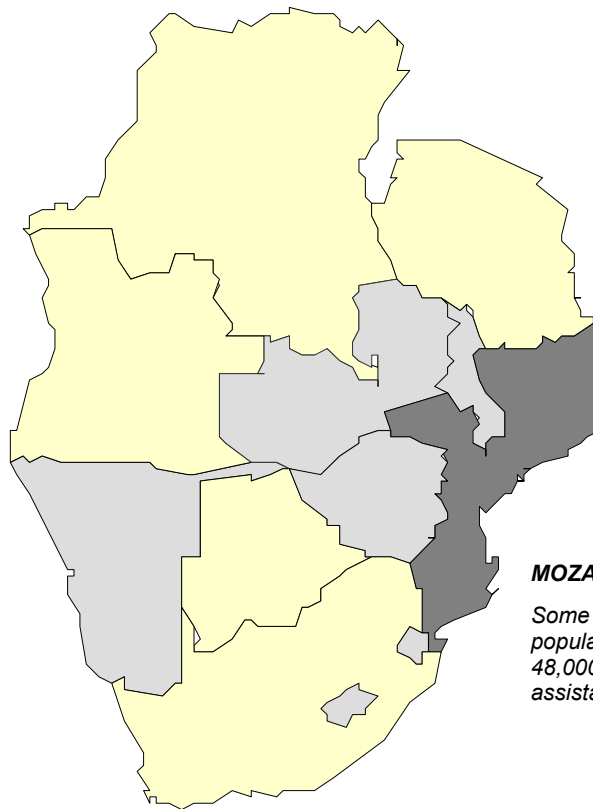


Mozambique National Vulnerability Assessment Committee  
in collaboration with the  
SADC FANR Vulnerability Assessment Committee



# MOZAMBIQUE

## Emergency Food Security Assessment Report



### **MOZAMBIQUE**

*Some 590,000 people (3% of the population) will require an estimated 48,000MT of cereal emergency food assistance through March 2003.*

16 September 2002  
Maputo

Prepared in 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.

## **ACKNOWLEDGEMENTS**

The Mozambique VAC would like to thank all participants of food need assessment, including the Ministry of Agriculture and Rural Development, National Disaster Management Institute, FEWS-NET, WFP, for spending many days on data collection and analyze. Special thanks are addressed to members of provincial and district level government for their assistance and support provided to the teams. Special thanks also to the Food Economy Group, who helped with the data analysis, and to WFP, FEWS-NET, World Vision, Norwegian Agency, GPZ, MSF and Ministry of Agriculture and Rural Development for help providing transport. Our deepest gratitude also goes to the regional VAC for their contribution to this assessment.

## ABBREVIATIONS AND ACRONYMS

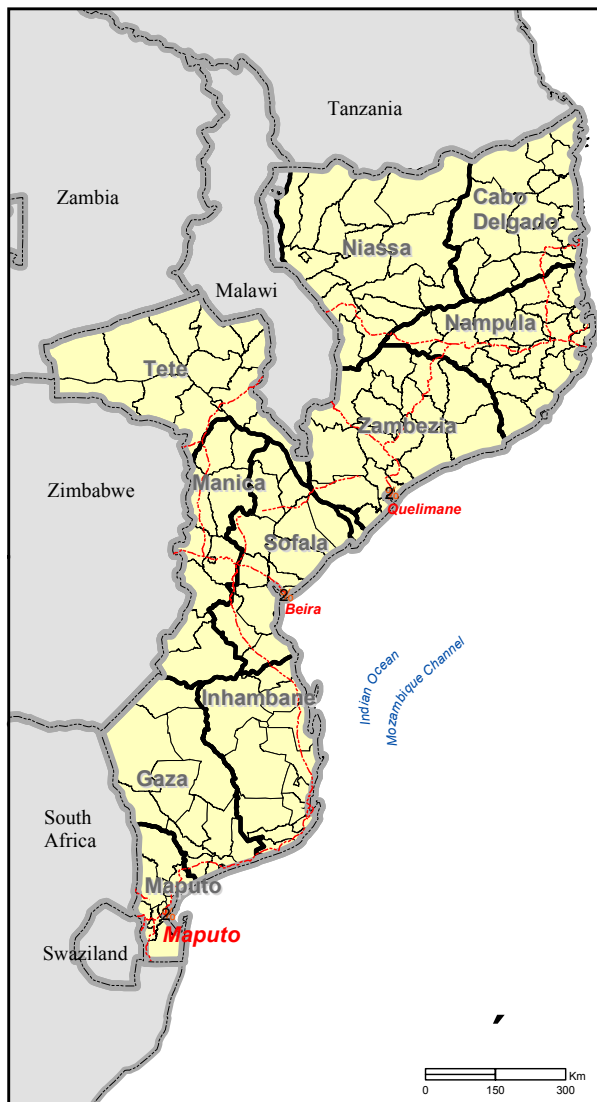
VAC	Vulnerability Assessment Committee
MADER	Ministry of Agriculture and Rural Development
DINA	National Directorate of Agriculture
NEWU	National Early Warning Unit
WFP	World Food Programme
FAO	Food and Agriculture Organization
FEWS-NET	Famine Early Warning System - Network
SARNET	Southern Africa Regional Network
CFSAM	Crop and Food Supply Assessment Mission
GMO	Genetically Modified Organism
MUAC	Mid Upper Arm Circumference
HIV/AIDS	Acquired Immune Deficiency Syndrome
FEZ	Food Economy Zone
SPA	Provincial Agricultural Service
MT	Metric Tonnes
GPZ	Zambezi Plan Cabinet

## TABLE OF CONTENTS

<b>MOZAMBIQUE EMERGENCY ASSESSMENT HIGHLIGHTS .....</b>	<b>V</b>
<b>I. OVERVIEW .....</b>	<b>1</b>
A. Purpose of this assessment.....	1
B. Food security prospects for the country .....	1
C. Overview of methods used for this assessment .....	1
D. Key Findings .....	2
a. <i>Trends in food security since the CFSAM or other previous reports .....</i>	<i>2</i>
b. <i>Targeting: geographic, temporal, socio-economic .....</i>	<i>2</i>
c. <i>Identification of hot spots or particularly severe areas in the country.....</i>	<i>3</i>
<b>II. MACRO PROCESSES AND TRENDS .....</b>	<b>5</b>
A. Final crop assessment estimates.....	5
B. General conditions for the winter cropping season.....	6
C. Market prices of key commodities as compared to household purchasing power.....	7
D. Level of commercial imports .....	7
E. General livestock conditions .....	7
F. Government policies and actions.....	8
<b>III. NUTRITION, HEALTH, GENDER, AND CONSUMPTION PATTERNS .....</b>	<b>8</b>
A. Nutritional Situation.....	8
B. Epidemiological Situation.....	9
C. HIV/AIDS prevalence and linkages to food security .....	9
D. Gender issues.....	10
E. Consumption patterns.....	10
<b>IV. COMMUNITY VULNERABILITY ASSESSMENTS - PROVINCIAL OVERVIEWS.....</b>	<b>10</b>
A. Niassa Province .....	10
B. Cabo Delgado Province .....	11
C. Nampula Province.....	12
D. Zambézia Province .....	13
E. Tete Province.....	14
F. Manica Province .....	15
G. Sofala Province.....	17
H. Inhambane Province .....	18
I. Gaza Province .....	19
J. Maputo Province .....	20
<b>APPENDIX I: CORE NUMERIC RESULTS REGARDING EMERGENCY FOOD AID.....</b>	<b>21</b>

## MOZAMBIQUE EMERGENCY ASSESSMENT HIGHLIGHTS

- The current estimate for the total number of people in need of food assistance is approximately 590,000 people in 48 Districts. This represents approximately 3% of the total population. Cereal requirements for emergency food aid are estimated at 48,000MT.
- Since the FAO/WFP Crop and Food Supply Assessment Mission (CFSAM) in April/May, there have been no major changes to the cereal production figures for the 2002 main season, except for millet in Sofala Province, where production was less than forecast in April/May. Overall cereal production in 2002 was approximately 5% higher than in 2001.
- However, cereal production was more than 34% less than last year in some areas, particularly in southern Mozambique. Districts highlighted for assistance are those that were hard hit by drought. Cassava production has been affected by “brown streak virus” in Nampula province.
- Poor road infrastructure makes it un-economical to move surplus food production in the north to deficit areas in the south.



- Emergency provision of seeds and tools are urgently required in the affected areas.
- Markets need to be monitored closely as current trends indicate that food prices could increase to levels that would be beyond the reach of the poorer households. Current food prices are higher in Nampula, Beira and Maputo than the same period last year.
- HIV/AIDS prevalence is reaching an alarming stage, with estimates that by the year 2010, some 1.2 million Mozambicans will have died of AIDS. This will seriously affect food security.
- Cereal imports are currently ahead of plans and the winter cropping is progressing well in areas that have not been affected by poor production in the main season.

## I. OVERVIEW

### A. PURPOSE OF THIS ASSESSMENT

This emergency food needs assessment was conducted for three main purposes, specifically, to:

1. Evaluate key assumptions from the April/May CFSAMs;
2. Update targeting and numbers of beneficiaries in need based on comprehensive national and community level analysis;
3. Provide feedback on the emergency response to date.

### B. FOOD SECURITY PROSPECTS FOR THE COUNTRY

The key factors that will affect food security in the coming months are the depletion of household-level stocks and increasing staple food prices, compounded by lack of availability of food for purchase in the more remote areas of the country.

Severe dry weather and drought during the 2001/02 cropping season sharply reduced crop yields in some parts of southern and central Mozambique. However, in the main cereal growing areas of the northern region and parts of the central region, abundant and well distributed rains led to increased production of cereals at the national level. Overall, the 2002 cereal output is estimated at 1.77 million MT, or 5% above last year, of which maize constitutes 1.24 million tonnes, or an increase of 8% from the previous year. Pulses increased by 9%, while cassava decreased by only 1%, although losses due to the brown streak virus were severe in Nampula Province.

Cereal production in the south was 34% lower than in 2000/01 as compared to last year and even more reduced in particular areas. Poor crop production, combined with very high staple food prices this year, mean that poor households in 48 districts of the country will be unable to meet their food needs up to the next harvest period.

The total number of people in need has risen by approximately 13%, (from 515,000 in April/May to 587,000) due primarily to the inclusion of pockets of food insecurity in two new provinces: Zambézia and Nampula. In parts of coastal Zambézia, poor households with limited access to land have been included in the population estimates. In coastal areas of Nampula Province, cassava, the staple food, has been severely affected by brown streak virus, and in one district this problem has been compounded by limited access to land.

<b>Table 1: PROVISIONAL VAC ESTIMATE</b>			
	<b>PEOPLE IN NEED</b>	<b>% TOTAL POPULATION IN NEED</b>	<b>CUMULATIVE MT CEREAL FOOD AID</b>
<b>SEPT 1-NOV 30</b>	587,000	3	21,118
<b>DEC 1-MAR 31</b>	587,000	3	28,157
<b>TOTAL: SEPT-MAR</b>	<i>587,000</i>	3	<i>49,275</i>

Source: VAC assessment

**Table 1** indicates the VAC estimate of cereal food need in Mozambique - a total of 49,275 MT of cereal are needed to cover around 587,000 people. Since the April/May CFSAM, a total of 13,275 MT has been pledged by donors for Mozambique. This figure compares to a total requirement of 70,050 MT as determined in the April/May assessments (or just under 20%).

Currently there are no other pipelines in operation although several organisations are planning to purchase surplus maize within Mozambique. The WFP has issued tenders for 7,000 MT of maize to be used in the Mozambique emergency operation.

### C. OVERVIEW OF METHODS USED FOR THIS ASSESSMENT

Output from the April/May CFSAM was used to identify the most affected districts. The affected districts were then incorporated into 10 Food Economy Zones (FEZ)<sup>1</sup>. Within each district 2 to 4

<sup>1</sup> Food Economy Zones represent the different food and cash income options available to different types of households in a particular geographic area. See <http://www.fews.net/livelihoods/framework/> for more details on the approach.

villages were selected for interview based on local government and NGO's information. The assessment was realized by four teams who visited 6 provinces (Inhambane, Sofala, Manica, Tete, Zambézia and Nampula). The food economy approach was used by the teams for data collection and a two-day training was provided to the team members.

For other districts not identified during the CFSAM as vulnerable, semi-structured questionnaires were delivered using two national consultants. In this way, information was collected from all districts. In selected villages, the teams interviewed local leaders and held discussions with focus groups. The data entry started in the field followed by analysis in the office.

## **D. KEY FINDINGS**

### **a. Trends in food security since the CFSAM or other previous reports**

Since the April-May FAO/WFP crop assessment, there have been no major changes to the crop production estimates, except for millet in Sofala Province, which was less than forecast in April/May. Overall cereal production in 2002 was approximately 5% higher than in 2001.

Surplus cereal production in northern and central areas was projected in April/May at 100 000 MT, however high internal transport costs make it uncompetitive to move the maize from the north to the deficit areas of the south (CFSAM April/May 2002). Cereal production in the south was 34% lower this year compared to last year, and the districts highlighted for assistance in this report are those that were particularly hard hit by drought.

Cassava production fell by 1% nationally, but this figure hides a huge reduction in cassava yields in the coastal part of Nampula Province, which was hit by brown streak virus. While most of the affected area does not require emergency food assistance as a result of the disease (because of alternative food and income sources) intervention to address the disease is urgently required.

Overall, the second season was reasonable, but it represents only 10-15% of normal annual production and has resulted in a reduction of needs in only a few areas of southern Mozambique. In general, the areas that were identified as having problems in April/May are also the areas that are either not major winter crops areas, or where the winter crops are not doing so well. These tend to be the semi-arid areas of the country.

The main markets are usually well stocked with basic staple foods like maize and beans, but prices are very high this year, with negative consequences for poor households. In the more remote parts of the country, there are problems of physical access to markets due to poor road infrastructure. This means that even if households have reasonable access to cash income, they face difficulties in purchasing staple food.

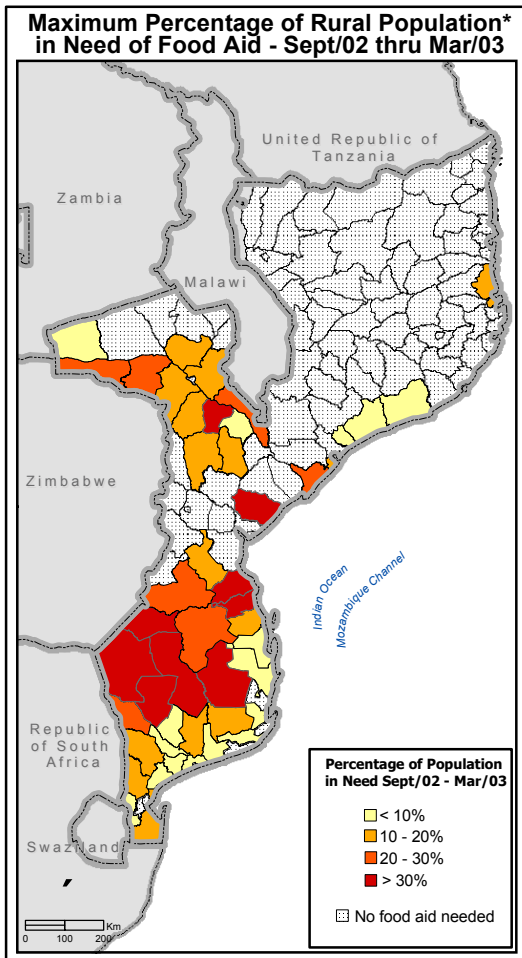
Coping strategies vary from region to region and generally represent intensified efforts at activities that households pursue normally. Examples include casual labour (locally or migratory), production and sale of alcoholic beverages (often made from wild fruits or honey), consumption of wild foods, sale of livestock, sale of handicrafts, firewood and charcoal, and fishing and hunting (which are sources of both food and income). The teams did not encounter distress migration of whole families.

### **b. Targeting: geographic, temporal, socio-economic**

The geographic distribution of people in need includes 48 out of 128 districts as determined by this assessment. The majority of affected districts are semi-arid where the rainfall varies from 400 to 600 mm and are located in south and parts of central Mozambique. Some affected districts are those located in low lands that are cyclically affected by floods and drought. In spite of all the factors mentioned earlier, some districts are located in remote areas with difficult access. Figure 1 illustrates the percentage of rural population in need; figure 2 illustrates the distribution of the rural population in need of food aid in the country.

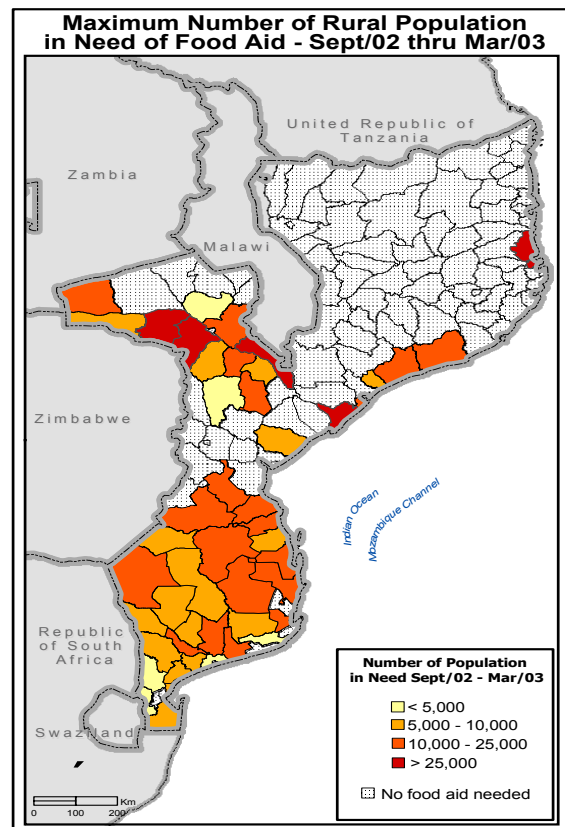
In terms of temporal targeting, there is a need for immediate assistance in 47 districts identified in VAC assessment. However one district, Namaacha, will need the assistance starting in November.

**Figure 1**



Many of the poor households that have been identified in various parts of the country are female-headed households, household headed by older people and by physical disabled people. These households face major labour constraints and find it more difficult than other households to intensify activities to obtain food and income. These households also tend to have small land portions and normally they depend on casual labour (*ganho-ganho*) as a food and income source. They do not own cattle, goats and pigs, but may own some chickens.

**Figure 2**



**Main problems with food aid distribution**

- Finding implementing partners with capacity and reliability in remote areas of the country;
- Funding for non-food items to integrate Food for Work activities;
- Ensure targeting of beneficiaries in order to reach the most vulnerable people;
- High cost from EDP (extended delivery point) to the FDP (final delivery point), from the warehouses to the communities for distribution because of distances and poor road conditions.

**c. Identification of hot spots or particularly severe areas in the country**

The critical areas of the country are those where poor households have the largest estimated food deficits over the April 2002 to March 2003 period. These include: Upper Limpopo (Chicualacuala and Mabalane), Interior of Gaza (Massangena, Chigubo, northern Guijá, northern Chibuto), Interior of Inhambane (Funhalouro and Mabote), Semi-Arid Interior of Zambezi North (northern Changara,



southern Chiúta, south and central Moatize, northwest Mutarara), Memba District, Chinde and Inhassunge Districts.

### **Additional Findings and Recommendations**

The following additional inputs were identified in the course of the assessment to improve food security.

- The transplanted disease-resistant varieties of cassava to coastal Nampula Province is a matter of urgency. The Ministry of Agriculture has identified four varieties of cassava for this purpose, but needs assistance to multiply and then transport the planting stock.
- Cashews were a very important cash crop in many parts of Mozambique in the past, but production in recent years has been poor due to powdery mildew disease. Coconut production has also been hit by the lethal yellowing disease in coastal Zambézia and parts of coastal Nampula. Support to programmes to reverse these production declines should be considered.
- In remote parts of the country, physical access to traders selling agricultural inputs is difficult. Combined with the difficulties that some poor households will have in accessing food this year, a distribution of tools in remote areas should be considered.
- The quality of seed available in the most drought-stricken areas of the country is poor. Distribution of quality seeds tailored to particular areas should be considered. Places that were hit by floods last year and drought this year (mainly in central and south of Mozambique) should have priority in any distributions, particularly for groundnut, cowpeas and bambara nut seeds.
- Improved roads would lead to improved access to markets, which would make obtaining income and purchasing food easier in many of the more remote parts of the country.
- Support to the livestock sector is appropriate since this is an important source of income in many zones.
- In the natural reserve areas a decision is needed regarding the cohabitation of people and animals.
- Steps should be taken to ensure that farmers get access to credit to purchase agricultural tools and improved seeds.
- Nutritional and food diversification workshops should be held, particularly with regard to child feeding practices in northern Mozambique.
- There is a need to continue the awareness campaigns aimed at knocking down the coconut trees infected by the lethal yellowing disease. The movement of plants and related materials that could lead to the infection of plants in areas so far not affected by the disease needs to be controlled.
- Food assistance activities in Chinde and Inhassunge Districts have to be coupled with a nutritional program, since experience has proven that food aid alone is not solving the nutritional problem of some affected populations.

### **Monitoring indicators and sentinel sites**

Monitoring key indicators that affect the status of food security should be a continuous exercise involving the government, FAO, WFP, FEWS-Net and NGO's. Some indicators are already collected with some difficulties such as price, rainfall data, crop production data, nutrition status and health status. Indicators related to the rural livelihoods such as household level stocks, household income sources, quantities and prices (coping strategies). The VAC committee should institutionalise the livelihood data collection for the purpose of comparison with the baseline

information. In addition, each food economy has specific income sources and coping strategies to monitor.

## II. MACRO PROCESSES AND TRENDS

### A. FINAL CROP ASSESSMENT ESTIMATES

Commodity	CFSAM (MT)	Final production (MT)	% Difference
Maize	1,235,657	1,235,657	0
Sorghum	314,136	314,136	0
Millet	55,761	49,500	-11%
Rice	167,925	167,925	0
TOTAL	1,773,479	1,767,218	-0.4%

Source: MADER and CFSAM

**Table 2** compares the national cereal production figures that were projected during the CFSAM and the final MoA crop figures as established in July. The only difference between the two estimates is in millet production, and this difference was noted in the Sofala province where millet production was less than forecast in April/May.

For the 2001/02 agricultural season 3,840,000 hectares were planted with 7 main crops, of which 2,116,000 ha was cereals, 703,000 ha was pulses, and 1,204,000 ha was cassava crops. The production of cereals was estimated to be 1,767,000 tons, of which maize was 1,236,000 tons, which correspond to 70% of the overall cereal production. The production of pulses was estimated to be 287,000 tons and cassava was 5,925,000 tons.

Table 3. Cereal Balance Sheet (April 2002 - March 2003 Marketing Year)

	May 2002 <sup>1</sup>	August 2002 <sup>2</sup>	5-Year Average <sup>3</sup>
Opening Stocks	218,000	109,000	145,000
Domestic Production	1,773,000	1,767,000	1,678,000
<b>TOTAL AVAILABILITY</b>	<b>1,991,000</b>	<b>1,876,000</b>	<b>1,823,000</b>
Domestic Requirements	2,242,000	2,256,000	2,059,000
Planned Exports	100,000	130,000	33,000
Desired Closing Stocks	233,000	0	34,000
<b>TOTAL REQUIREMENTS</b>	<b>2,575,000</b>	<b>2,386,000</b>	<b>2,126,000</b>
<b>DOMESTIC CEREAL GAP</b>	<b>-584,000</b>	<b>-510,000</b>	<b>-303,000</b>
Commercial Imports Received	0	233,000	77,000
Food Aid Received	0	63,000	24,000
<b>TOTAL IMPORTS RECEIVED</b>	<b>0</b>	<b>296,000</b>	<b>101,000</b>
Commercial Imports Expected	534,000	359,000	0
Food Aid Expected	50,000	70,000	0
<b>TOTAL IMPORTS EXPECTED</b>	<b>584,000</b>	<b>429,000</b>	<b>0</b>
<b>TOTAL IMPORTS</b>	<b>584,000</b>	<b>725,000</b>	<b>101,000</b>
<b>UNFILLED CEREAL GAP/SURPLUS</b>	<b>0</b>	<b>215,000</b>	<b>-202,000</b>

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

2. SADC Regional Early Warning Unit estimate, based on government figures.

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

It is interesting to note that the MoA has already made predictions for the 2002/3 season, with an overall increase in cereal output of 10% projected as compared to the 2001/2 season. This information is obviously preliminary but indicates the desire of farmers to increase production, perhaps as a result of high prices being offered in the region.

## B. GENERAL CONDITIONS FOR THE WINTER CROPPING SEASON

The winter cropping season accounts for a significant contribution to food and income in some districts. Some regions report good progress, while production is less favourable in others. In general, the areas that were identified as having problems in April/May are also the areas that are either not major winter crops areas, or the winter crops are not doing so well. These tend to be the semi-arid areas of the country.

Vegetables (pumpkins, watermelon, melon, sweet-potato, onions, kales, tomatoes) and maize are planted in lowlands or in irrigation schemes in various parts of the country. The contribution of income from the sale of the vegetables in these areas is significant and will assist households to access other staple foods until the next harvest. There is also an intensification of tubers planting and rapid multiplication of sweet potato and cassava cuttings, in collaboration with SARNET (Southern Africa Regional Network) in several parts of the country.

Following are the season appraisal statements made by Chiefs of Provincial Agricultural Services (SPA), during the 6<sup>th</sup> Annual Meeting of DINA (National Directorate of Agriculture), Bilene, 11-13<sup>th</sup> July 2002. This is 'mid season' information, and will be updated when the assessment teams return from the field by mid August and therefore should be treated as preliminary.

**Maputo** - The second cropping season is progressing satisfactorily despite lack of rain. Farmers are intensifying the production of vegetables, beans, sweet potato and maize for fresh consumption in lowlands and in established irrigation schemes.

**Gaza** - The second cropping season is progressing satisfactorily. The coastal zones had enough precipitation, and in interior the planting is concentrated in lowlands. The dewfall is providing sufficient humidity for the development of maize and common beans.

**Inhambane** - The vegetable crops cultivated are doing well as there are seeds for various types available. Vegetables and sweet potatoes cuttings are planted in the rehabilitated irrigation systems. The number of vegetable fields is increasing.

**Sofala** - The main cropping season is progressing satisfactorily. The precipitation behaviour is regular for this season. The vegetables, beans, and maize are in vegetative stages and maturation respectively, and maize is being harvested.

**Manica** - In the second season cropping, generally vegetables and beans are the crops most planted with exception of few localized zones. The season is progressing normally and there was a timely seed supply.

**Zambézia** - The second cropping season is moving satisfactorily. Maize, beans and vegetables seeds were distributed to the people in vulnerable districts. There is an intensification of rapid multiplication of sweet-potato and cassava cuttings in coordination with SARNET.

**Tete** - The second cropping season is progressing normally. The crops planted are mostly vegetables cultivated in almost all the districts, in lowlands and in small irrigated lands. It is also ongoing the multiplication of tubers program in lowlands, as well as the multiplication of cereal grains and pulses for the next cropping season.

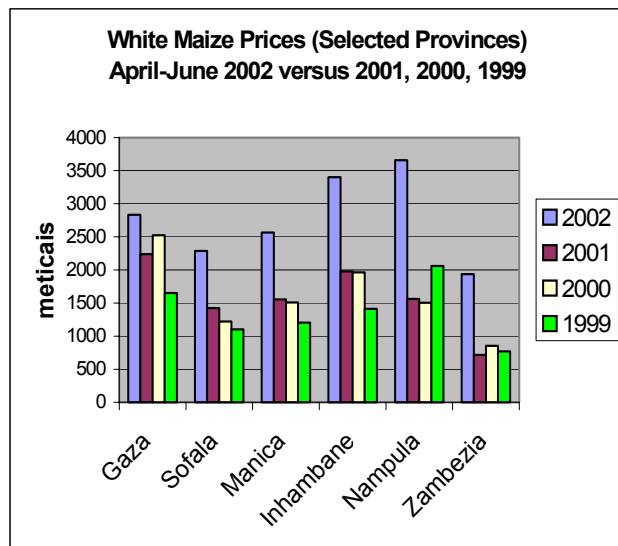
**Nampula** - In Nampula the second cropping system is almost at end. The main crops grown were sunflower, sesame, beans and maize. The vegetables production is in progress. The multiplication of cassava cuttings and cowpea seeds is done in the irrigated lands.

**Cabo Delgado** - The provincial directorate of Agriculture and Rural Development distributed vegetable seeds, sweet potato and cassava cuttings. Maize is on grain formation stage, and the pigeon pea is on the pods formation stage.

**Niassa** - Second cropping season progressing normally.

## C. MARKET PRICES OF KEY COMMODITIES AS COMPARED TO HOUSEHOLD PURCHASING POWER

Graphic 1: White maize price comparison



### Evolution of real maize prices in June

The current real retail prices of maize (adjusted for inflation) are higher in Nampula, Beira and Maputo compared with the same time period in the previous three years. The real retail maize price in June 2002 in Maputo was similar to that observed in June 2000, just after the devastating Limpopo River floods. Real prices in Nampula and Beira are also markedly higher this year. Nominal prices (not adjusted for inflation) show an even more dramatic picture, with June 2002 prices significantly above June prices in recent years in all three markets. This indicates that even when the effects of inflation are removed, households are already paying more for maize.

An examination of producer maize prices in Chimoio over the past three seasons reveals the huge increase in prices during the 2001/02 season, and the corresponding drop in prices with the good harvest in early 2002. The very high producer prices during the planting season in late 2001 stimulated production and reflected the scarcity of maize within the country and the region during the period. Current producer prices in Chimoio have increased slightly in June 2002, perhaps as an early indication of strong demand from national and regional buyers and reduced supply on the market. In the 2000/01 season, producer prices remained fairly flat for the entire year, increasing only slightly before the harvest.

Retail maize prices in the major markets fell sharply when the harvest season began in late March and early April. Prices then remained relatively stable through April, May and early June, but appear to be on the increase again. Prices are expected to continue to climb throughout the year and until the next harvest in early 2003. Prices trends will be closely monitored, as they are a key indicator of food security especially in the worst affected regions.

## D. LEVEL OF COMMERCIAL IMPORTS

Level of commercial imports realized and committed in the future, as compared to assumptions in CFSAMs. **Table 4** represents the level of commercial imports estimated for the marketing year compares to the actual (1st quarter).

As can be seen the rate of imports for the first quarter is well ahead of target (assuming a constant rate of importation).

Traditionally larger consignments of rice are received in December. Overall thirty nine percent of the commercial food importation predicted during the CFSAM has already been imported in the first quarter.

Commodity	CFSAM (12 months)	Actual (3 months)*	% of 12 months
Maize	70,000	20,227	28
Wheat	260,000	132,157	51
Rice	262,000	80,422	30
TOTAL	592,000	232,806	39

Source Ministry of Industry and Commerce

## E. GENERAL LIVESTOCK CONDITIONS

Livestock are generally reported to be in good condition for this time of year. However Newcastle disease has been registered throughout the country. Central and northern regions of Mozambique are endemic to swine fever pest, which negatively impacts the community income and coping

strategies. The main issue is that water is becoming scarce. Herders are noted to be digging for water as from August in riverbeds for their livestock in the most arid areas. This would normally happen two months later in September/October

## F. GOVERNMENT POLICIES AND ACTIONS

At the end of July, the Government of Mozambique stated that GMO maize should be milled before distribution to prevent the possible use as seed. Negotiations are underway to determine how this should be carried out and who will cover the costs of the milling. The GoM has also stipulated that any GMO grain in transit should be in covered trucks and should have an agreement from the recipient country. A working group has been formed by the Ministry of Agriculture, Office of Migration, Police and Customs to facilitate the transport of food aid through Mozambique. The working group has already decided to extend the border opening hours.

## III. NUTRITION, HEALTH, GENDER, AND CONSUMPTION PATTERNS

### A. NUTRITIONAL SITUATION

	2001	2002
Tete	8.1% (150.210)	5.7% (162.925)
Sofala	13.3% (166.977)	8.6% (175.168)
Inhambane	6.7% (235.763)	7.6% (251.509)
Gaza	4.8% (198.931)	3.5% (226.463)
Manica <sup>1</sup>	9.3% (67.644)	7.3% (78.122)

A general analysis of the Insufficient Growth (IG)<sup>2</sup> indicator for the 5 provinces worse affected by drought during the first semesters of 2001 and 2002 we observe a reduction tendency of the IG rate (**Table 5**). However the number of children weighed (sample size) has also increased.

The ten districts considered the most vulnerable to food insecurity, and according to results from the FAO/WFP May assessment present a slightly different picture (**Table 6**). The districts in "bold" present an increase in the IG rates. A rapid nutritional assessment was carried out in the ten districts. The Braquial Perimeter<sup>3</sup> was chosen as the indicator to be measured, although it is not necessarily an accurate weight for height indicator. However, its use is commonly used in emergency situations and gives a rapid indication of the nutritional situation in children with  $\geq 12$  months of age.

Provinces	District	2001	2002
Tete	Changara	12.3% (8.272)	4.7% (9.645)
	Magoé	7.9% (7.316)	5.3% (10.963)
Sofala	Chibavava	12.4% (15.242)	11.5% (13.826)
	Machanga	10.7% (6.128)	5.1% (6.277)
Inhambane	<b>Funhalouro</b>	1.1% (5.462)	1.3% (8.300)
	Mabote	11.8% (3.213)	10.7% (8.507)
Gaza	<b>Mabalane</b>	3.0% (2.608)	5.1% (4.104)
	<b>Massangena<sup>1</sup></b>	10.6% (3.976)	17.5% (3.181)
Manica	<b>Tambara<sup>1</sup></b>	10% (8.758)	17.5% (1.951)
	<b>Macossa<sup>1</sup></b>	14.5% (1.287)	11.9% (8.57)

Province	District	P.B	Diarrhoea	Conjunctivitis
Tete	Changara	6.5%	23.3%	16.9%
	Magoé	8.6%	16.7%	13.3%
Sofala	Chibavava	5.3%	20.5%	2.5%
	Machanga	6.0%	20.6%	0.1%
Inhambane <sup>1</sup>	<b>Funhalouro<sup>1</sup></b>	18.3%	38.9%	43.0%
	Mabote	2.0%	48.9%	33.5%
Gaza <sup>1</sup>	Mabalane	6.6%	20.5%	
	Massangena	4.7%	27.3%	
Manica <sup>1</sup>				

30 children in 30 clusters were measured in each district (900 children). In Inhambane province the sampling took place in 16 and 17 clusters, respectively. Two weeks before the survey, information on diarrhea was collected together with that related to conjunctivitis. **Table 7** illustrates the results.

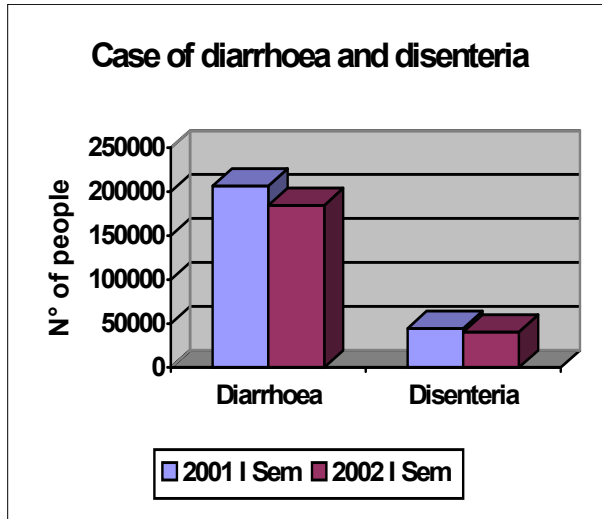
<sup>2</sup> The Insufficient Growth indicator cut off are <16% as normal; 16-30%- alarm; >30% serious.

<sup>3</sup> The cut-off for P.B are: <125 mm - slight; < 120 mm - moderate; < 110 - acute.

Funhalouro district is the worst among the eight most affected districts. The remaining districts, with the exception of Mabote where the situation is described as acceptable, are in an alert situation, requiring constant monitoring<sup>4</sup>.

## B. EPIDEMIOLOGICAL SITUATION

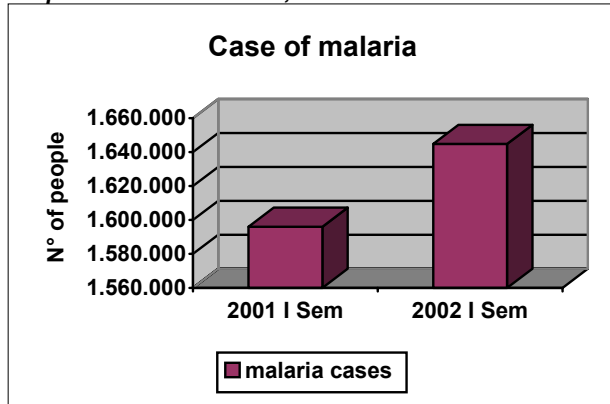
**Graph 2: Cases of Diarrhoea and Dysentery**



Until the present, no occurrence has emerged as a result of the drought. Scarcity of water, for washing purposes, may lead to the occurrence of skin diseases and diarrhea. The graphs present comparative information on diarrhea, malaria and pests between the first semesters of the years 2001 and 2002.

During the first semester of 2002, 184 511 cases of simple diarrhea were notified and 40 435 cases of dysentery. These numbers are inferior to the numbers presented the previous year (10% and 9%, respectively) as shown in the graph. Simple diarrhoea affects the 0-4 years old age group more, followed by the 15+ age group.

**Graph 3: Cases of Malaria, 1st semesters 2001 e 2002**



Cholera presents a seasonal endemic behaviour. During the semester, 32 522 cases were notified resulting in 379 deaths. The lethal rate stands at 1.2%. According to BES Segundo 1,644,741 cases of malaria were registered resulting in 1536 deaths. Comparing the same period of the previous year a reduction in the number of deaths is observed. During the first semester of 2002 30 cases of pest were registered against 42 cases for the same period the previous. Morrumbala, in Zambezia province is the only district where the cases were registered.

## C. HIV/AIDS PREVALENCE AND LINKAGES TO FOOD SECURITY

The most recent figures for HIV prevalence in Mozambique in 2000<sup>5</sup> ranged from 5.2% in Nampula Province to 21.1% in Manica Province. Nationally, prevalence was 12.2%, with the central part of the country most seriously affected. Estimates are that by 2010, 1.2 million Mozambicans will have died as a result of AIDS. This is a serious threat to food security, particularly since it is the most economically active part of the population that is most affected by the disease. The central corridor is the more affected area followed by Gaza province in southern region.

<sup>4</sup> Mal-nutrition rates of < 5% - normal situation; 5-9% - alert situation; 10-14% - worrying situation; >15% - aggravated situation.

<sup>5</sup> Impacto Demografico do HIV/SIDA em Mozambique, February 2002 - National Council Against HIV/AIDS, National Statistics Institute, Ministry of Health, Ministry of Planning and Finance, Centre for Population Studies at UEM, Faculty of Medicine at UEM, Ministry of Education.

## D. GENDER ISSUES

The current food insecurity situation has not reached the stage of disrupting normal male and female roles in agricultural activities or income generating activities. Typical male activities include grass cutting, hunting and fishing, while women undertake other activities such as brewing and distilling alcohol, fetching water, cultivation of agricultural fields, weeding, etc. Casual labour (ganho-ganho) is practiced by both genders, depending on its availability. However it has been noted that the income is higher for those activities (casual labour) practiced by men than those practised by women. Female-headed households, household headed by older people and by physical disabled people are more vulnerable since they cultivate small land portions and they face labour constraints.

Orphans seem to living within families, but often in families headed by elderly people, with very small family sizes. These households normally have small fields, low crop production and few sources of cash income.

Labour constraint is big issue in the rural areas. In time of crises households without such a constraint are better able to cope than those with a labour constraint. Since the characteristics of the poor people are those household facing labour constrain they should be the first to be contemplated in assistance programme.

## E. CONSUMPTION PATTERNS

Consumption pattern varies from region to region. The **Southern Region** has two main zones, interior and coastal. For poor people living in the interior they are having a hard time to meet their food requirements. Two meals are provided for children while adults are having one meal per day. Cassava and vegetables (mainly cassava leaves, pumpkins) are the food consumed in this crises period.

Households residing in coastal areas and lowlands, which have a second season, harvested in July/August. Currently they have something to eat until the end of September. Peanuts are more important in their diet, however the last two seasons have not been favourable for peanuts and pulses due to dry conditions. Consumption of wild food is intense in this critical period. Some people substitute one meal with wild food.

Poor household in the **Central Region**, who faced floods last year, are also facing a shortage of cereals and pulses. Basically they are taking one meal per day for adult and two meals for children. Consumption of wild food is intense in this critical period. Some people substitute one meal with wild food.

The most affected area in the **Northern Region** is coastal areas, although they have availability of other food but not their preferred the food (cassava). Poor people throughout the country rarely buy oil and sugar.

## IV. COMMUNITY VULNERABILITY ASSESSMENTS - PROVINCIAL OVERVIEWS

The following sections summarise the findings by province, starting in the north of the country and working south.

### A. NIASSA PROVINCE

Team members did not visit Niassa Province. However, a questionnaire was sent to the district offices of the Ministry of Agriculture, which is summarized below.

Niassa Province, located in northwest Mozambique, is rich in natural resources and it boasts great agricultural potential. This province has a poor road network and a low population density.

### *Availability*

Agricultural production for the 2001/02 season at provincial level was satisfactory and it was characterized by the expansion of cultivated areas. The total area in which various crops were planted covered 285,000 hectares, which represented an increase of approximately 7% in relation to the previous season. Cereals covered 163,000ha, and the production of cereals was estimated to be 131,000 MT. Cassava production was estimated at 145,000 MT and pulses at 27,000 MT. District agriculture officials estimate that households have food reserves for three to six months.

**Table 8**

Niassa Province	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	211,697	29,297	162,705
2000-01	167,563	24,884	149,553
1999-00	150,343	23,467	127,005

Source: Ministry of Agriculture - DPA

### *Access*

Access to food in general terms is through household crop production, complemented by the purchase of some food items. Market availability of maize and beans is good. The price of maize in the border districts has increased compared to last year because of response to greater demand from Malawi. The commercial network in the province is generally deficient owing to the poor conditions of the access roads. Poor families often rely on alternative means, such as casual labour to earn income to purchase food.

### *Coping capacities and strategies*

Income options in the province include the production of cash crops such as tobacco, cotton, sesame, and paprika. Maize and beans are both food crops and cash crops for poor and average families. Breeding goats and sheep for sale is a common practice. There are also families that cut firewood to make charcoal and handicrafts. Poor families with low levels of agricultural production engage in casual labour for food and cash after exhausting their food reserves.

## **B. CABO DELGADO PROVINCE**

Team members did not visit Cabo Delgado Province. The following represents a summary of the information provided through a questionnaire that was sent to the district offices of the Ministry of Agriculture.

### *Availability*

This province is made up of districts that can be characterized in terms of high, average and low potential for agricultural production. The first category (high) includes Ancuabe, Balama, Chiure, Namuno and Montepuez Districts. The second category (average) includes Palma, Macomia, Mocimboa da Praia, Nangade and Moeda Districts. The third category (low) covers the coastal districts of Mecufi, Pemba-Metugi, Quissanga, Macomia and Ibo. The most common crops include maize, millet, rice, beans, and groundnuts.

The 2001/02 season had normal rainfall and overall the province had a good harvest. The total planted area in the last agricultural season was 455,600 ha with food crops, of which 173,482 ha was cereals, 100,458 ha was pulses and 169,519 ha was cassava. There were reports of areas lost to wild animals and late weeding. Cereal production was estimated to be around 175,181 MT, of which maize was 105,565 MT, which represents 60% of cereal production as a whole. Pulses claimed 50,208 MT and cassava 1,094,983 MT.

**Table 9**

Cabo Delgado	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	175,181	50,208	1,094,983
2000-01	125,411	40,254	1,011,022
1999-00	92,543	35,408	811,701

Source: Ministry of Agriculture - DPA

### *Access*



Cabo Delgado Province is basically self-reliant in terms of food. Nonetheless, in the coastal districts, where the populations cultivate smaller areas, the production has not been enough to meet the needs and access routes are generally poor. The commercial campaign normally occurs between June and August. After this period, prices tend to rise. Currently maize prices range from 1500 mt/kg in Mocímboa da Praia to 2500 mt/kg in the remaining northern districts.

#### *Coping capacities and strategies*

The survival strategies in the province aim to satisfying food needs. Casual labour, consumption of wild fruits in the dry season, and sale of handicrafts provide households with the money they need to purchase food items. The flow of men to major cities as a result of migrant labour is a major factor in the social arena. Another practice that prevails in the province is the provision of labour to better-off families by poor women, who are often single mothers, widows, or old women. Other sources of income include cotton and sesame sales and the production and sale of alcoholic beverages.

### **C. NAMPULA PROVINCE**

The team that covered Nampula Province found that in general, there is no need for food assistance in the coastal districts that have been affected by cassava disease. Cassava is the main staple food in the region and production has been greatly reduced, but households have other food and income sources (including fishing) that are adequate to meet their minimum food and non-food needs.

The team did find, however, that there is a subzone within Memba District where food assistance is required. In this subzone, households are facing a problem of access to land because a cashew company owns vast tracts of fertile land in the area. Combined with the current year problems of drought and cassava disease, the team estimated that poor and lower middle households in this area are facing a deficit of approximately 5 months of food this year (in the period from September through February). Another characteristic of the people in this subzone is that they do not fish, unlike most population groups in the coastal zones of Nampula Province.

#### *Availability*

The first season crops were planted later than normal, due to the late start of the rains. In general terms, the 2001-02 season was better than the previous season, with regard to maize and groundnuts for the province as a whole. No difference was registered regarding beans but there was a decrease in cassava production as a result of the widespread "brown streak virus" and irregular and scarce rains.

If compared to the last season, the second season is progressing normally in the low-lying areas for vegetables and sweet potatoes, but the production of maize is poor.

In terms of production, the districts of Nampula are self-reliant and they have enough household food stocks up to December, with the exception of Memba, Nacala-a-Velha and Mossuril Districts, which have stocks only up to September, due to the decrease in cassava production, which is the main food crop. There are food reserves in the interior districts, namely: Ribaue, Malema, Murrupula and parts of Mecuburi. There are also reserves in the midland districts of Erati, Muecati, and Nacaroa and in the interior of Mongincual District.

Cassava is the staple food in Nampula, therefore its scarcity has an extremely negative impact on the perception of food security by the local population, who attach greater value to cassava than to other alternative sources of carbohydrates. Cassava reserves are exhausted or nearing exhaustion in parts of the coastal districts of Memba, Mossuril and Angoche.

Cereal production in the 2001-02 agricultural season was estimated to be 231,828 tons, of which maize was 111,582 tons (or 48% of total cereals). The production of pulses was 65,801 tons, and cassava was 2,272,388 tons.

**Table 10**

Nampula Province	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	231,828	65,801	2,272,388
2000-01	214,946	56,325	2,604,798
1999-00	195,633	58,876	2,451,576

Source: Ministry of Agriculture - DPA

### Access

Purchasing power varies amongst households within the same community as well as between communities. However, a common limiting factor is the absence of markets in which local produce and outside goods can be traded. Poor road infrastructure, unavailability of vehicles, and the isolation and distances between villages and towns all combine to hinder access. Where possible, the transport of goods is also done by dhows.

Despite high prices this year, households have good access to cash income and will be able to purchase their remaining food needs. The province has a high potential for goats. Chicken rearing for sale is also common at household level. However, livestock are generally not part of the household diet. Newcastle disease and parasites are often a drawback in poultry. Fishing is an important activity for many households in the coastal areas, and makes a considerable contribution to the sources of food and sources of income at household level.

The table below indicates white Maize Prices in Nampula Province (Nacala)

**Table 11**

April – June 02	3657/kg	= 234% of 2001
April – June 01	1563	
April – June 00	1505	
April – June 99	2060	
April – June 98	2157	

Source: SIMA

### *Coping strategies and capacities*

Consumption of wild tubers and fruits, sale of animals (mainly goats and chicken), casual labour, migration to look for work in neighbouring districts, and the sale of handicrafts and thatching grass are the main coping mechanisms for the poorer households in the province. In bad years, these activities are done more intensively. There is a pattern of seasonal migration in years of food scarcity from the stricken areas to the closest “better-off” districts. Usually migrants only return at the beginning of the following agricultural season.

In parts of Memba district, in the subzone with limited access to land, this is the third consecutive year of food insecurity, and wild berries, tubers and vegetables are running out.

Orphans and elderly people are the poorest social groups, and the less active segment of the population. They cultivate small fields, have limited stocks and basically survive on remittances from relatives or subsidies from the government or NGOs.

Wealth indicators have to be used so as to identify the target groups. They are: a) cultivated area; b) number and species of animals owned by the household; c) sources of food; d) kinds of income and expenditure; e) household composition.

## **D. ZAMBÉZIA PROVINCE**

A very rapid assessment by mission members was conducted in Chinde and Inhassunge Districts of Zambezia Province. Information on other districts was obtained from the offices of the Ministry of Agriculture in the province.

### *Food availability*

Chinde District is facing the most serious food security problems in the province, followed by Inhassunge District. Floods last year and drought this year, linked to structural problems such as poor roads and market networks and isolation from the rest of the province, are contributing to the worsening the food security situation.

Another major problem is the coconut lethal yellowing disease that has been affecting the province and has greatly reduced coconut production.

The total planted area in Zambézia during the 2001-02 agricultural season was 760,498 ha, of which cereals covered 374,994 ha, pulses 86,298 ha, and cassava 273,283 ha. Cereal production was estimated to be 396,412 tons, of which maize was 269,066 tons (or 66% of the total cereal production). The production of pulses was 51,188 tons while cassava was 1,776,340 tons.

**Table 12**

Zambezia	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	396,411	51,188	1,776,340
2000-01	334,658	50,059	1,592,819
1999-00	304,816	48,145	1,460,000

Source: Ministry of Agriculture - DPA

### Access

Zambezia province is potentially rich and self-reliant. Problems such as poor road networks and the isolation of Chinde District from the commercial routes worsen the food security situation. Access to land is not easy because commercial farmers own most of the arable land. The markets are poor in the most affected areas, without excluding the private sector.

The table below indicates white Maize Prices in Zambezia Province (Mocuba)

**Table 13**

April – May 02 (June n/a)	1938/kg	= 271% of 2001
April – May 01	715	
April – May 00	855	
April – May 99	770	
April – May 98	867	

Source: SIMA

### *Coping strategies and capacities*

The cultivated area determines household production, which is then translated into the distribution of wealth. The poorer families are those that own smaller land portions, since they have limited agricultural outputs.

The crisis generally falls heavily of women, children, elderly people and destitute, as witnessed in Chinde and Inhassunge Districts. There are tasks that are typical for men and others that are typically for women. Casual labour is normally practiced by both genders, depending on the specific task at hand.

Orphans seem to be in families, but these are often families headed by elderly people in households with one or two family member(s).

## **E. TETE PROVINCE**

The food economy approach was used for data collection and analysis in Tete Province.

### *Availability*

The northern part of the province has surpluses, and good climatic and soil conditions, which are favorable to agricultural activities. The southern region, in contrast, normally faces food shortages as a result of its aridity, poor rainfall and soils. However, this region is very good for livestock rearing.

Cereal production this year was estimated to be 218,716 tons, of which maize was 177,798 tons (or 81% of cereal production). The production of pulses was around 21,152 tons, while cassava was 7,643 tons. These production levels are higher than in 2000 and 2001 at the provincial level, but the figures mask large differences between districts. Despite the general increase of cereal production, for example, there was a decrease in production in Changara, southern Chiuta, Moatize and Mutarara Districts.

**Table 14**

Tete	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	218,717	21,152	7,643
2000-01	196,061	17,924	7,313
1999-00	176,145	14,533	6,318

Source: Ministry of Agriculture - DPA

The most affected areas are the north of Changara District, which is linked to southern Chiuta District and central and south Moatize District, and the whole of Mutarara District. The percentage food deficit for poor households in these areas is approximately 35 to 40% or 4½ to 5 months of food. The deficit was calculated taking into account the rational use of all non-destructive coping strategies. The number of people in need has fallen slightly in this assessment compared to the earlier FAO-WFP assessment, from 137,000 to 125,000 people (see table below)

#### Access

In most years, the northern part of the province sells its production to neighboring countries such as Malawi, Zambia and Zimbabwe, where they can be sold at competitive prices, as opposed to the less wealthy southern region. The price of white maize in April-June 2002 is 96% higher than in the same period in 2001. If these price differences are sustained, poor and some of lower middle households in the most affected districts are unlikely to be able to make up the crop production lost to drought through market purchase.

The table below indicates white Maize Prices in Tete Province (Tete)

**Table 15**

April – June 02	1791	196% of 2001
April – June 01	916	
April – June 00	742	
April – June 99	581	
April – June 98	681	

Source: SIMA

#### Coping strategies and capacities

In general terms, the survival strategies tend to be the same in most parts of the province. Households intensify livestock sales (especially goats), hunting, fishing, casual labour (ganho-ganho), production and sale of alcoholic beverages (made from the wild fruit *maçanica*), sale of firewood and the consumption of wild fruits in bad years. These activities are also the coping mechanisms that households employ to overcome the temporary hunger periods that affect the province on an annual basis.

The crisis has not reached the stage of disrupting normal male and female roles in agricultural activities or in income generating activities. Typical male activities include grass cutting, hunting and fishing, while women undertake other activities such as brewing and distilling alcohol, fetching water, cultivation of agricultural fields, weeding, etc. Casual labour (ganho-ganho) is practiced by both genders, depending on its availability.

Orphans seem to living within families, but often in families headed by elderly people, with very small family sizes. These households normally have small fields, low crop production and few sources of cash income. Wealth in the food economy zones in this province is generally related to the area of land cultivated.

## F. MANICA PROVINCE

The food economy approach was used for data collection and analysis in Manica Province. The most affected areas continue to be in parts of Guro, Machaze, Macossa and Tambara Districts. Although households have considerable access to cash income in this zone (the Semi-Arid Interior of Manica Province), there appears to be a problem of market access in this remote part of the province, with long distances having to be travelled to purchase food. Consequently, a deficit has been calculated for poor households in this zone, of roughly 3 months of food. In the most northerly part of the province, poor households in the Zambezi Valley are facing a deficit of 3-4

months due to drought. The overall number of people in need in the province has dropped from that estimated in the April-May assessment.

#### *Availability*

In the southern part of the province, the rains started in the first decade of November, while in the central region the rains fell in the second week of November, followed by the rainfall in the northern areas in the following week. The planting process was carried out according to the rainfall. After the planting period, there was a considerable amount of time without rains. The 2001/2002 agricultural season was characterized by a slight decrease in cereal and pulse production. Cash crops such as cotton, tobacco, sunflower and tea registered a considerable increase, while coffee remained within planned ranges.

**Table 16**

Manica	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	237,759	2,641	7,706
2000-01	246,494	4,800	6,553
1999-00	222,884	3,796	4,904

Source: Ministry of Agriculture - DPA

In general terms the province is self-reliant in terms of food, but there are districts within the province, such as Macossa, Machaze, Tambara and Guro, that face chronic food shortages, mainly due to difficulties in accessing markets to purchase food.

The second season is progressing normally in the districts of Mossurize, Manica and Sussundenga. The same does not apply to the remaining districts due to drought that affects most areas of Tambara, Guro, Macossa and Machaze. The cotton harvest has just ended in the province and it is expected that the company that promotes cotton production will purchase the produce before the start of the next rainy season. This will equip the farmers with financial resources to purchase agricultural inputs for the 2002/03 agricultural season.

Regarding livestock, the chronically deficit districts have the potential to produce goats, pigs, and poultry for sale, but their consumption is low due to food habits of the population.

#### *Access*

The purchase power varies amongst households of the same community as well as between communities. Nonetheless, the common limiting factor in the most affected parts of the province is the absence of markets in which to sell and purchase goods, as a result of poor access routes, and the remote location of villages and towns. Where there are access roads, there are few vehicles, making transport difficult. Price increases will constitute another obstacle to purchasing cereal needs in next few months.

The table below indicates white Maize Prices in Province (Chimoio)

**Table 17**

April – June 02	2566	= 165% of 2001
April – June 01	1555	
April – June 00	1510	
April – June 99	1205	
April – June 98	1256	

Source: SIMA

#### *Coping strategies and capacities*

As in other parts of the country, people use their natural resources as a strategy for survival. Hunting, casual labour (*ganho-ganho*), sale of livestock and firewood, and production and sale of alcoholic beverages (made from wild fruits *maçanica and honey*) are amongst the sources of income for the majority of people living in this zone. In bad years, these activities are intensified. For those who are living near the Zambeze River, fishing is an additional source of income and food. Intensified consumption of wild foods is another coping strategy.

No disruption of the normal activities of men and women was found. Some poor families and female-headed households face labour constraints due to a shortage of active people in family, but this is a chronic situation. Orphans and elderly people are the most affected social groups, and the less active segment of the population. They cultivate small fields, have limited stocks and basically survive on assistance from relatives.

## G. SOFALA PROVINCE

A rapid assessment by mission members was conducted in Muanza, Chemba, Maringue, Chibabava and Machanga Districts of Sofala Province. Information on other districts was obtained from the offices of the Ministry of Agriculture in the province.

The population in need in Sofala Province has increased by roughly 30% from the April-May estimates due to the inclusion of parts of two new districts (Chemba and Maringue) at the request of the local authorities. The assessment team confirmed needs in these districts and adjusted previous estimates of need in two other districts.

### *Food availability*

Following the 2001 floods that hit the central region, the semi-arid areas around the Zambeze Valley in Sofala Province were affected by severe drought during the 2001-02 agricultural season, resulting in decreasing food security levels in the province. The situation is more serious in Muanza, Chemba, Maringue, Machanga and Chibabava Districts, where some poor households are already facing food shortage.

The total cultivated area in Sofala in 2001-02 was 238,075 ha, of which cereals was 187,520 ha, pulses 26,435 ha and cassava 13,207 ha. There were reports of lost areas as a result of the drought that started in January 2002. Cereal production was estimated at 132,427 tons, including 70,234 tons of maize (53% of cereal production). Pulse and cassava production was estimated to be 10,352 tons and 78,341 tons respectively.

**Table 18**

Sofala Province	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	132,427	10,352	78,341
2000-01	154,171	11,663	65,888
1999-00	131,021	8,344	44,188

Source: Ministry of Agriculture - DPA

### *Access*

The drought that affects some districts of Sofala Province is affecting access to food. The affected areas are in locations with bad roads and poor market networks, which contribute to cash unavailability and the subsequent poor commercial activity as a whole. Poorer families resort to the sale of wooden poles, firewood and charcoal to earn money to purchase food. Food-for-work activities mitigate food unavailability but they do not solve the underlying problems. The table below are indicate white Maize Prices in Sofala Province (Beira).

**Table 19**

April – June 02	2288/kg	= 161% of 2001
April – June 01	1425	
April – June 00	1223	
April – June 99	1102	
April – June 98	1421	

Source: SIMA

### *Coping strategies and capacities*

Sales of charcoal, wooden poles, firewood and chickens are the most common alternative sources of income, besides casual labour and poaching. In some areas, the population eats large rats and honey, and collect honey to brew alcoholic beverages (for consumption and sales).

Orphans and elderly people are the most affected social groups, and the less active segment of the population. They cultivate small land portions and have limited stocks and basically survive on

assistance from relatives who live/work in towns or subsidies they receive from the government or from NGOs.

## H. INHAMBANE PROVINCE

An updated analysis of the Interior of Inhambane Province food economy zone (covering most of Funhalouro and Mabote Districts), combined with the results of a rapid assessment in other parts of the province by mission members, has not changed the number of people that were estimated to be in need of food aid in April-May. Funhalouro District continues to be the most affected by drought, as identified in the previous FAO-WFP mission, with 33% of the population in need. Mabote District follows this with 29% and Panda with 20% of the population in need. The rest of the districts in Inhambane Province vary from 0 to 8% of the population in need. The most difficult period will be from September/October to December.

### *Food availability*

The 2001/02 agricultural season was characterized by delayed rains, which resulted in a late commencement of sowing season (November) as compared to the normal years. Planting was followed by irregular rainfall, from the germination up to the blooming phase. By the latter phase the vegetative features of the crops changed dramatically as a result of the absence of rains, thus resulting in drastic shortfalls in the ultimate yield of the agricultural season.

The second season is progressing normally, but there are no expectations of great contributions to cover the food deficit, since the production is happening in the low-lying areas, and the common crops are vegetables, that cannot be kept in stock.

The total cultivated area in the 2001/02 season was 351,303 hectares. This was distributed as follows: 156,017 ha cereals, 127,825 ha pulses and 63,959 ha cassava. Considerable areas were lost from January 2002, owing to the drought that affected some areas of the province. Cereal production was estimated to be 59,146 tons, of which maize was 40,014 tons (or 68% of cereal production). Pulses produced 31,615 tons, while cassava was 315,646 tons.

**Table 20**

Inhambane	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	59,146	31,615	315,646
2000-01	96,929	31,155	317,276
1999-00	102,418	42,003	295,670

Source: Ministry of Agriculture - DPA

### *Access*

Owing to the drought that affected the province, the production of the current season was lower than that of the previous season (2000/01). Farmers need food reserves and cash income to make up for those periods in which they will be faced with food scarcity. Up to now cassava is the only crop that resisted the drought, and is one of the limited options the populations are left with. Horticulture is the other alternative for those who live close to low-lying areas during the second season.

Due the current crisis the prices of the basic commodities have increased considerably, if compared to the previous season. The purchasing power is low amongst poor rural households and it is worsened by the general increase of the prices of commodities.

The table below are indicate white Maize Prices in Inhambane Province (Massinga)

**Table 21**

April – June 02	3401/kg	= 172% of 2001
April – June 01	1977	
April – June 00	1963	
April – June 99	1413	
April – June 98	1575	

Source: SIMA

### *Coping strategies and capacities*

In order to obtain food and cash income, poorer households have increased the time spent on activities such as hunting, artisanal fishing, and brewing alcoholic beverages (often from wild fruits), depending on the area where they live. Due to food scarcity in this season, these activities were started two to three months earlier than normal. The other practice observed was the consumption of wild fruits in some areas.

Elderly people, orphans and destitutes are the groups most affected by the crisis, since under normal circumstances they cultivate small fields, from which the production does not satisfy their basic family needs.

## **I. GAZA PROVINCE**

An updated analysis of the food economy zones in Gaza Province, combined with the results of the district-level questionnaires, has reduced the number of people in need as estimated by the April-May assessment by approximately 18,000 people to 111,000. Poor and middle households in the Upper Limpopo and Interior Zones of Gaza are particularly in need this year, with deficits of up to 4 months of food. Households in the Lower Limpopo and Coastal Zones are likely to be able to cope with the current drought, due to their varied and relatively substantial income sources and resulting purchasing power.

### *Availability*

The first season crops had a normal yield in various agro-ecological zones of the province, since planting was carried out in the appropriate time. A long dry period followed in January, resulting in low yields, if any, in some regions. Roughly 85% of the population depend on agriculture and livestock activities. Maize is the preferred staple food, although there is consumption of cassava in the interior.

In various districts the household stock levels currently range from 1 month to 4 months of food reserves. Poor and middle households in the semi-arid areas in Gaza are likely to face food scarcity from September/October this year. In the Upper Limpopo, food shortage affects the same social groups, poor and middle households. In the coastal areas, there are less severe shortages and there has been some second season production of maize. Hence needs are much lower in this zone. The Lower Limpopo zone tends to have much higher income levels (particularly from remittances from South Africa) and more developed markets than the more remote zones. The food security situation is adequate in this zone.

The total planted area in the 2001/02 agricultural season in Gaza province was 3,308,466 ha, distributed as follows: 170,864 ha cereals; 68,635 ha pulses and 37,051 ha cassava. There were reports of lost areas as a result of drought that struck some parts of the province in January. Cereal production was estimated at 69,228 tons, including 51,343 tons of maize (or 74% of total cereal production). Pulse production was 17,056 tons and cassava was 179,404 tons.

**Table 22**

Gaza Province	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	69,228	17,056	179,404
2000-01	87,494	19,416	186,686
1999-00	62,532	15,728	143,339

Source: Ministry of Agriculture - DPA

### *Access*

The commercial network varies from area to area, but it is worth indicating that the Lower Limpopo zone does not face great accessibility problems, as a result of the existence of infrastructures. In the remaining parts of the province, the bad/damaged roads are a hindering factor. Purchasing power is very low amongst poor families in the Interior and Upper Limpopo zones.

The table below are indicate white Maize Prices in Gaza Province (Xai-Xai)



**Table 23**

April – June 02	2834/kg	= 127% of 2001
April – June 01	2238	
April – June 00	2523	
April – June 99	1653	

Source: SIMA

### *Coping strategies and capacities*

Households commonly use income from casual labour and migration to the mines in South Africa and to urban canters to mitigate food scarcity. Consumption of wild fruits, such as macuacua, and madocomela, occur normally during the year, and increase during the drought periods. The sales of domestic animals such as chickens, ducks and goats are another coping strategy.

Male migrant labour to the mines and to the large urban centers is the major issue related to gender, since this in some cases leaves whole families with food security problems, as the men sometimes start off another family to the detriment of the family they leave behind.

The other common feature is the provision of casual labour to better off families by the poorer female segments of the society, generally made up of single mothers, elderly people and widows.

## **J. MAPUTO PROVINCE**

Team members did not visit Maputo Province. The following represents a summary of the information provided through a questionnaire that was sent to the district offices of the Ministry of Agriculture. In sum, the population in need has increased very slightly in Maputo Province since the April-May 2002 crop assessment.

### *Availability*

The 2001/02 agricultural season suffered a set-back with the drought that affected the province. Some farmers had to sow their crops more than once, but still the final result was poor. The second season focused in the low-lying areas, where they can be irrigated. This season normally contributes 20–30% of the main season's production levels. The crops commonly planted in this season are vegetables and maize. Many households in the province are currently without stocks.

The total planted areas in Maputo Province in 2001/02 was 109,187 hectares, thus distributed: cereals 68,416 ha, pulses 23,547 ha, and cassava 6,189 ha. Cereal production was estimated to be 34,823 tons, of which maize was 32,532 tons (93% of cereal production). Pulse and cassava production was estimated to be 7,833 tons and 29,394 tons respectively.

**Table 24**

Maputo Province	Cereals (MT)	Pulses (MT)	Cassava (MT)
2001-02	34,824	7,833	29,394
2000-01	61,871	7,519	32,685
1999-00	33,400	10,655	17,074

Source: Ministry of Agriculture - DPA

### *Access*

As a result of low or no production, food prices in the markets are high, which acts a hindrance to the poorer families. The commercial networks are comparatively advanced, in relation to other provinces. Migration to the neighboring countries and *mukhero*<sup>6</sup> are the alternative sources of income.

### *Coping strategies and capacities*

A number of income-generating activities have started to be implemented. These include the sale of chickens, traditional beverages, firewood and charcoal. Hunting and fishing are also practiced in some areas.

<sup>6</sup> Small scale cross border business, mostly practiced by unauthorized people. Women are the major practitioners of this activity,

Migrant labour to neighboring countries and to the major urban centers by the male population is the outstanding feature in the social arena. Locally, poor families tend to provide services to families that are comparatively better off in the form of casual labour. This is common among single mothers, elderly people, and widows. Some women practice *mukhero* and sell sea fruits, amongst other things.

## APPENDIX I: CORE NUMERIC RESULTS REGARDING EMERGENCY FOOD AID

Table 25

(P) Province	(E) Population CFSAM	CFSAM # Pop Need	WFP Pipeline # Beneficiaries	Revised # Pop Need	CFSAM # Pop Need	WFP Pipeline # Beneficiaries	Revised # Pop Need
Cabo Delgado	1,525,633						
Gaza	1,395,195	132,000	115,000	110991	132,000	115,000	111130
Inhambane	1,198,085	90,000	75,000	73650	90,000	75,000	93000
Manica	1,207,332	82,000	53,000	41575	82,000	53,000	43770
Maputo	2,048,610	35,000	34,000		38,000	34,000	39200
Nampula	2,461,762			37500			33000
Niassa	916,671						
Sofala	1,516,165	36,000	33,000	50150	36,000	33,000	47025
Tete	1,388,205	137,000	110,000	123949	137,000	110,000	125353
Zambezia	3,476,483	3,000	20,000	72711			95134
<b>Total</b>	<b>17,134,141</b>	<b>515,000</b>	<b>440,000</b>	<b>510526</b>	<b>515,000</b>	<b>420,000</b>	<b>587612</b>

Table 26

Sept 1 thru Nov 30						Dec 1 thru March 31						Total: Sept thru March														
CFSAM Estimate			Provisional Estimate *			VAC			CFSAM Estimate			Provisional Estimate *			VAC			CFSAM Estimate			Provisional Estimate *			VAC		
# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*	# People in Need	% of Total Pop. In Need	Mt. Cereal Food Aid*			
515000	3	18540	587000	3	21,118	515000	3	24720	587000	3	28,157	515000	3	43260	587000	3	49,275									

The total number of people who will need food assistance in the period September-November has risen by approximately 13% due to the inclusion of pockets of food insecurity in two new provinces, namely Zambézia and Nampula. The figures for other provinces have altered somewhat, with some provinces falling slightly and others increasing slightly, due to a more detailed analysis process.

Poor households in 4 districts will require food aid starting in November (rather than December), and this is why the population figures for the two periods (September-November and December-March) are the same.

It is proposed that the date to phase out assistance should be investigated during the December assessments, when the 2002-03 season will be underway. It is possible that assistance will not be required through the very end of March for some of the affected populations if the rains start on time and are adequate from September.

### Emergency response to date

Food distributions have followed the floods EMOP, and since January the following amount of food was distributed nationwide:

**Table 27**

	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan
Bridging EMOP		400,000	400,000							
Regional EMOP				350,000	350,000	440,000	440,000	440,000	440,000	440,000
LOUs	120,000	180,000	230,000	280,000	330,000					
Mt CFSAM			5325	5325	5325	7725	7725	7725	7725	7725
MT LOU		2415	3105	3968	4830	5693				
Actual Distribution										