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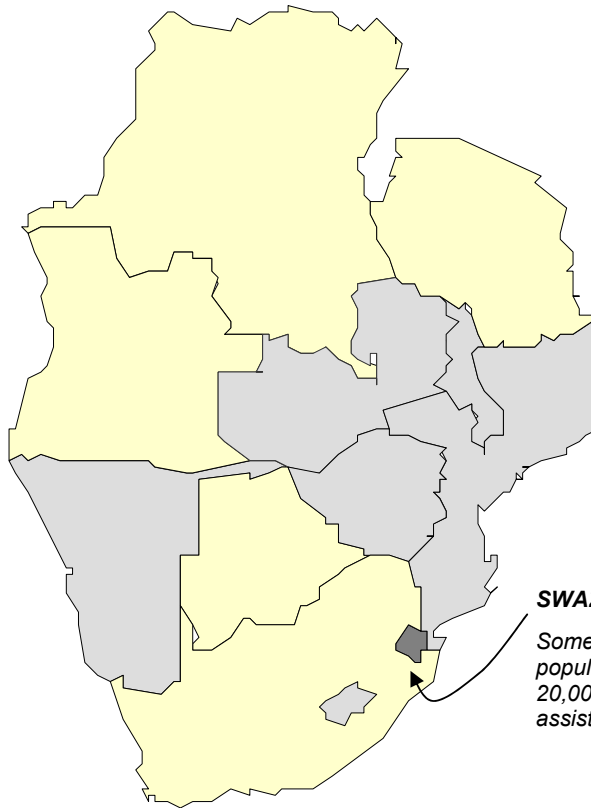
Swaziland National Vulnerability Assessment Committee
in collaboration with the ...
SADC FANR Vulnerability Assessment Committee



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Assessment Committee

SWAZILAND

Emergency Food Security Assessment Report



SWAZILAND

Some 270,000 people (24% of the population) will require an estimated 20,000MT of emergency food assistance by March 2002.

16 September 2002
Mbabane

Prepared with financial support from DFID, WFP and USAID

PREFACE

This emergency food security assessment is regionally coordinated by the Southern Africa Development Community (SADC) Food, Agriculture, and Natural Resources (FANR) Vulnerability Assessment Committee (VAC), in collaboration with international partners (WFP, FEWS NET, SC(UK), CARE, FAO, UNICEF, and IFRC). National VACs in each country—a consortium of government, NGO, and UN agencies—coordinated the assessments locally. This is the first of a series of rolling food security assessments to be conducted in affected countries throughout the region for the duration of the current food crisis.

The VAC assessment strategy has two principal axes. First, it uses a sequential process of ‘best-practices’ in assessment and monitoring, drawn from the extensive and varied experience of the VAC partners, to meet a broad range of critical information needs at both the spatial and socio-economic targeting levels. The sequential nature of the approach not only provides richer details of the “access side” of the food security equation, but it adds the very important temporal dimension as well. From an operational (i.e. response) perspective, the latter is critical. Second, by approaching food security assessment through a coordinated, collaborative process, the strategy integrates the most influential assessment and response players into the ongoing effort, thereby gaining privileged access to national and agency datasets and expert technicians and increases the likelihood of consensus between national governments, implementing partners, and major donors. This ‘partnering’ strategy links the major players and stakeholders including regional institutions, national governments, response agencies, NGOs and donors for on-going, intensive ‘rolling’ assessment coverage of food security conditions on the ground.

SWAZILAND EMERGENCY ASSESSMENT HIGHLIGHTS

- 2001/02 crop production was 33% lower than the five-year average resulting in a domestic food gap of 138,000MT which is 71% of the total domestic requirement. Due to the mid-season dry spell, crop production was particularly reduced in the Lowveld and Lubombo Plateau.
- Even with a higher than normal level of planned commercial imports, and accounting for contributions from food aid until end of July, Swaziland still faces an uncovered gap of 27,500MT.
- Maize prices are approximately double compared to the same time last year increasing the vulnerability of the poorer wealth groups who depend on purchases to meet their food requirements. Prices are reported to be higher in the Lowveld and Lubombo Plateau compared to the other zones.
- Compared to the April FAO/WFP assessment, the number of people in need of food assistance has increased from 144,000 to 153,000 for the September – November period and from 231,000 to 265,000 from December to March. The total cereal requirement has increased from 13,500 to 19,500MT.
- According to information gathered at the household level, the most seriously affected areas are in the Lowveld and Lubombo Plateau and the dry parts of the Middleveld. Within these areas the poor and very poor families are in need of assistance now.
- A significant number (29%) of households have either no adults or only one adult in the 19 – 60 year old age bracket. This could be attributed to the HIV/AIDS epidemic as well as to absent males seeking work elsewhere. Forty one percent of households are headed by females. This results in less income from employment and less labour for productive activities.
- Nutritionally, 40% of children under-five years of age show signs of chronic malnutrition. The worst affected areas are the Lowveld and Lubombo Plateau.



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I. OVERVIEW

A. THE COUNTRY

Swaziland is a landlocked country that borders Mozambique and South Africa. Arable land is only 11% of the total area, the remainder made up of permanent pasture, forests and woodlands. The country is divided into four Agro-ecological zones. The Highveld and Middleveld are the most populous and intensively cultivated, followed by the Lowveld and Lubombo Plateau.

Swaziland is classified as a middle income country, however there are huge discrepancies between the poor and wealthy with 66% living below the poverty line. The economy is dependent on manufacturing and agriculture. Unemployment rate is about 40%. The closure on manufacturing companies in recent years combined with the retrenchment of mine workers in South Africa is significantly affecting household incomes.

Swaziland's currency – the Emalangi – is pegged to the South African Rand. During the 2001/02 fiscal year the value fell by 38 percent against the US dollar.

B. PURPOSE OF THE VAC ASSESSMENT

The main purpose of the Swaziland emergency food security assessment was to:

- evaluate key assumptions from the April / May FAO/WFP assessment;
- update targeting information and the number of beneficiaries in need based on national and community level analysis; and
- provide feedback on the emergency response to date.

C. OVERALL ASSESSMENT METHODS

The emergency food security assessment included a macro situation review including agricultural production and food imports, a nutritional survey, as well as two complimentary approaches. The first was an extensive survey / questionnaire conducted at the regional level, the community level and the household level. In each agro-ecological zone, there was one regional level survey conducted with key government officials and leaders, 10 community level with a cross section of the community, and then within each community 10 household surveys. In total, over 40 community and 400 surveys were conducted. Nutritional information was gathered in the same communities.

The second approach was a simulation using RiskMap software based on the SC(UK) food economy exercise carried out in 1998/99. Using updated crop production figures, price data for food and livestock, availability of casual labour, coping mechanisms and remittances, the RiskMap was able to produce a current status of the food economy zones (FEZs) in Swaziland.

Cross-checking of the information from the two sources was carried out to gain consensus of the population in need as well as the total metric tonnage of food aid required.

D. KEY FINDINGS

- i) There has been a deterioration in the food security situation in Swaziland since April.
- ii) The factors which have affected this include the continued high prices of basic food stuffs, the decrease in the price of cattle and the reduction in employment opportunities both in the formal sector as well as casual labour on farms.
- iii) It is estimated that there are currently (September 2002) 153,000 people in need of food assistance increasing to 265,000 in November. The total cereal food aid requirement between September and March will be just over 19,500MT.
- iv) Targeting of food assistance should be focussed primarily in the following ways:

- **Geographic Targeting:** In the Dry Middleveld, Lowveld and Lubombo Plateau, where agricultural production was lowest compared to the past five year average, household cereal gaps are the highest, nutritional status is worst, and prices for maize are the highest. Figure 1 shows the rural population in need of food aid in each zone; figure 2 shows the percentage of rural population in need of food aid.
- **Temporal Targeting:** As the year progresses, more people are going to require food assistance. The increase from 153,000 to 265,000 reflects those who will exhaust stocks in the coming months and also coincides with the traditional lean period.
- **Socio-Economic Targeting:** The groups of people who will be most affected are female-headed households (41%), orphans and child headed households, and those without assets such as livestock and are dependent on purchased food. According to the community level interviews, poor and very poor households combined make up between 60% and 75% of the community depending on the food economy zone. The number of poor and very poor households revealed by the assessment is similar to previous estimates of those living below the poverty line (66%).

Figure 1

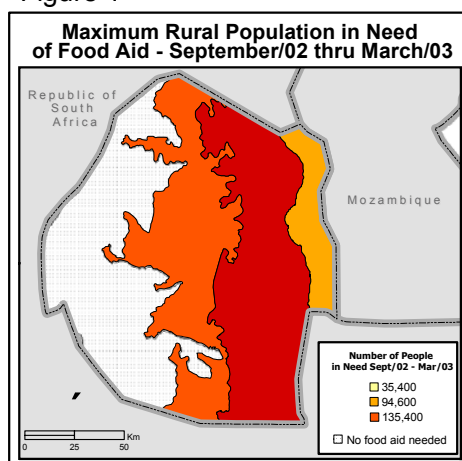
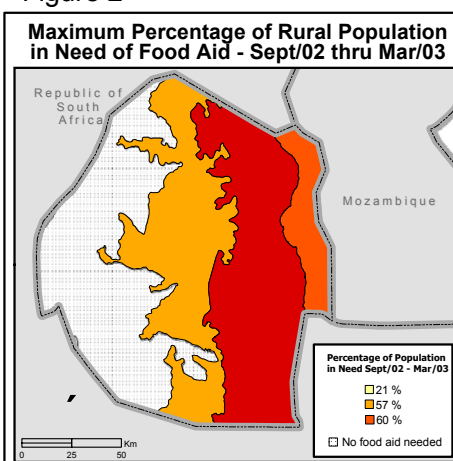


Figure 2



II. MACRO PROCESS AND TRENDS

A. FINAL ROUND GOVERNMENT CROP ESTIMATES AND DIFFERENCES FROM THE CFSAM

The FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) estimated that the total cereal production in the 2001/02 season was 67,886MT. According to the National Early Warning Unit (NEWU) report issued in May, the final production stands at 69,772MT, an increase of nearly 2,000MT. In contrast, the cereal supply figure which includes carry over stocks (on and off farm), has been reduced from a total of 77,000MT to 72,000MT, indicating that the stocks were not as substantial as estimated in April by the CFSAM. There is no significant winter cropping of cereal in Swaziland, so the final production figures are unlikely to change further.

B. MARKET PRICES

Market prices are currently E140 – E150 per 50kg bag of maize. This has increased from about E120 at the time of the April assessment, representing about a 25% increase over the four month period. As in other countries in the region the current price is more than double compared to this time last year. During the middle of last year, prices were around E50 per 50kg bag.

Field reports indicate that livestock prices have dropped considerably since April, from around E1,500 for cattle to between E800 – E1,000. It is likely that prices will drop even further until the rains and then the harvest.

For those who own livestock this will reduce their purchasing power. For those without animals, a larger proportion of the cash income will be spent on food and therefore will leave less for non-food items, medical expenses and school fees.

C. LEVEL OF COMMERCIAL IMPORTS FOR CEREALS REALIZED AND PLANNED

According to the latest figures from the Swaziland National Early Warning Unit (see table below), at the start of the 2002/03 marketing year in April, domestic cereal availability (production plus opening stocks) was 72,500MT against requirements of 210,500MT, which includes consumption, seeds, losses, formal and informal exports, and stock replenishment. This implied a domestic cereal gap of 138,000MT to be filled through a combination of commercial and food aid imports. As seen in the table, some 28,000MT of commercial cereal imports and 5,000MT of food aid had been received by the end of July. Additional planned cereal imports through the end of the marketing year (March 2003) include 66,000MT of commercial imports and 9,500MT of food aid. Thus the total level of cereal imports received and planned stands at 108,500MT, against the import requirement of 138,000MT. There is a potential unfilled cereal gap of 29,500MT.

<i>SWAZILAND Cereal Balance Sheet (April 2002 - March 2003 Marketing Year)</i>			
	May 2002 ¹	August 2002 ²	5-Year Average ³
Opening Stocks	9,500	2,500	29,000
Domestic Production	68,000	70,000	90,000
TOTAL AVAILABILITY	77,500	72,500	119,000
Domestic Requirements	188,000	193,500	183,500
Planned Exports	0	6,500	6,500
Desired Closing Stocks	0	10,500	9,500
TOTAL REQUIREMENTS	188,000	210,500	199,500
DOMESTIC CEREAL GAP	-110,500	-138,000	-80,500
Commercial Imports Received	0	28,000 ⁴	80,000
Food Aid Received	0	5,000 ⁵	0
TOTAL IMPORTS RECEIVED	0	33,000	80,000
Commercial Imports Expected	95,500	66,000	0
Food Aid Expected	15,000	9,500	0
TOTAL IMPORTS EXPECTED	110,500	75,500	0
TOTAL IMPORTS	110,500	108,500	80,000
UNFILLED CEREAL GAP/SURPLUS	0	-29,500	-500

1. FAO/WFP Crop and Food Supply Assessment Mission estimate.

2. Swaziland National Early Warning Unit, September 2002

3. SADC Regional Early Warning Unit, based on government figures, 1997/98 to 2001/02.

4. As of the end of July 2002.

5. Food aid imports includes Government assistance of 500MT and WFP of just under 4,500MT.

Various assumptions have been made with the above calculations:

- WFP has already received 4,500MT of cereals; however further food aid contributions will depend on pledges from donors.
- The gap could be further reduced through an increase in the volume of commercial imports and/or food aid. The former will depend on effective demand in the marketplace and people's ability to purchase, which is expected to be limited by the high staple food prices as well as a decrease in livestock prices.

The main differences between the FAO/WFP figures in May and the current government figures for August include the reduction in domestic availability based on lower opening stock levels despite the slight increase in the final crop production estimates, and the notable increase in domestic requirements, primarily to fulfil export plans and for stock replenishment.

Compared to the past five year average, domestic cereal availability is 40% lower this current marketing year because of low opening stock levels and below normal production. The commercial sector normally imports an average of 80,000MT, sufficient to fill the normal domestic shortfall. In contrast, this year's commercial imports are expected to total 94,000MT (17% more than normal), which still leaves a cereal gap which will have to be made up through food aid and/or more commercial imports.

D. GENERAL LIVESTOCK CONDITIONS

Currently there are no major livestock problems in Swaziland. In the more arid areas, water for animals is expected to become more critical in the coming months, depending on the start of the rainfall season. According to the NEWU, pasture and water have deteriorated, especially in the Lowveld, which is likely to result in a decline in livestock condition.

E. FOOD AID RESPONSE TO DATE

The FAO/WFP CFSAM recommended 17,720 MT of food aid including all commodities of which 13,500MT was the cereal component. The regional EMOP proposed 26,166MT, an increase of 50% over the CFSAM. This increase was justified by more updated information between the time of the CFSAM and the preparation of the EMOP. The situation proved to be worse than initially estimated and in addition the intervention was extended to cover nine months rather than the six months proposed by the CFSAM, which would meet programming needs and keep the operation in line with the broader regional appeal.

Between the period April and July the Government, through the National Disaster Task Force and NGOs, distributed approximately 10,000 bags or 500MT of relief food to the most vulnerable. Additional Government funds have been set aside to support the relief efforts being carried out by WFP. This includes assessment and providing assistance to NGOs.

International response for food assistance so far has been limited to 4,190MT of mixed commodities from the United States and 818MT of maize from DFID. The table at right summarises and compares the

Estimated Food Aid Needs and Response (as of July 2002)

	CFSAM Estimated Needs	WFP EMOP Estimated Needs	Confirmed Pledges (end July)	Food Aid Gap
Cereal	13,500	17,600	4,300	13,300
Other Food	4,220	8,566	690	7,876
Total Food	17,720	26,166	4,990	21,176

level of food aid requirements estimated by the CFSAM, the WFP EMOP, the actual confirmed pledges as of the end of July, and the remaining food aid gap. So far only about 24% of the total food required for the WFP EMOP has been confirmed.

F. AREAS PARTICULARLY AFFECTED BY FOOD SHORTAGES

Based on preliminary findings and feedback from the field assessments, the worst affected area is the Lowveld. This is consistent with the finding of the CFSAM in April. Reports that families are beginning to 'migrate' from their home areas on a permanent basis will also have to be monitored closely.

III. COMMUNITY VULNERABILITY ASSESSMENT AND EMERGENCY FOOD AID NEEDS

A. NATIONAL OVERVIEW

a. Nutritional Indicators

Nutrition information was gathered to help ascertain the magnitude of food insecurity among children under five years of age and their caretakers. The anthropometric study was based on the following objectives:

- To establish the anthropometric status of children 6-59 months in Swaziland, by agro-ecological zone, socio-economic status and age distribution.
- To establish the body mass index of mothers who are caretakers by agro-ecological zone.

From the wealth ranking exercise, which was conducted as part of the assessment, a total of ten households were selected by community members to represent rich, middle and poor households. In each of these households children under the age of five years were weighed and measured together with their caretakers. All the children (6 – 59mths) who were present in a particular household were included in the study.

Individual measurement of sex, age, weight, and height were taken. Indices were formed from these data related to height-for-age (HA), weight-for-age (WA), and weight-for-height (WH). These indices were expressed in terms of Z-scores, also referred to as standard deviation (SD); percentiles; and percent of median relative to the international growth reference population by the National Centre of Health Statistics (NCHS) of the USA using Epi Info version 1.00 (2000). The cut-off value used was <-2 SD. The table below summarises the findings of the survey.

Percentage of under-five children who are malnourished in the four agro-ecological zones, 2002

	Height-for-Age -2 SD	Weight-for-Age -2 SD	Weight-for-Height -2 SD
National:	40.8	11.0	2.2
Ecological Zones	Highveld	37.6	2.6
	Lowveld	51.0	1.9
	Lubombo Pl.	51.1	-
	Middleveld	21.6	5.2
Sex	Female	37.2	2.5
	Male	46.2	1.9
Age (months)	6 - 11	50.0	0
	12 – 23	36.7	2.1
	24 – 35	61.5	3.3
	36 – 47	37.2	2.3
	48 - 59	34.3	1.9

As shown in the table above, at the national level, 40% of the children surveyed were stunted (a measure of chronic malnutrition), 2.2% were wasted (a measure of acute malnutrition) and 11.0% were undernourished (HA<-2SD). The WA and WH percentages are within the range which does not show any major acute malnutrition. However the 40% HA shows there is a chronic nutritional problem.

The comparison by agro-ecological zone showed that, Lubombo Plateau had the highest stunted (HA) children at 51.1%, closely followed by the Lowveld at 51.0 %, the Highveld at 37.6% and the Middleveld at 21.6%. Wasting (WH) was highest in the Middleveld 5.2%, Highveld 2.6%, Lowveld 1.9%. The Lubombo plateau data need some verification, as results were inconsistent. The stunting rate varied between male and female children, with 46.2% of males and 37.2% of females stunted. Nutritional problems were recorded as being prevalent at the ages above 12 months, as indicated in the table above.

In this study, anthropometrically the prevalence of stunting at the national level is very high, wasting is low and under nutrition is medium. The table on the right shows an interesting trend over time, especially for the HA, which indicates the there is an increasing problem of chronic malnutrition.

National Nutritional Trends, 1983 to 2002

Year	Height for Age (%)	Weight for Height (%)	Weight for Age (%)
1983	30.0	1.0	-
1995	27.0	<2.0	6.9
2000	30.2	1.3	10.3
2002	40.8	11.0	2.2

The deteriorating nutritional status of children under-five could be attributed to several factors:

- The HIV/AIDS epidemic has had an impact on nutrition. HIV/AIDS infection exacerbates malnutrition through its attack on the immune system and its impact on nutrient intake, absorption and utilization. Malnutrition leads to chronic infection and in turn chronic infection leads to malnutrition, thus the very high stunting rate.
- Income distribution is highly skewed and contributes to the high poverty level.
- The drought has had an impact on food availability. Households have not been able to produce enough food for family consumption and the major problem becomes that of food distribution within the household. The children are not given enough food, as result they become malnourished.

It was observed that through out the country, the nutritional status of children under five years is at stake. This problem cuts across all agro-ecological zones. Stunting was at 37.6% in the Highveld, which is relatively high given the fact this agro-ecological zone is perceived as doing well in terms of food / maize availability. These results confirm that food distribution within the individual household is a problem, along with food access within the community.

b. HIV/AIDS prevalence and linkages to food security

Some 29% of the households interviewed had either zero or one adult in the 19-60 year old age group. While the analysis does not allow for a direct correlation with HIV, there is clearly a disruption in what would be considered a normal demographic profile at the household level. This imbalance, along with the size of the households (average = 8.7) creates a tremendous burden on the elderly, and forces high early school drop-out rates so that older children can either work to supplement household income, or become child carers themselves.

According to data presented to the United Nations Inter-Agency Standing Committee on the southern Africa food shortages, Swaziland has one of the highest HIV/AIDS prevalence rates in the region. It was also noted through the process of carrying out the household surveys, that there were many individuals who were chronically sick and unable to productively contribute to the household.

c. Issues of availability

At the national level, Swaziland is a net importer of food. Normally about 40% of the food consumed is from imports – mainly from South Africa. Overall crop production estimates were down 18% from last year and 37% lower than the five-year average. Given the agro-climatic diversity across the four zones there is also a corresponding reduction in production. For example, the Highveld suffered the least loss of 19%, while the Lowveld reported a 70% reduction in yield.

At the household level, production varied between zones. According to the household survey information, the average number of 50kg bags of cereal produced last season per household (across all socio-economic groups) was 16 in the Highveld, six in the Middleveld, two in the Lowveld and two in the Lubombo Plateau.

Household stocks are extremely low. From interviews with farmers, cereal stocks ran out or will run out 2 – 3 months earlier than normal. When comparing stocks across the four zones, households in the Highveld are better off than other areas. This is not surprising as production is highest in the Highveld, which is currently a source of maize for

All Wealth groups	Number of 50kg bags	All Zones	Number of 50kg bags
Highveld	+7.5	Well off	+36
Middleveld	+2.5	Middle	+7.3
Lowveld	-0.7	Poor	- 7.2
Lubombo	-3.2	Very poor	- 6.2

individuals and markets in the lower zones. In the Lowveld and Plateau, all but the wealthy have depleted stocks. Based on the household surveys the table (right) shows the estimated number of 50kg bags surplus (+) or deficit (-) up until March 2003 by zone and by wealth group

Commercial Imports: Expected commercial cereal imports for the 2002/03 marketing year (which starts in April) have been estimated at 94,000MT. This is 17.5% higher than normal, to compensate for the reduced agricultural production. By the end of July, only 28,000MT had been imported, representing 30% of expected commercial imports.

Availability of non cereal foods: Legumes such as beans, cowpeas and peanuts are produced on a small scale. Tubers such as cassava and sweet potatoes are also produced on a promotional basis; however the quantities of these are insignificant.

d. Access

Even if food is physically available, some households may not be able to access the food because of low purchasing power in the face of raising prices. The market price for maize currently averages between E130–E140 per 50kg bag, which is equivalent to US\$13-14. This has increased from about E120 per 50kg bag at the time of the April CFSAM, representing approximately a 15% increase. As in other countries in the region the current price is higher (over double) compared to this time last year. During the middle of last year, prices were around E50 per 50kg bag. Current prices were noted to be higher in the Lowveld and Lubombo Plateau (E140-E150), compared to the Highveld that reported prices of E120-E130. This corresponds with the relative production and current stocks in the respective areas.

In the Lowveld and Plateau, very few main markets actually had maize for sale. Individuals in remote areas were therefore forced to travel, sometimes considerable distances, to purchase food, adding to the overall cost. One female interviewee from the Lowveld reported that she had travelled all day to try to get some maize on credit at the nearest market, only to find that there was nothing available, her investment in time and bus fare obviously for nothing.

Field reports indicate that livestock prices have dropped considerably since April, from around E1,500 for cattle to between E800-E1,000. It is likely that prices will drop even further. For those who own livestock this will reduce their purchasing power. Even compared to April the terms of trade cattle:maize have halved. The sale of one head of cattle now provides income to purchase only six bags of maize. For those without animals, a larger proportion of the cash income will be spent on food and therefore will leave less for non-food items, medical expenses and school fees.

e. Coping Strategies

The most common responses when households were asked how they are or will cope in the coming months, included:

- Taking children out of school (64%)
- Reduce the number of meals per day (53%)
- Choose to eat less expensive food (72%)
- Borrow (68%)
- Reduce expenditure on health (54%)
- Skip meals for the whole day. (32%)

The high percentages indicate that many families will have to resort to more than one of the above coping mechanisms.

The sale of livestock as a coping mechanism is generally limited to the wealthy and middle income groups in the Lowveld. According to the food economy baseline, in a normal year cattle sale's contribution to income in the Lowveld for the middle and wealthy is only 15%. Lowveld households selling cattle as a coping mechanism face limited market outlets and low prices as indicated above,

and risk being taken advantage of by unscrupulous traders, given the current situation. Other areas do not have substantial herds and for social/cultural reasons are reluctant to sell. In fact from interviews, the preference was to remove children from school, before selling animals.

f. Gender Issues

It is clear that during times of stress, or crisis, women are often the most seriously affected. Results from the household survey show that at the national level the average deficit for female headed households is -0.6 bags, whereas the average for male headed households is a surplus of +3.7 bags. Female-headed households are common. Of the 424 household interviews carried out, 175 (41%) were reported to be headed by females, who are both child carers and providers. It is not uncommon for men to leave families or villages for extended periods of time. Even for those men who stay close to home, they are more able as individuals to request food or a meal from neighbours or friends.

g. Dietary intake

Reducing the number of meals per day, as well as skipping meals altogether are important coping mechanisms. As crop production is largely limited to cereals, legumes and other food sources such as oil are typically expensive, and are out of reach for many households. Legumes do not play a significant role and do not contribute greatly to the overall diet in Swaziland. Boiled vegetables as a relish offer some limited diversity and are normally cheaper legumes. It is unlikely that the poor and very poor households that are already having difficulty affording maize at current prices will be able to purchase other foods.

B. REGIONAL SUMMARY: THE HIGHVELD

Nutrition: The survey suggests that the nutritional status of both children and adults in the Highveld is generally average. However, signs of malnutrition were noted particularly amongst children under five and some mothers (caretakers). In particular, stunting and wasting were found. The cause of stunting for adults is more of a genetic factor rather than malnutrition. On the other hand, the cause of stunting for children was found to be multifaceted, particularly for households that fall within the poor wealth group. The causes in most of the poorer households were a combination of insufficient dietary intake due to lack of income to supplement the staple food and genetic related factors. Wasting was found to be relatively severe compared to stunting as seen in the table in the nutrition section above. There were also skin diseases and cases of partial blindness that could be signs of micro-nutrient deficiency.

HIV/AIDS: Although statistics on HIV/AIDS prevalence could not be gathered at community level, the demographic data revealed that in the Highveld, 32% of all households had either one or no adults in the 19 – 60 year old age group. This may suggest that there are more people dying of HIV/AIDS. This has a serious bearing on food security at household level because of the high dependency on remittance from breadwinners who fall within the age range mentioned above.

Issues of Availability: According to the household survey, all wealth groups currently have some maize stocks. On average the Highveld has eight bags per household. However, the poor will run out of stocks before the next harvest in April 2003. The results of the survey suggest that the poor category will require maize from other sources as of January 2003. At the time of conducting the survey, a significant number of rich households and some middle households had already started selling surplus maize to the National Maize Co-operation (NMC) and to the general public. It is envisaged that maize will continue to be available in most parts of the Highveld until the end of October 2002.

Non-Cereal Foods: There are a limited number of households that produce tubers such as sweet potatoes. Sweet potatoes produced are mainly for sale within local markets and for supplementary consumption. Legume crop, such as beans, are also produced in small quantities mainly for household consumption. With comparatively better access to water for irrigation, vegetable gar-

dens exist, but are sparsely distributed within the zone. These gardens are mainly for generating income.

Issues of Access: Although maize is readily available in most parts of the Highveld not every household has access to it. People within the poor wealth group have difficulty accessing maize due to the high prices. The current local prices of a 70kg bag of maize in the southern part of the Highveld ranges from E80 to E100 where as the south ranges from E150 to E180. In comparison to last year this is almost double. The official market price has risen from E65 per 50kg last year to the current price of E118. While maize is available, the poor cannot afford to purchase it due to the sharp price increases in all markets. Their limited purchasing power is compounded not only by the increase in maize prices, but also the decline in remittances mainly as a result of the HIV/AIDS impact on the 19 – 60 years age group.

Coping Capacities and Strategies: The current food shortages have had negative impacts in most Highveld communities. Poor households are most severely affected. During the survey, the following coping strategies were highlighted:

- Casual labour for food or money – this is mainly working in maize plantations of the rich and the middle income groups.
- Handicrafts – during the off-season period households rely on income from weaving traditional mats, making chicken cages, clay pot moulding, wood art and other handicraft products to sell to tourist.
- Timber Cutting – though much of the forestry work has been sub-contracted to non-locals, a few residents are hired but are paid very low wages. Most of the contractors prefer hiring Mozambicans who are prepared to accept wages far below Swazi standards.
- Although the percentage of children being withdrawn from school may seem insignificant, it was noted that this may increase if opportunities for casual labour does not improve.
- Selling small livestock such as chickens, pigs and at times goats.
- Reduce expenditure on health care.

Variation in How Men and Women are affected by the Crisis: In the Highveld the average number of women in a household is about 1.8 compared to 1.4 men. The higher numbers of women indicate that they carry more burden in providing food for children. Men are usually employed in cities or in South Africa. However, this does not guarantee a regular flow of remittances to support women left to care for the typically large family.

Variation in Gendered Coping Strategies: Men typically have more opportunities to access seasonal and permanent employment than women. In the Highveld, most men have access to the forest industries. Women are usually involved in piecework, petty trade and some handicraft work – activities which do not guarantee a regular income. Men also have overall control of assets such as livestock. Women may not sell livestock, so instead may withdraw children from school as an alternative while men are not available to approve any sale of livestock.

Effects of Crisis on Orphaned and Elderly: Orphans and the elderly are usually dependent on extended family and charity organisations for support. In crisis periods extended families may find it difficult to support these vulnerable groups, increasing their reliance on charitable organisations, which themselves have resource constraints. These vulnerable groups are therefore forced to engage in distress coping mechanisms including skipping meals for a whole day.

Agricultural inputs: The survey indicates that nearly 70% of households interviewed have no seed and fertiliser for the coming season. This implies that only the rich and a proportion of the middle will have agricultural inputs. The rest would either forgo planting this season or rely very much on external assistance. This is not just a result of the current food crisis but it is aggravated by sharp increase in all agricultural inputs and draught power.

C. REGIONAL SUMMARY: THE MIDDLEVELD

Nutrition: Malnutrition symptoms were evident in the poor, the very poor and slightly in the middle group. Out of the 10 communities visited, 9 showed signs of malnutrition. This could be attributed to the fact that care takers were either young or very old, in addition, most of these households were experiencing food shortages. The poor and the very poor had a poor harvest, and their stocks, which are now exhausted, were only enough to last them for a period of between 1 – 3 months. Children in the middle, poor and very poor households were reported to have been sick in the past week and some still had persisting infections. The most observed illnesses were: - Diarrhea, Cough, Fever, Skin infection and Ringworm.

HIV/AIDS: Orphaned children in the region were prevalent and were inevitably the ones who were suffering from some form of illness or disease. In some instances residents would estimate that in almost 1/3 of all households in the community had orphaned children. Visual observations by the assessment team would support this. It was difficult to gather information about the prevalence of HIV/AIDS in the communities. However, testimonies of young, breadwinners or the economically productive age group (19 - 60 years) dying of assumed HIV/AIDS related illnesses. This has an impact on food security of the affected households. According to the household surveys nearly 30% of the households have either 0 or 1 adult in the 19 – 60 year old age bracket.

Issues of Availability: In most communities there was no maize available, community members travel long distances markets such as the Highveld to buy maize. Only 2 out of 10 communities had sufficient maize, and surplus to sell to individuals and NMC. The unavailability of maize at local community level over-stretches the little resources due to transportation costs particularly for the poor wealth group. In summary, food stocks for the rich and the middle income categories are expected to last up to November 02 others even up to March 03. However stocks for the poor and very poor categories range between one month to three months. People in the wet Middleveld are expected to cope much better than those in the dry Middleveld.

Non-Cereal Availability: No winter cereal crops are grown in the Middleveld. Only a few farmers who have access to small streams are able to grow vegetables during the winter months. Cassava is not a common crop in the region. Sweet potatoes are also grown at small scale. This particular year the harvest of sweet potatoes was very low due to insufficient rain. Legumes such as beans and cowpeas are grown in small quantities compared to maize.

Issues of access: The average price of a 50kg bag of maize is E 140.00 and a 20kg tin of maize ranges between E 30.00 – E 40.00. The rich and middle income earning categories can afford to purchase maize from within or outside the community, in the event their own stocks get depleted. In high maize producing areas such as Hhelehele and Khubuta, this the rich category act a market outlet for the poor and very poor groups within and outside the zone. The poor and the very poor income earning categories have great difficulty affording the current markets maize prices. In general this category purchases between one 20kg tin of maize to two tins a month regardless of the family size. These categories are then forced to limit the number of meals and sometimes skip a day or two without a meal.

Purchasing Power: The areas visited showed a drop in the purchasing of the poor and very poor income earning categories. Job opportunities, which were available to the poor and the very poor, have been drastically reduced due to the dry spell. Formal employment is also not easily accessible affecting the purchasing power of this category. Income from casual labour, or selling chickens, which is often their only form of livestock, has also diminished.

Coping Strategies: Coping mechanisms employed by mainly the poor and the very poor include the following:

- make and sell handcrafts
- selling of fire wood by road sides
- work for food

- reduce number of meals
- reduce portion size
- withdraw children from school
- self local brew / beer
- selling of chicken
- reliant on wild foods
- Beg for food from neighbours
- Reliant on wild foods
- Skipping the whole day without food

Gender and Social Group Issues: The survey revealed that man, woman and children are affected differently by food insecurity. Men have luxury of visiting relatives where they are offered a meal whereas women have less freedom to go around visiting friends and relatives. From the survey, the average number of females per household in the Middleveld is 1.8 compared to 1.5 males. There are therefore many women looking after their families single headed compared to men. Access and control to assets such as land, livestock, employment and credit tend to favour men. In situations where the husband has died, the extended family structures usually take control over assets. This renders the woman more vulnerable to shocks such as the current food crisis than man. Men have better opportunities for casual labour / permanent employment all year round due to the market demand particularly in the construction sector. Women mainly have access to seasonal agricultural casual employment. Drinking of alcohol is more prevalent with men who are in the “very poor” group. They do errands for the traditional brewers, e.g. fetching water, firewood, and in return they are paid in form of food and beer.

Agricultural Inputs: Like in other agro-ecological zones, access to agric-inputs is not a problem. The major challenge is affordability. Market prices for agricultural inputs have almost doubled over the past 10 months. Only the rich and about 30% of the middle income-earning group can afford to purchase seed and fertilizer. The remainder will not be able to purchase inputs. About 80% of the households do not have seed for the coming planting season.

D. REGIONAL SUMMARY: LOWVELD

Nutrition: From the field observations through the households questionnaires the Lowveld there are clear differences between the northern and the southern part of the Lowveld in terms of nutritional status of children and adults. Most children weighed in the southern Lowveld were found to be underweight while the northern part had only a small percentage of underweight, the majority of children in the north looked satisfactory health-wise and a lot happier than those in the south. Children with kwashiorkor were observed, and there was evidence of pellagra but no goitre cases were identified or reported. The reason for underweight is attributed to poor access to basic foodstuffs. This was evident when investigating coping strategies particularly amongst the poor and the very poor wealth groups in the southern Lowveld. These groups were reported to be; seriously cutting on the proportion of each meal eaten (when available) and at times skipping the whole day’s meals due to lack of food. In essence, the nutritional status of children in the south is worse off than that in the north.

HIV/AIDS: HIV/AIDS related diseases were common in the southern part of the Lowveld mainly in Mbutfu community. A significant number of people were noted suffering from T.B, HERPES ZOOSTER, Diarrhea etc. The prevalence of these diseases could be an indicator for a significant increase in HIV/AIDS infection rates. The main factor that contributes a great deal to making the community in the southern Lowveld prone to contracting the deadly virus is access to income. There are no readily available jobs that could enable the community to have food purchasing power. With the influx of trucks and access to the army camp, women find themselves with no option but engaging in casual sexual relationships to raise money to purchase basic food for their families.

Although at this point we have no figures to compare the north and the southern Lowveld, our observations are that the north has healthier community compared to the south. From the focus

group discussions it was evident that there are more orphans and vulnerable children in the south compared to the north. This however will have to be supported by official figures on HIV/AIDS prevalence. The assessment team concludes that the food crisis has been seriously aggravated by the high prevalence of HIV/AIDS pandemic resulting in the breakdown of people's ability to cope and thus adopting distress strategies.

Issues of Availability: There was very little production from the recent 2001/2002 harvest throughout the Lowveld. The whole of the Lowveld was hit by the December/January 2001/2002 dry spell. During the field interviews it was evident that the southern part of the Lowveld is now importing all their cereals from other regions. It is expected that the food distribution planned for August / September 02 will save a huge proportion of household currently stressed by the cereal shortage.

Non-Cereal Availability: There is generally a notable decline in cotton growing. The northern Lowveld has almost completely pulled out of cotton growing while the south still has a reasonable number farmers growing cotton. Legumes production is also very limited in this region. Tubers are not generally grown in the Lowveld. This includes little bit of cassava, and sweet potatoes. It was noted that there are more vegetables grown in the northern Lowveld because of access to irrigation. Most farmers in the north grow vegetables for commercial purposes.

Issue of Access: Maize harvest was estimated at only 0% to 30% of normal in northern Lowveld while the southern Lowveld experienced about 0% to 8%. Both the north and south now depends on outside markets for maize. The southern part depends largely in Lavumisa and Matata in Big Bend. The average price of a 50kg bag is E150.00 in the south. The north gets most of their maize from Nftonjeni at about E120.00 per 50kg. The current official maize market price from the National Maize Cooperation is E113.00 per 50kg.

Purchasing Power: The middle and the rich in the north have some purchasing power through their varied sources of income including remittances, income from vegetable gardens, income from mango orchards, and income from sale of livestock. To some extent, the poor in the north also own some livestock e.g. they own between 0 - 5 cattle and some goats. What also adds to their purchasing power is the fact that the cost of a 50kg maize is less compared to the south.

Other facts about the purchasing power:

- Consumers sell livestock to buy maize.
- However cattle price has dropped about 30%.
- Cattle price has dropped from the normal selling price i.e., E1,200.00 – E1,600.00
- The drop is down to E800.00 - E1,000.00 compared to the normal selling price above.
- The cattle buyers now detect the price, yet under normal circumstances, sellers detect the price.
- Remittances have dropped due the escalating cost of leaving in the cities and other more pressing reasons.
- Employment is shrinking due to retrenchment in huge companies and in some instances closure of such companies etc.
- HIV/AIDS deaths have robbed families' their breadwinners leaving a lot of orphans and destitute population.
- All in all the percentage of families who fail to support themselves is on the increase.

Coping Strategies:

Northern Lowveld – Cattle and Cotton Food Economy Area: The poor generally have very limited number of livestock, i.e., a small or no herd of cattle at all. They may also have a couple of goats and chickens. Their production this particular agricultural year was an absolute failure. With limited amount of food available, they are forced to reduce the number of meals consumed per day. So far, there are no reports suggesting that some families actually skip the whole day without a meal.

Southern Lowveld – Cattle, Cotton and Maize: Current coping mechanisms employed by the poor and very poor wealth groups include the following; reducing number of meals per day, reducing the amount of food eaten, skipping meals for the whole day, borrowing staple food, withdrawing children from school and in some cases, migrating permanently to South Africa. There are also reports of some families that have started eating certain types of food that they would normally not eat because they are considered poisonous or waste. Other families travel long distances to buy food on credit. At times they are unlucky not to find any food after spending borrowed money on a bus.

In summary the coping capacity for people in the southern part of the Lowveld has been completely depressed while the poor people in the north still have some kind of resilience. The rich and the mode wealth groups in the north are much more resilient than those in the southern part of the Lowveld. In fact a big proportion of the mode wealth group in the south have stretched themselves so far that they have no choice but to resort to distress coping mechanisms.

E. REGIONAL SUMMARY: LUMBOMO PLATEAU AND LOMHASHA TRADING

Nutrition and HIV/AIDS: According the survey, households with adults between 0 -1 in the age group of 19 - 60 years are over 20%. Although no detailed data was collected on the prevalence of HIV/AIDS related illnesses, it is evident from the national and regional statistics that the Lubombo Plateau is affected by the pandemic.

Issues of Availability: Only the middle and the rich wealth groups produced a small amount of maize during the last season. In most households interviewed there is currently no stocks left. According to the household survey in this region, there is a cereal deficit of 4 x 50kg bags per household across all wealth groups. This represents the worst deficit of all four zones. Households are currently importing food from the National Maize Corporation. The unavailability of maize causes an added constraint to the poor and very poor.

Non-Cereal Availability: Very little vegetable production is produced due to limited shortage of water for irrigation. Legumes planted all dry up at the germination stage due to the dry spell. There is also a gradual withdrawal from growing cotton due to poor harvest subsequently resulting in profit losses. Farmers growing cotton now have difficulties paying back loans drawn from Vunisa Cotton Board. Tubers such as cassava and sweet potatoes were also a complete failure in this last season.

Issues of Access: Currently maize prices stand at E118.00 offered by NMC while the informal market out of this zone range from E150.00 - E200.00. These prices are excluding transport costs. Otherwise people in this zone have no other options of accessing maize either than importing it from the markets mentioned above.

Purchasing power: The household purchasing power is very low. Casual labour rates stand at E10.00 per day. It must however be noted that casual labour opportunities are very limited yet seasonal in this zone. Other sources of income including sale of livestock is also not viable because there are very few households that own cattle. Most households in the middle, poor and very poor categories do not own any livestock, even for the wealthy livestock sales only contribute about 20% to the household income. Handicraft is also one way households use to raise money to purchase food. This is however subject to the availability of raw material and reliable markets.

Coping strategies:

- Children drop out of school
- Reduce health expenses by use of traditional medicines
- Increase the consumption of wild fruits
- Reduce portions of meals and meal times as well, some go through the day without a meal.
- Eating of less preferred foods
- Migration

a) Core Numeric Results

Population: An effort has been made to consolidate population figures from different sources. Using rural population figures, the food economy /risk map estimates calculated that there were a total of 127,000 people whom would require food assistance from September to November, increasing to 275,000 from December to March. These figures include all zones with the exception of the Highveld. While there is some concern that there maybe pockets of vulnerable in the Highveld, these are likely to be the chronically vulnerable and would be extremely difficult to target in the current crisis. However these groups should be considered for non food assistance.

Information from the wealth ranking carried out during the community questionnaires shows a similar trend. When including households from the poor and very poor in the Lowveld, the Lubombo Plateau and the dry Middleveld, the September to November figure is estimated to be 153,000. For the remaining period from December to March parts of the wet Middleveld as well as the middle wealth groups in all three zones are included and the total population increases to 265,000.

IV. CEREAL REQUIREMENTS

Carrying out a similar comparison for quantities of food, the risk map projects a total food aid need of between 19,000 and 25,000MT, if an average figure was assumed to be 22,000MT the cereal component of this would make up approximately 18,000MT. Analysis of the household questionnaires, using the cereal deficit per household per wealth group per zone, a national deficit would amount to 14,500MT, however there is some concern that the methodology has underestimated the cereal deficit between September and March.

Taking into consideration the above estimates as well as the CFSAM and current EMOP figures, it is the consensus of the VAC that the figures obtained through the household questionnaire are the most appropriate until March 2003.

Therefore the population figures will increase from 144,000 to 153,000 for the first time period and from 231,000 to 265,000 for the second time period. It should also be noted that the increase in numbers occur as from the beginning of November, not December as in format on the table below.

The population in need is 24% of the total population just over 40% of the rural population only.

There would be a corresponding increase in tonnages of food, the September – November total amounting to 6,852MT, and the December to March total 12,720MT. This represents a 40% increase over the CFSAM and a 11% increase over what has been proposed in the WFP EMOP

Estimated population and CEREAL needs

	CFSAM			VAC		
	# people in need	% total population in need	MT	# people in need	% total population in need	MT
Sept – November	144,000	13	3,456	153,000	14	6,852
Dec – March	231,000	21	10,044	265,000	24	12,720
TOTAL	231,000		13,500	265,000		19,500

Note : The VAC estimate of population in need increases from 153,000 in September and October to 265,000 in November

A. CHANGES SINCE JUNE 2002

The main reasons for the differences between the CFSAM and VAC estimates are due to:

- The increase in population 6% in the first time period and 11 % in the second.
- The time period increasing from 6 months to the 7 month period in the table
- The increase in numbers from 153,000 to 265,000 occurring two months earlier in the VAC as compared to the CFSAM.

In addition to the above cereals it should be noted that the EMOP also has a large proportion of CSB (nearly 20% of the total food requirement).

Breakdown per zone for the whole period September to March

	CFSAM %	VAC %	CFSAM MT	VAC MT
Highveld	0	0	0	0
Middleveld	17	21	3780	6619
Lowveld	52	58	7776	10152
Lubombo Plateau	60	60	1994	2822
TOTAL	21	24	13500	19500

It therefore follows from the analysis that the focus of the intervention should be in the Lowveld and Lubombo Plateau where 58 % and 60% of the population are in need of assistance with 65% of the total food. As noted in the first section of the report, the poor and very poor are in need immediately with middle wealth groups requiring assistance in the coming months. The poor and very poor are those with no assets or stocks and have limited or no income earning potential due to lack of employment opportunities or female headed households.

V. EMERGENCY RESPONSE TO DATE

The CFSAM recommended 17,720 MT of food aid including all commodities of which 13,500MT was the cereal component. The regional EMOP proposed 26,166MT and increase of 50% over the CFSAM. This was done to enable the intervention to cover 9 months rather than the six months proposed by the CFSAM, which would keep the operation in line with the surrounding countries and to meet programming needs. So far the only confirmed food aid is 4,190MT of mixed commodities from the United States and 818MT maize from DFID.

Below is a table summarising and comparing the estimated food aid between the CFSAM, the EMOP and what has actually been confirmed. So far about 20% of the total food required for the EMOP has been confirmed.

	CFSAM	EMOP 10200	Confirmed As at 31/7
Total Food	17,720	26,166	4,990
Cereal	13,500	17,600	4,300

FAO has initiated a seed distribution in Swaziland, but it is likely to only reach a small percentage of the population compared to the needs as discussed below.

VI. NON FOOD REQUIREMENTS

The issue relating to Agricultural inputs is perhaps more of access than availability. The household survey shows that across the country 80% of the households do not have seed for the coming season, with nearly 100% of the respondents in the Lowveld saying they do not have seed. The prices for seed and fertiliser has risen far beyond the reach of many households. The fact that the poor and very poor cannot afford food would indicate that they will be unable to buy seeds and other inputs as well. The issue is further complicated and linked with the availability of casual

labour as mentioned above and could further exacerbate the food crisis. If the area planted is reduced through lack of inputs, because of the high cost, then there will be fewer casual labour opportunities, especially during the planting and weeding period from October to December. Poorer households in the Low and Middleveld, acquire between 60 and 75% of their income from casual labour according to the food economy baseline.

VII. MONITORING AND SENTINEL SITE

Swaziland has a number of very useful sources of information currently available to monitor the food security situation. Apart from the regular price, production and import monitoring carried out by the government departments, the July / August assessment process has provided a partial update of the Risk map model and in addition a large amount of data has been gathered through the 40 community and 400 household questionnaires.

The risk map can be further updated and can use information from the surveys and other secondary sources to do so. Given the estimates from the risk map falling close to the household questionnaire analysis, will allow the VAC to use the model with more confidence in the future. It will also be possible and to allow for more refined estimates in future, the VAC will expand the number of sampling areas, into the 8 FEZs. The highveld, lowveld and plateau AEZs can each be divided into two or more FEZs as well the inclusion of an urban corridor zone. These zones are already identified, but further work needs to be carried out to update the model.

The data gathered through the household surveys has been entered into a database. This information can be used as a base for further assessment and monitoring and also should be made available to interested parties, especially those who are involved in food distributions and other programmes related to food security.

Critical information to monitor until the next harvest will be:

- Market prices for cereals
- Livestock prices
- The level of commercial imports
- Support to the current EMOP and any other food aid pipeline
- Next season rainfall
- Policy changes with regards to imported cereals
- Prices of Agricultural inputs

Household information:

- Availability of casual labour. Employment is a very important contributor to the household economy especially the poor and very poor, and will play an important role in the coming lean months
- Changes in diet such as the reduction in meals and alternative food.
- Increase in the number resorting to coping mechanisms, especially the reduction in education and health expenditure

Nutrition: Apart from the increase in the number of children identified as being chronically malnourished, there were no other strong indicators, showing there are children who are malnourished as a result of the current crisis. However, the number of chronically malnourished has risen over time which is a cause for concern. It will now be possible to use the nutritional information gathered during the assessment and refer back to the sites visited to monitor the nutritional status in the coming months.

VIII. RECOMMENDATIONS AND CONCLUDING REMARKS

The updated assessed need shows an increase of those who require food assistance as well as an increase in tonnage compared to the CFSAM. The needs also show an increase over an above the amount of food requested in the regional EMOP

Throughout the country individual households, especially the poor are going to have difficulty purchasing agricultural inputs for the coming season due to the lack of cash and the high prices caused by a weakening exchange rate. Every effort should be made to support the coming planting season to maximise production next year. Some seed programmes are in place, however not in the sufficient quantities to make a substantial impact. Swaziland relies largely on hybrid seed with the associated fertiliser requirements. Appropriately targeted inputs could reduce the need for food aid assistance in the future

Critical activities for the national VAC to focus on before December will be to

- Monitor key food security indicators as listed above
- Update Household Food economy data
- Maintain Sentinel sites
- Monitor key Government policies