2007 as shown on the graph below.

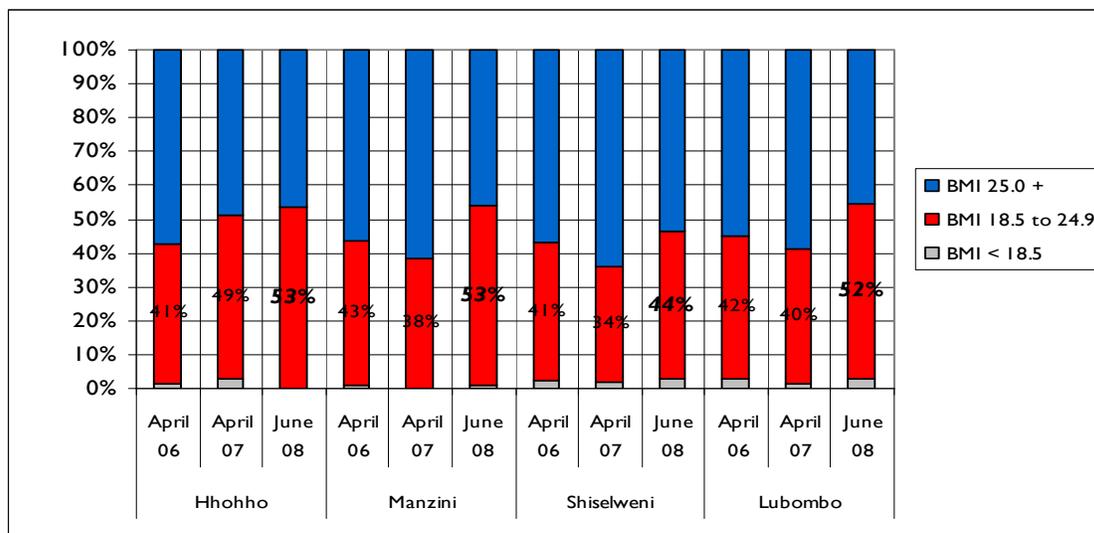


Figure 22: Women's BMI for 2006 - 2008 by region

The assessment clearly shows that the highest proportion of women that are underweight are in Lowveld Cattle and Maize food economy zone with a prevalence of 3.5% (95% CI: 1.8-4.9%) and is statistical different from other food economy zones ($p < 0.05$) while the average was 1.8% (95% CI: 0.6-2.7). Lubombo is the most affected food economy zone according to the assessment as has the highest number of women in the overweight to obese category with about 60% (95% CI: 48-72%) and closely followed by Highveld Maize and Cattle at 59,2% (95% CI: 43-68%)

5.3.3 Key Relationships Noted

- Boys were significantly ($p < 0.001$) more likely to be underweight than girls; 11% compared to 2% for girls.
- Boys were more significantly ($p < 0.001$) likely to be stunted: 49% as compared to 30% girls
- Children who have had recent diarrhoea are more likely to be wasted (2.9%) than those without (1%).
- Children with recent diarrhoea were more likely to be underweight (9.2%) than those without recent diarrhoea (5.5%).

5.3.4 Breastfeeding Status

The assessment shows that there is no significant difference between boys and girls that are breastfeeding as shown in figure 23.

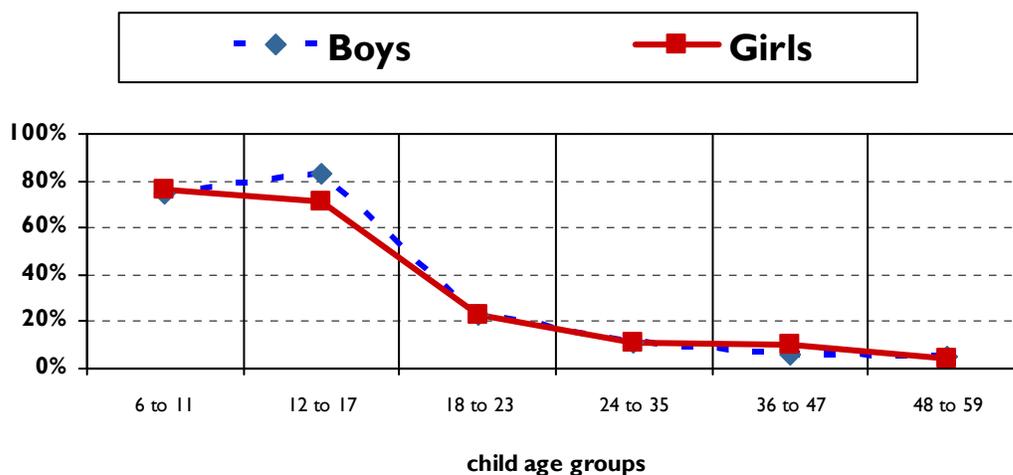


Figure 23: Breastfeeding comparisons for boys and girls

5.3.5 Immunisation Coverage

The assessment collected data on vaccination coverage for all children between 6-59 months. Information on vaccination coverage was collected in two ways i.e. child health cards and from mothers' verbal reports. In comparison to the routine Expanded Programme of Childhood illnesses which is below 60%, the findings show high immunization coverage above the 80% recommended by WHO though it is low for infants between 9-12 months when they are expected to have received their first measles dose as shown by the table 15 below:

Table 15: Child Immunization Coverage

| | Used health care when ill | Measles (9-59 months) | Measles (9-12 months) | Deworming (12-59 months) | Vitamin A (6-59 months) |
|-------------------|---------------------------|-----------------------|-----------------------|--------------------------|-------------------------|
| Hhohho | 59% | 86% | 71% | 72% | 68% |
| Manzini | 57% | 75% | 73% | 51% | 60% |
| Shiselweni | 38% | 79% | 73% | 48% | 60% |
| Lubombo | 48% | 91% | 73% | 55% | 57% |
| Total | - | 83% | 73% | 56% | 61% |

From the table above, Manzini and Shiselweni have percentages of Measles below 80% in the age group 9-59 months. In all the regions for the age group 9-12 months they are all below the cut off points. Vitamin A and de-worming children remains very low for children 6-59 and 12-59 months respectively, which tallies with the national Vitamin A routine monitoring.

5.4 HIV and AIDS

The country has one of the highest HIV prevalence in the world at 26% among the sexually active population with HIV infection higher among women at 31.1% than men at 19% (SDHS 2006/07). The 2006/07 SDHS tested women and men age 15 – 49, children 2 -14, adults age 50 and older. Figure 24 shows the percent affected with HIV.

The number of people living with HIV who need antiretroviral therapy is estimated at 62,749. Antiretroviral treatment is provided in 51 health facilities with 26,812 clients on treatment as at the end of March 2008 (1st quarter MOHSW M&E Report 2008). According to the HIV estimation and projection spectrum for Swaziland, October 2007, there are 62,749 HIV positive people in need of ART.

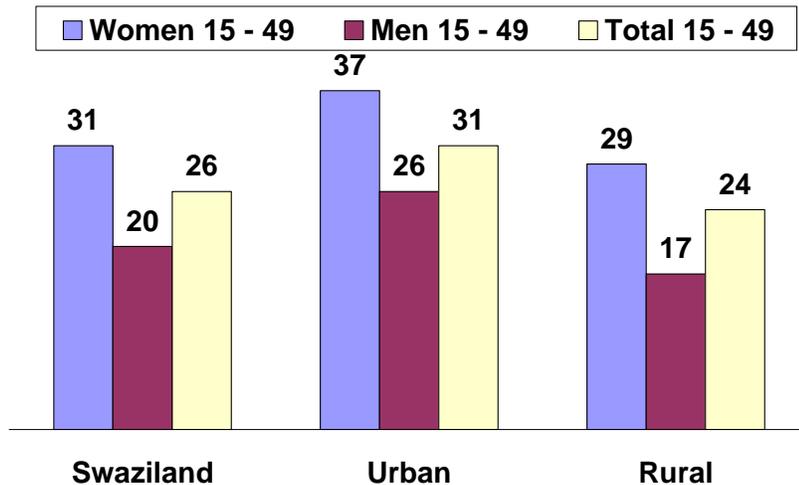


Figure 24: HIV Prevalence in Swaziland (SDHS 2007)

5.4.1 HIV and AIDS in relation to Poverty

People who are poor often come late for diagnosis. They are less likely to get treatment for sexually transmitted diseases (STIs), known to be a major factor aiding transmission of HIV. They are also less likely to get and use condoms. For women who are poor, sex becomes a commodity they sell, to obtain money; satisfy hunger of dependants, and clothe and educate children.

While the impact of HIV and AIDS is generally well documented and understood, considerably less attention has been given to the spread of HIV and AIDS in an emergency / humanitarian crisis/settings. It is important to remember, however, that significant work remains to be done in accurately assessing prevalence rates and information related to risk behaviours for HIV in emergency/drought stricken settings. In general, people already infected with HIV are at greater risk of physically deteriorating during humanitarian crisis as there are more prone to suffer from diseases and death as a consequence of limited access to food, clean water and good hygiene than are people with functioning immune systems.

It is in this regard that efforts have been made in this study to further integrate HIV and AIDS issues into vulnerability assessment and analyses without changing the approach of the assessment.

Findings from the assessment showed that household with chronic illness (CI) as assessed regionally are at an average of 14% burden with Hhohho and Lubombo regions leading (16%) respectively and Shiselweni region (13%) and the least being Manzini (11%).

Table 16: HIV and AIDS Proxies

| | HH size | % Female headed | % Elderly headed | % member CI | % Disabled member |
|--------------|----------------|------------------------|-------------------------|--------------------|--------------------------|
| Hhohho | 5.4 | 39% | 36% | 16% | 2% |
| Manzini | 6.6 | 49% | 35% | 12% | 6% |
| Shiselweni | 6.3 | 48% | 38% | 13% | 4% |
| Lubombo | 6.3 | 43% | 30% | 16% | 2% |
| Total | 6.1 | 45% | 35% | 14% | 4% |

The assessment also looked at chronic illness, TB and mentally/physically disabled with regards to access to medical treatment see table 17 below.

Table 17: Access to Medical Treatment by Physical Condition

| Physical Condition | Medical Treatment | | | Total |
|------------------------------|--------------------------|--|-------------------------|--------------|
| | go to doctor regularly | go regularly but do not take medicines | no doctor, no medicines | |
| mentally/physically disabled | 49.4% | 25.3% | 25.3% | 100.0% |
| chronic illness | 70.9% | 22.7% | 6.4% | 100.0% |
| TB | 80.0% | 13.3% | 6.7% | 100.0% |
| Total | 66.3% | 22.0% | 11.7% | 100.0% |

Table 18: Reasons for not going to Health Facility

| Main Reasons for Not Going to Health Centre | Physical Conditions | | | |
|---|------------------------------|-----------------|-----|-------|
| | mentally/physically disabled | chronic illness | TB | Total |
| Health center too far | 14% | 14% | 11% | 14% |
| No money for transport | 45% | 50% | 22% | 46% |
| Prefer traditional medicine | 0% | 6% | 11% | 4% |
| Too busy with work | 5% | 4% | | 4% |
| Medicines unavailable at the centre | 10% | 4% | 22% | 8% |
| Medicines are expensive | 21% | 16% | 22% | 19% |
| Medicines give undesired effect | 5% | 6% | 11% | 6% |
| Health center too far | 14% | 14% | 11% | 14% |
| Total | 100 | 100 | 100 | 100 |

5.4.2 The Population Structure

The population structure is generally described as a pyramid, reflecting the demographer's traditional depiction of population according to age group, with men on one side of a central axis and women on the other. The shape of the pyramid is determined by both birth and death rates. When both are high, the pyramid has a wide base and tapers off steadily with increasing age.

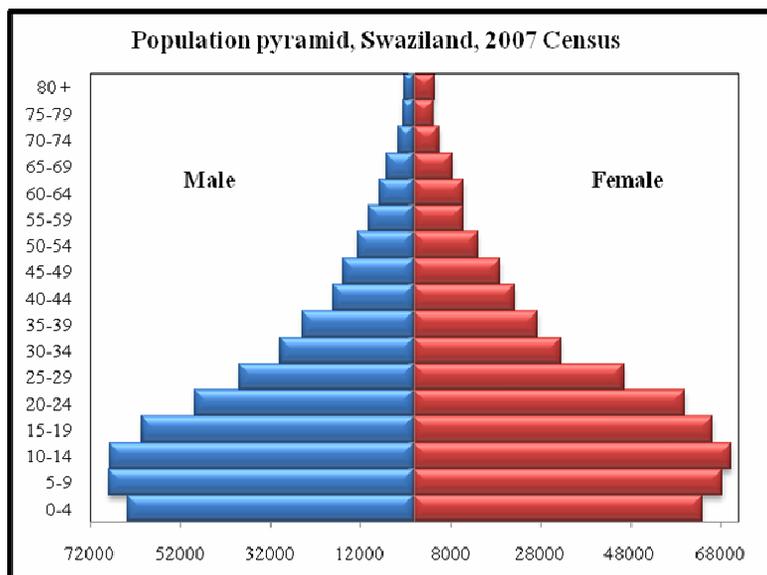


Figure 25: Population pyramid for 2007 Census (source CSO)

Aids has begun to introduce a completely new shape, the "population chimney". The base of the pyramid is less broad. The dramatic change in the population pyramid occurs around 10-15 years after the age at which people first become sexually active, when those infected with HIV

early in their sexual lives begin to die off. The population of women above their early 20s and men above their 30s shrink radically.

6 Services

The overarching development objective is to improve the quality of life for the rural population, particularly the extreme poor, by raising rural incomes and improving access to basic services. In the country, the proportion of the population resident in rural areas is estimated at about 78.9% making the need for effective service delivery a priority for Government and other development partners. The Millennium Development Goals (MDG's) sets targets for Governments to achieve and deliver by the year 2015 and Swaziland as a member of the United Nations community also made a commitment to strive towards the attainment of the MDG's. In pursuit of the MDG's, the Government of Swaziland has launched the Poverty Reduction Strategy and Action Programme (PRSAP) as a planning framework that should be implemented to work towards attainment of the MDG's.

The assessment has generated information from the communities that were involved through focus group discussions around the following sectors:

- Agriculture
- Education
- Health and
- General Public Services (Transport, Telecommunications, Banking)

The key areas of investigation were Access, Ownership, Usage and the Level of satisfaction among the different wealth groups. This is to capture the different perceptions on service delivery by each wealth group across the four regions of the country. The need to understand and measure the living standards of rural communities enhances the incorporation of the anticipated direction in which they would likely move as a result of macroeconomic policy.

6.1 Agriculture Sector

i) Agricultural Extension services:

The extension service provides a link for technology transfer between research and the farmers and in the country, the extension service is the most decentralised compared to many government services.

a. Access to extension services

The table below depicts the level of access to agricultural extension services disaggregated by wealth group. The figures present the proportions of the respondents that were engaged during the exercise.

Table 19: Access to agricultural extension services

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 38.9 | 27.8 | - | 33.3 |
| Middle | 19.4 | 22.6 | 29.6 | 29.0 |
| Poor | 29.6 | 22.2 | 14.8 | 33.3 |
| Very poor | 26.5 | 17.6 | 32.4 | 23.5 |

The better off wealth group in the Hhohho region show a higher level of access (38.9%) to these services compared to other regions. The very poor in the Manzini region show a low level of access (17.6%). This could be attributed to the urbanization taking place in this region along the peri-urban corridor.

b. Use of extension services

Usage of agricultural extension services is high among the better off group across all regions. However, the very poor in the Hhohho and Lubombo also exhibit higher usage levels of services compared to Manzini and Shiselweni. The table below presents the results disaggregated by wealth group across the regions.

Table 20: Use of Agricultural Extension Services

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 33.3 | 33.3 | - | 33.3 |
| Middle | 11.8 | 23.5 | 11.8 | 52.9 |
| Poor | 29.2 | 16.7 | 16.7 | 27.5 |
| Very poor | 31.8 | 22.7 | 13.6 | 31.8 |

c. Ownership of extension services

In the Lubombo Region, extension services are mainly provided by the government and the perception is the same across all wealth groups. Other service providers exist in the regions and these are mainly provided by private institutions and non-governmental organizations. In the Hhohho region at least 7.1% of the respondents attributed extension service provision to private and non-governmental organizations. The table below shows the breakdown by region of government provided extension services.

Table 21: Ownership of extension services

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 14.3 | 35.7 | - | 35.7 |
| Middle | 11.5 | 26.9 | 26.9 | 30.8 |
| Poor | 24.0 | 24.0 | 16 | 36 |
| Very poor | 33 | 23.8 | 9.5 | 28.6 |

d. Levels of satisfaction with service

Across all the wealth groups there is a high level of dissatisfaction with the extension services. The main reasons cited include distance to the extension office and generally poor quality of services (inadequate staff and poor infrastructure). Looking at changes over the last five years, Lubombo shows that the services are much better compared to the other regions.

ii) **Agricultural inputs**

a. Access to inputs

Across all the regions, the levels of access are similar across the different wealth groups which is an indication of properly functioning input markets. Inputs are largely available in most of the

retail outlets even in the rural areas. The major disparity could arise from differences in prices which could affect the least affluent households in terms of disposable income.

Table 22: Access to inputs

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 25 | 20.8 | - | 20.8 |
| Middle | 16.7 | 36.1 | 22.2 | 25 |
| Poor | 20 | 40 | 10 | 30 |
| Very poor | 16.2 | 32.4 | 27 | 24.3 |

b. Input use

Transfer of extension messages is meaningless if the recommendations on the adequate levels of input use to enhance productivity are disregarded. Across the broad spectrum of agricultural enterprises, inputs determine if the desired outcome will be achieved.

Table 23: Levels of input use

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 25 | 45 | - | 30 |
| Middle | 18.5 | 37.0 | 11.1 | 33.3 |
| Poor | 19.2 | 38.5 | 11.5 | 30.8 |
| Very poor | 17.4 | 47.8 | 4.3 | 30.4 |

Across all wealth groups, Manzini region shows a considerable high level of input use and the Lubombo region fares much better compared to Hhohho and Shiselweni with the latter showing depressed levels of input usage. This could be attributed to the high levels of poverty in the Shiselweni region.

6.2 Education Sector

The national target in as far as education is concerned is to achieve universal primary education by the year 2015. The assessment evaluated the following areas in the education sector: Access, Ownership, Level of satisfaction, Concerns and observed Changes over the last five years.

i) Access

Access to education facilities across all four regions shows no significant disparities between the different wealth groups. The access dimension here is looked at from the perspective of proximity.

Table 24: access to education facilities

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 34.5 | 41.4 | - | 24.1 |
| Middle | 18.4 | 39.5 | 18.4 | 23.7 |
| Poor | 26.2 | 31 | 21.4 | 21.4 |
| Very poor | 25 | 29.5 | 25 | 20.5 |

ii) Ownership

The majority of the education facilities across all regions are Government owned. Community owned education facilities complement the Government owned facilities to a great extent in the Hhohho, Manzini and Lubombo regions. Other contributors to the sector include Private and Church.

iii) Level of satisfaction

The Hhohho and Manzini regions show higher levels of satisfaction across all wealth groups. The main concerns in the Hhohho and Lubombo regions are the cost of education. In Manzini the issue of concern is proximity to education facilities. The general feeling in Hhohho, Lubombo and Shiselweni regions is that the services offered in the schools have improved in the last five years.

6.3 Health Sector

Health facilities play a pivotal role in the every day life of a community. The Ministry of Health and Social Welfare seeks to improve provision of preventive services that are of high quality, relevant, accessible, affordable, equitable and socially acceptable. This is in pursuance of the Health related MDG's of reducing infant, child and maternal mortality ratio by 2015 and reducing AIDS, TB and Malaria.

The ability to stage an appropriate medical response to a disaster situation is only one of the many important aspects of health facility disaster preparedness. Health facilities take on the role of ensuring as much as possible the survival and treatment of disaster victims and initiating measures to prevent and control epidemics and other public health consequences.

i) Access to hospital services

Hhohho and Lubombo show relatively high levels of access to health services compared to the other regions. This is observed across all wealth groups except for Shiselweni where the very poor express a considerably higher level of access.

Table 25: Access to health services

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 37.5 | 12.5 | - | 50 |
| Middle | 18.5 | 14.8 | 33.3 | 33.3 |
| Poor | 23.5 | 17.6 | 5.9 | 52.9 |
| Very poor | 20.8 | 12.5 | 41.7 | 25 |

The Lubombo region has the highest rates of health facility usage across all wealth groups. Manzini and Hhohho follow closely as depicted in the table below:

Table 26: Use of health services

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 16.7 | 16.7 | - | 66.7 |
| Middle | - | 22.2 | 27.8 | 50 |

| | | | | |
|-----------|------|------|-----|------|
| Poor | 7.1 | 21.4 | 7.1 | 64.3 |
| Very poor | 35.7 | 21.4 | 7.1 | 35.7 |

ii) Hospital ownership

The presence of government owned health facilities is evenly spread across all the regions. However, the Lubombo region has more private owned facilities compared to the other regions.

iii) Level of Satisfaction with health services

There is a great level of dissatisfaction with health services across all regions. Levels of satisfaction were derived from investigation of quality of service and concerns over the proximity, staffing levels and availability of equipment (general infrastructure). Over the last five years there have been notable changes in the Lubombo region showing an improvement in the quality of service. The other regions however show that things have not improved over the same period.

iv) Maternal Health

The target of achieving improved maternal health and reducing maternal mortality is attainable by providing pre and post natal care services. The level of access to these services according to the findings from this assessment reveal that Manzini and Hhohho are much better compared to the other regions. This is the observed trend across all the wealth groups. Usage of maternal health services is high in Manzini and Hhohho compared to the other regions as reflected in table 28 below:

Table 27: Usage of Maternal Services

| Wealth group | Hhohho (%) | Manzini (%) | Shiselweni (%) | Lubombo (%) |
|--------------|------------|-------------|----------------|-------------|
| Better off | 42.9 | 50 | - | 7.1 |
| Middle | 28.6 | 42.9 | 7.1 | 21.4 |
| Poor | 25 | 30 | 15 | 30 |
| Very poor | 22.7 | 31.8 | 31.8 | 13.8 |

6.4 General Public Services

The general public services investigated in this section include telecommunication (mobile and fixed line), postal services and transport. These are the kind of services that make life for rural residents informed and in touch with the rest of society. The dimensions that were considered in the effectiveness of general services were Access, Satisfaction and Concerns that impacted on service delivery.

Mobile phone usage shows a consistently high level of usage in all the regions with Manzini on the lead while the Hhohho region came second. The level of satisfaction which can be measured in terms of network coverage and reliability of service is higher in Manzini followed by Hhohho.

However the issue of high tariffs remain a major concern among the people who have access to the service. In some cases there are issues over poor reception or service interruptions.

Fixed line usage is indicated to be higher in the Lubombo region with Manzini following closely. The rating in terms of satisfaction with the service delivery is higher in Manzini. The aspect of high cost related to fixed line usage is reportedly higher in Manzini and Lubombo.

Postal services are evenly distributed across all the regions and accessible by all wealth groups. However the levels of satisfaction vary across regions with Manzini showing slightly improved levels followed by Lubombo. The main concern about postal services is that of being far away particularly in the Manzini region.

Transport is accessible throughout all the regions by all wealth groups. Concerns around transport emanate from unreliability in some routes and this is more evident in the Shiselweni and Lubombo regions. This could be attributed to poor road infrastructure.