

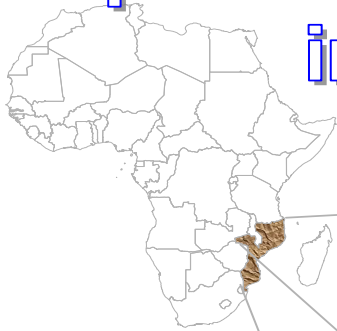


**Republic of Mozambique**

**Technical Secretariat for Food Security and Nutrition**

**Vulnerability Analysis Group**

# Report on Current Vulnerability in Mozambique



**May, 2005**

## **Report of the Vulnerability Analysis Assessment April 2005**

### **Acknowledgments**

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We thank everyone, including the interviewed family households, and we hope that the results herewith obtained will be of public use in assisting those who engage in planning, decision-making and priority interventions that aim at alleviating the vulnerability of rural populations.

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# Acronyms

AF	Family Household
AV	Vulnerability Analysis
BPN	Low Birth Weight
CI	Insufficient Growth
CPT	Food for Work
CSB	Corn Soya Blend
DDA	District Directorate of Agriculture
DPA	Provincial Directorate of Agriculture
EP1	First Grade Primary School
EP2	Second Grade Primary School
EPC	Complete Primary School
FAO	Food and Agriculture Organization
FEWS NET	Famine Early Warning System Network
GAPSAN	Food Security and Nutrition Early Warning Group
GATV	Center for Voluntary Counselling and Treatment (HIV/AIDS)
GAV	Vulnerability Analysis Group
GOM	Government of Mozambique
GPZ	Zambezi Valley Office
HIV/SIDA	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
LGB	<i>Prostephanus Truncatus</i>
MINAG	Ministry of Agriculture
MISAU	Ministry of Health
MMAS	Ministry of Women and Social Action
OCHA	Office for Coordination of Humanitarian Assistance
ONGs	Non Governmental Organizations
WFP	World Food Programme
PVCHS	People living with HIV/AIDS
RFE	Rain Fall Estimates
SAN	Food and Nutrition Security
SC-UK	Save the Children United Kingdom
SC-US	Save the Children United States
SETSAN	Technical Secretariat for Food Security and Nutrition
SETSAN-P	SETSAN-Provincial
SIMA	Agricultural Markets Information System
SPA	Provincial Agricultural Services
THR	Take Home Ration
UNICEF	United Nations International Children's Emergency Fund
VGf	Vulnerable Groups Feeding
WV	World Vision

# 1. EXECUTIVE SUMMARY

In March 2004 the multi-sectoral Vulnerability Analysis Group (GAV) of the Technical Secretariat for Food Security and Nutrition (SETSAN) identified 108.000 people (around 1% of the population) being in a situation of extreme food and nutritional insecurity. Due to the various interventions realized and to the optimum result of the second agricultural campaign, the food security situation had improved considerably at the end of the third quarter of 2004. At that time it became clear that there would be a need to monitor the situation, above all of the results and perspectives of subsequent seasons.

Meanwhile various parts of the country experienced long periods of drought during the 2004/05 season, which above all affected cereal crops in the southern and central regions, significantly reduced the yields of other food crops and the availability of water for human and animal consumption, and also foiled attempts by family households to reduce risks by subsequent sowing. Rainfall deficits had a negative impact on production and on the start of the second season as well.

Thus, the Vulnerability Analysis Group (GAV) and the Food Security and Nutrition Early Warning Group (GAPSAN), members of the provincial SETSANs, District Directorates of Agriculture and Health, and their partners (FAO, WFP, UNICEF and FEWS NET), embarked upon monitoring the current situation, with the following objectives:

- (a) Analyse the current situation concerning food and nutrition security;
- (b) Determine the scale and the nature of needs (of food, water and inputs);
- (c) Provide decision makers with recommendations to guide interventions;

Based on previously carried out analyses of rainfall, crop yields and livelihoods of family households, thirty five (35) districts were selected from the ten provinces. The 2005 vulnerability analysis is based on a qualitative evaluation, using a combination of data on vulnerability and food insecurity and rapid rural appraisal methods.

The analysed indicators were; (1) food availability, agricultural production, animal husbandry, food assistance, rainfall; (2) access to food, prices, market access, terms of trade, income sources; (3) utilization of food, with emphasis on nutritional and health aspects as well as on consumption; and finally (4) aspects of survival strategies.

The percentages of livelihood groups identified by the previous mission (May 2004) have been used to extrapolate to the number of people in a situation of food insecurity. Vulnerable to immediate food insecurity are considered the people belonging to the groups 1, 2 and 3 or "Subsistence farmers who are not self-supporting", "Basic subsistence farmers" and "Farmers dependent on cereals" respectively, while people at risk of entering into food and nutrition insecurity are those belonging to group 4 "Farmers with a diversified production system and informal work opportunities".

The mission shows that in this year the food and nutrition security situation of family households deteriorated in the districts affected by drought, which is why some livelihood groups, especially those with limited livelihood options need immediate assistance. Thus,

428.234 people are vulnerable to immediate food insecurity and 159.265 will need food aid from October of this year onwards.

The following districts have been identified as being extremely vulnerable to food insecurity: Funhalouro, Mabote, Panda, Chigubo, Massangena and Chicualacuala. The north and interior of Gaza, the interior of Inhambane, the south-western part of Tete, and the most northern and southern parts of Manica are in a situation that is particularly worrisome.

Compared with the previous year, the availability of food produced by the family has decreased. In all districts visited maize crops have suffered most, while the other food crops were drastically reduced.

In the arid and semi-arid areas, access to drinking water has become difficult. Not only the reduction in quantity is alarming, quality problems are frequently referred to as well. The availability for human and even animal consumption may soon be jeopardized due to the shortage of surface and underground water resources.

Various strategies are being implemented by family households to face the drought. However, there is an increase in the dependence on the use of negative survival alternatives such as the reduction of meals, the consumption of hunger foods, and the use of natural resources - especially by the most ill favoured family households. These strategies will be of short duration.

Compared with the same period of last year, the nutrition indicators (Insufficient Growth and Low Birth Weight) collected in the centres of nutritional surveillance, in general show a situation which is close to alarming and which is worsening, indicating deterioration in the near future.

Concerning schools, there are no alarming drop-out levels due to drought. Access to education among women improved significantly, they do not seem to be disfavoured when it comes to access to education in the southern region. Schools providing school meals show a significant improvement in attendance as well as a reduction of absenteeism. Rations to be taken home also have a positive impact on the target groups.

Various measures to mitigate the drought's impact directed by the government and its partners have been implemented among the visited districts, such as the multiplication of vegetative material, the exploitation of low lying areas, the rehabilitation of dams, agricultural input fairs, and the promotion of cattle-breeding, among others.

### **The following is recommended:**

#### **1. Agriculture:**

- Management of existing irrigation systems, rehabilitation of water pumps, attending training courses on respective management and maintenance aspects;
- Improvement of the quality and control of seeds distributed at fairs; studies on more appropriate seeds

- Take advantage of rainwater for agricultural and animal husbandry purposes, including the promotion of weirs;
  - Vaccinations against Newcastle disease: restoring of stock of vaccines against Newcastle disease in order to complete the vaccination plan.
2. Water and Sanitation:
- Promotion of a course for trainers in collection and use of water, which may be duplicated in the provinces – in coordination with the SADC;
  - Support the districts in their efforts to construct small dams for the storage of water;
  - Improve the access to drinking water through the rehabilitation of damaged water sources and the construction of new ones where the drought situation turns out to be serious;
  - Help communities to improve the quality of consumed water through chlorination and the adoption of other water purification methods;
  - All interventions should be accompanied by education programmes on hygiene so as to ensure the proper utilization of the infrastructures.
3. Nutrition:
- Pay more attention to, and monitor through the health units, districts with high incidences of Insufficient Growth (CI) and Low Birth Weight (BPN);
  - Intensify nutritional education activities;
  - Identify and refer children with clinical malnutrition;
  - Preventive medical activities, such as: vaccination and supplementation of Vitamin A.
4. Food Aid:
- Immediate food aid for 428.234 people in a situation of extreme vulnerability, until March 2006 and for 159.265 people from October to March 2006.
5. Monitoring:
- Monitoring of the population at risk;
  - Surveillance of the development of nutrition indicators at district level by the medical units;
  - Monitoring of trends of basic food prices, especially of maize in the Southern region.

## 2. MACRO-ECONOMIC SITUATION

### 2.1. Agricultural Production 2004/05

According to the Early Warning Department of MINAG, agricultural production in this year in general was mediocre, with a 5% decrease in cereals, a 2% increase in vegetables and a 3% increase in manioc, compared with the previous year. In addition to the irregular rains and the poor distribution in the course of the campaign, the incidence of diseases and plagues, especially of grasshoppers, elephants, rats, groundnut worm, *Prostephanus truncatus* (LGB) and red-beaked sparrows affected the produce in the field and in storage.

In the northern region, preliminary production estimates indicate an increase in the production of basic food crops, compared with the past campaign. Data show that cereals production is 10% higher, vegetables 9% and manioc 3%, in comparison with the 2003/04 campaign.

In the central region, the final production estimates indicate a decrease, mainly of cereals production, compared with the past campaign. It should be noted that the results have been negatively influenced by the recorded rainfall. Thus, according to the same source, cereals registered a decrease in the order of 10%, vegetables and manioc increases of 6% and 4% respectively, in comparison with the previous campaign.

In the southern region, preliminary estimates indicate a decrease of some 31% in cereals production, a 19% decrease in vegetables and an increase of 4% in manioc, in comparison with the previous campaign.

In Niassa, Cabo Delgado and Nampula, the production of maize grew, compared with the previous years. In general, maize production in the South saw a significant reduction (-32%), which in Gaza Province was in the order of 50%, while the centre region saw a slight reduction, the most noticeable being in Sofala Province.

<b>Table. 1. Maize Production, in MZM</b>				
	<b>2003/04</b>	<b>2004/05</b>	<b>Variation</b>	<b>Average (5 years)</b>
<b>NATIONAL TOTAL</b>	1434746	1382139	-4	1216119
CABO DELGADO	135822	139711	3	99046
NIASSA	204848	238989	17	167801
NAMPULA	135760	148471	9	119432
<b>North</b>	<b>476430</b>	<b>527171</b>	<b>11</b>	
ZAMBÉZIA	277623	263160	-5	232978
TETE	188188	190554	1	167823
MANICA	241830	221016	-9	204945
SOFALA	86410	67820	-22	78206
<b>Centre</b>	<b>794051</b>	<b>742549</b>	<b>-7</b>	
INHAMBANE	42607	37681	-12	53954
GAZA	93275	46735	-50	59089
MAPUTO	28384	28003	-1	32845
<b>South</b>	<b>164265</b>	<b>112419</b>	<b>-32</b>	

**Source:** Early Warning Department of DINA, Ministry of Agriculture.

Compared to the average of the last 5 years, the production of maize in the northern and central provinces is above average, while in Gaza and Inhambane provinces it is below average. Regarding cereals, there was an increase of almost 9% above the 5 year average (1,747,896 MZM).

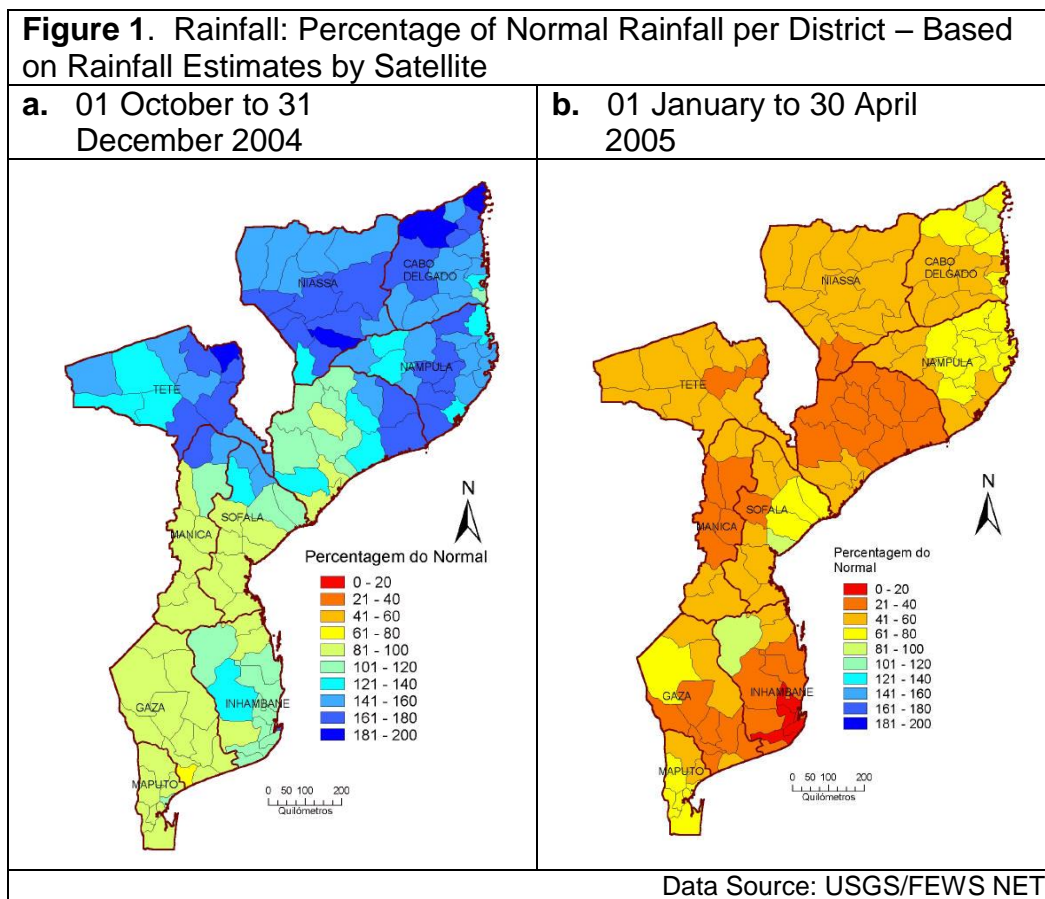
<b>Table. 2.</b> Cereals production in the last five campaigns					
	<b>Maize</b>	<b>Millet</b>	<b>Mexoeira</b>	<b>Rice</b>	<b>Total cereals</b>
<b>1999/00</b>	1,019,033	252,461	48,854	151,388	1,471,736
<b>2000/01</b>	1,143,263	313,787	61,602	166,945	1,685,597
<b>2001/02</b>	1,235,657	314,136	49,500	167,925	1,767,218
<b>2002/03</b>	1,247,897	314,590	48,021	200,437	1,810,945
<b>2003/04</b>	1,434,746	330,917	51,272	187,051	2,003,986
<b>2004/05</b>	1,382,139	307,543	35,935	173,770	1,899,386
<b>Source:</b> Early Warning Department of DINA, Ministry of Agriculture.					

As far as the production of drought resistant crops is concerned, especially manioc, millet and sorghum, a sharp reduction of approx. 80% in the production of sorghum and

of 70% in the production of millet in Gaza was reported. There are no big variations in manioc production, with a mere 3% increase compared to the previous season.

Equally noticeable was a significant increase in traditionally grown commercial crops, such as cotton, tobacco and tea, as well as in recently introduced crops such as sesame, soy and sweet pepper. These crops are an important component for food security of the families, given that they offer an income with which families may purchase food when they run out of surpluses, and a variety of essential non-food products, especially in the country's centre region.

## 2.2. Rainy Season 2004/05



The 2004/2005 rainy season consisted of two distinct periods: the first half, from October to December 2004, saw nearly normal rainfall in the southern and central regions and in the greater part of the country, with the occurrence of some local flooding. The second half, from January until the end of April, was characterized by intermittent and long periods of drought throughout the

country.

In the second half of the season, from January to April 2005, half of the country registered rainfall of 40% to 60% of normal. Some south-western parts of Inhambane Province recorded rainfall of 20% of normal. Other areas that are a source of great worry are south-western Gaza, the eastern and central parts of Manica, a large part of Zambézia Province and small areas in Tete, Maputo and Sofala provinces, with rainfall in the region of 20 to 40% of normal. The rest of the country recorded 40 to 80% of normal rainfall, with only 4 districts having rainfall between 80 and 100% of normal. In the North, rainfall was normally distributed, but in the Centre and the South distribution was particularly poor.

In the past year, during the 2003/04 rainy season of the same period, the accumulated rainfall up to the last ten days of April was above 100% of normal in Maputo and in large parts of the interior of Gaza (Massingir, Chicualacuala and Mabalane recorded 180%, 173% and 152% of normal, respectively). Notable shortfalls were only recorded at the coastal area of southeast Inhambane, where a mere 20 to 60% of normal was registered.

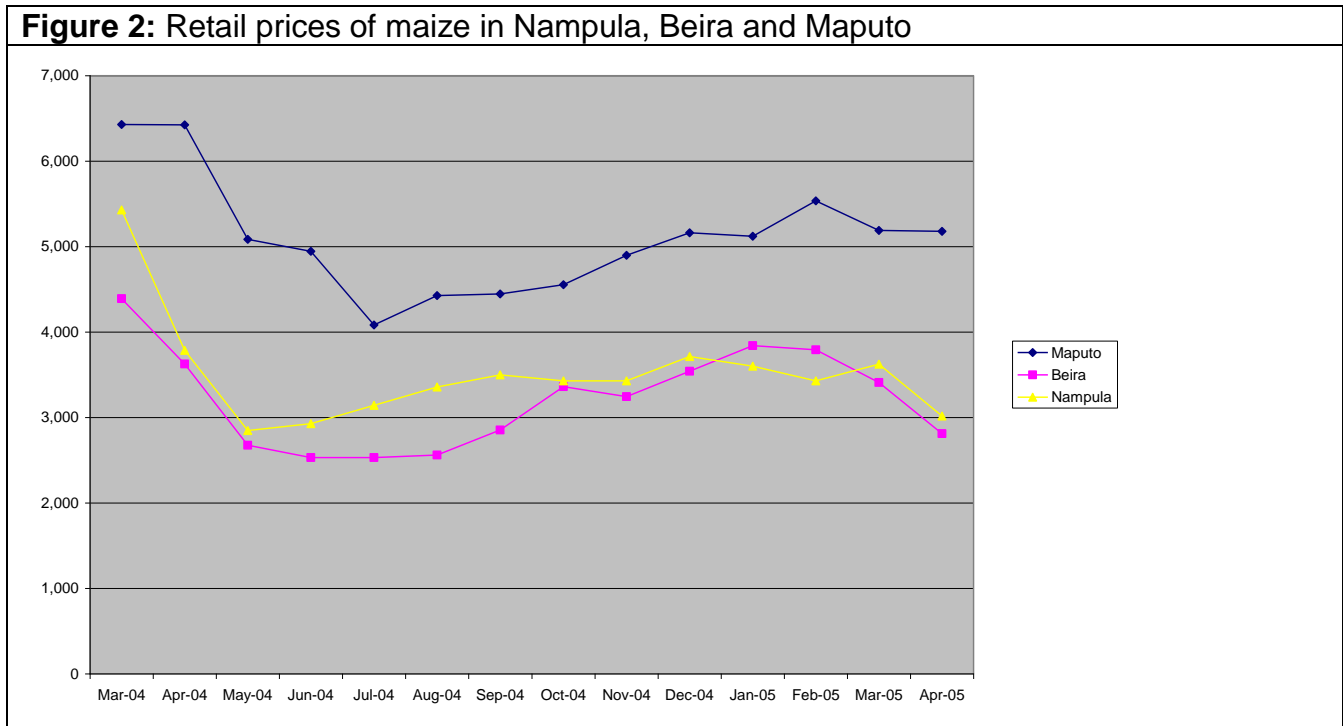
The 2003/04 rainy season therefore began with a delay of some two months. Although having started late, subsequent rainfall was regular and well distributed, having contributed to a good development of crops.

### 2.3. Prices

According to SIMA, with the recent harvest and following a normal trend, in the main markets of the North and Centre a reduction in maize prices, both in the retail as well as in the wholesale markets is noted.

In the urban markets of Maputo, Beira and Nampula, retail prices remained stable during the last six months, with only a few insignificant fluctuations. According to the indications in Figure 3, the prices the three markets in March 2005 were much lower than in the same month of 2004. In the course of the year, prices fell with 19%, 22% and 33% in Maputo, Beira and Nampula, respectively.

**Figure 2: Retail prices of maize in Nampula, Beira and Maputo**



Given that price fluctuations directly depend on the level of supply from the production areas to the reference markets, as a result of the low production in Gaza, the markets of Chókwe and Xai-Xai, which largely depend on maize from the central and northern regions, experienced a slight price increase.

Although maize is entering the southern markets, quantities are still small and demand is growing. Due to the weak supply and the low production of maize locally, in some markets of Gaza and Inhambane provinces, namely Chókwe and Maxixe respectively, the prices of maize are rising. This situation is being felt in Manica, where the districts of Machaze and

Mossurize experience significant increases. In Tete the district of Mágoè also presents a significant price increase already, particularly of maize as compared with the same period of last year. A continuous price increase will limit family households' access, jeopardizing food security, especially for poor and middle class families.

### 3. METHODOLOGY

The Vulnerability Analysis Group (GAV), consisting of representatives of SETSAN central level, SETSAN provincial delegations, Provincial Directorates of Agriculture, MISAU/Nutrition, WFP, INGC, FEWS-NET, FAO and UNICEF, worked in the districts most affected by drought in the Centre and South regions of Mozambique and in some worrisome spots in the three provinces of the country's North region, from 26 April to 11 May.

The 2005 vulnerability analysis is based on a qualitative evaluation. The districts to be evaluated were selected on the basis of the information collected and analysed by GAPSAN. GAPSAN collected secondary information on rainfall estimates (RFE), production estimates and income alternatives, among others. Nevertheless, the final choice took into account other factors, such as market access, the localization of the district, the existence of other means of subsistence for the family households and the incidence of cyclical droughts.

Based on these criteria and taking into account the geographical localization (interior versus coastal), the food economy zones as well as the cultivation system and the performance during the last campaign, the following 35 districts were selected:

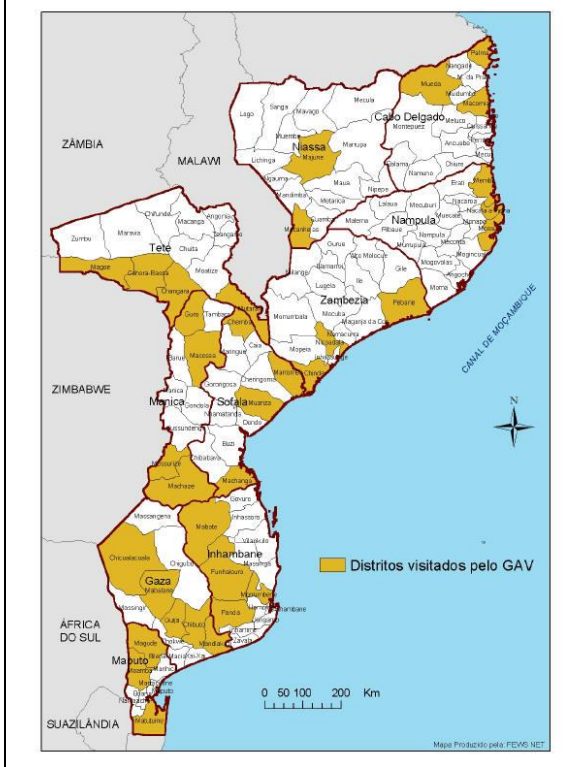
- Maputo:* Magude Moamba and Matutuíne
- Gaza:* Mabalane, Chicualacuala, Guijá, Chibuto and Manjacaze
- Inhambane:* Mabote, Funhalouro, Morrumbene and Panda.
- Sofala:* Muanza, Marromeu, Chemba and Machanga
- Manica:* Machaze, Mossurize, Macossa and Guro.
- Tete:* Mutarara, Mágoè, Changara and Cahora Bassa
- Nampula:* Mossuril, Mema and Nacala Velha
- Zambézia:* Nicoadala (Munhonha, and Nicoadala City), the District of Mopeia (Chamanga and Mopeia City) and the District of Pebane (Murateia and Pebane City).
- C. Delgado:* Palma, Mueda and Macomia (ZEA areas at the coast and in the northern interior of the province numbers. 4, 5, 6 and 8).
- Niassa:* Majume and Mecanhelhas

For the field work, the GAV used a guide with indicators relevant for the evaluation of the vulnerability to food and nutrition insecurity<sup>1</sup>, namely: Food availability, animal husbandry, food aid, access to food (income and prices) and utilization of food - with emphasis on nutritional and health aspects as well as on consumption. Finally, survival strategies were also evaluated.

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<sup>1</sup> See the guide in the annex.

**Figure 3. Districts Visited by the GAV mission, April 2005**



Six teams used rapid probing techniques during the field work, which was preceded by a 1-day training session where the team members were trained in the methodology of collecting data on food economies as well as in using some tools of rapid rural appraisal.

At provincial and district level the teams met with key informants as well as with some member institutions of SETSAN.

Along the way some field observations were made in order to understand the dynamics of the production systems and the vegetative state of the crops, and markets were visited as well.

At district level affected administrative posts were selected as well as localities for interviewing local leaders. Semi-structured interviews were conducted at community level with focus groups, with a view to determine food insecurity problems and to verify the distribution of livelihood groups. Finally, this distribution was compared with the

livelihood groups identified in the analysis from 2004<sup>2</sup>, which were used to calculate the number of affected persons, in accordance with the following table:

**Table 3: Percentage of livelihood groups (GAV 2004)**

	Maputo	Gaza North	Gaza South	Zambézia Interior	Zambézia Coast	I'bane Interior	I'bane Coast	Sofala	Manica	Tete East	Tete Southeast
Gr 1	12.9	23.7	16.7	5.6	7.6	25.1	19.3	8.9	16.3	6.2	11.4
Gr 2	8.0	12.9	6.5	8.2	5.3	5.8	3.8	24.5	17.2	20.2	13.8
Gr 3	9.6	9.6	6.0	11.8	0.2	1.8	2.2	10.0	21.3	34.7	27.2
Gr 4	14.7	4.2	13.4	6.9	13.4	10.7	14.9	22.9	13.1	13.8	15.6
Gr 5	6.2	34.4	14.0	0.2	0.0	13.9	8.9	3.1	7.2	6.2	22.3
Gr 6	27.8	8.5	36.7	63.7	67.9	32.0	38.7	24.9	21.7	16.0	4.0
Gr 7	20.9	6.7	6.7	3.6	5.6	10.7	12.2	5.6	3.2	2.9	5.8
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Maputo:** Matutuíne, Magude, Moamba, Boane, Namaacha, Manhica, Marracuene  
**Gaza North:** Massangena, Chicualacuala, Chigubo, Mabalane, Massingir  
**Gaza South:** Guijá, Chibuto, Manjacaze, Chokwe, Bilene/Macia  
**Inhambane coastal region:** Govuro, Inhassoro, Vilanculos, Massinga, Morrumbene, Zavala, Jangamo  
**Inhambane Interior:** Mabote, Funhalouro, Inharrime, Homoine  
**Sofala:** Chemba, Marromeu, Machanga e Muanza  
**Tete East:** Mutarara  
**Tete Southeast:** Changara, Mágoè and Cahora-Bassa  
**Zambezia:** Chinde, Pebane, Nicoadala  
**Manica:** Machaze, Mossurize, Macossa, Guro

<sup>2</sup> See the description of the livelihood groups in annex 2.

## **4. VULNERABILITY PER PROVINCE**

### **4.1. MAPUTO PROVINCE**

#### **I. AVAILABILITY OF FOOD**

##### **a) Agricultural production**

In Maputo province, irregular and insufficient rainfall affected the districts of Magude (Mapulanguene, Motaze, Panjane, Mahele and Magude City), Moamba (Administrative Post of Pessene), Marracuene (high grounds of Macaneta), Manhiça (Administrative Posts of Maluana and Kalanga), Namaacha (north and southeast of the district), Matutuíne (Administrative Posts of Machungulo and Zitundo) where the crops of the first season practically were lost because of the drought. Insufficient rainfall was aggravated by high temperatures, which in the aforementioned districts, above all affected maize and groundnut crops.

Due to these factors it is obvious that crops are poorer than in the previous campaign. It is foreseen that within a short period of time the populations of Moamba, Magude and of other high areas will be in need of food. During the month of February there were improvements in rainfall, which may contribute to an improvement of the sowing in the second season.

A large part of the population takes recourse to low-lying areas in order to supplement the production normally realized in the high areas and produce vegetable crops such as sweet potato and manioc so as to alleviate the need for cereals and to generate income. Food reserves of family households are low, basically because of the drought and plagues.

##### **b) Animal husbandry**

Animals are rather important in contributing to the families' food security. The general condition of cattle is good, except for some specific areas. In some local areas pastures are deteriorating.

##### **c) Food aid**

Food aid has been offered in particular in the North of the province, through the food for work programmes, take home rations and food for vulnerable groups, however, these do not cover all areas affected by the drought.

#### **II. ACCESS TO FOOD**

Compared with the previous year, prices remain stable in most districts, with rather good availability in the markets. Maize prices varied between 85,000 and 100,000 MZM per 20-litre can in Marracuene (local and from the Josina Machel Island). The households' capacity to purchase food is closely related to income facilitating such purchases.

### III. INCOME SOURCES

Maputo province occupies a convenient geographical location, with the capital city favouring high consumption and extensive job opportunities, up to over 100km from the city's outer limits.

In the border regions, there are constant commercial activities, including temporary migration for labour purposes. Other sources of income are the selling of animals, hunting, the production of charcoal and firewood, temporary wage-labour, the selling of building material, honey, and alcoholic beverages, and remittances by migrants in the Republic of South Africa.

### IV. UTILIZATION

#### a) Nutrition

The data on health show that the nutrition indicators (Insufficient Growth (CI) and Low Birth Weight (BPN)<sup>3</sup>) are within the norms acceptable for the country, except for Marracuene which shows CI rates of 14,5%. There is a trend towards increasing levels.

#### b) Water

Taking into consideration that now is the end of the rainy season, the availability of water is reduced, even the levels of important rivers are low, as in the case of the Incomati, whose level is 50% of that for the same period during the last years.<sup>4</sup> The state of the Umbeluzi river is unchanged. In most localities visited, the populations complain about the long distances they have to walk, on average taking 1-2 hours, to fetch water.

#### c) Consumption

In general the poorest and most vulnerable families only have one meal, the other ones with more resources, animals and jobs have two to three meals per day.

#### d) Education

The number of pupils leaving school due to the crisis is insignificant, although many do drop out because of habits and customs of the region.

### V. SURVIVAL STRATEGIES

Households use a great variety of strategies to face the present situation, from reducing the number of meals, selling animals, making alcoholic beverages, to the extensive production of charcoal and firewood, engaging in informal labour and hunting.

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<sup>3</sup> CI: The Insufficient Growth rates are derived from the nutritional surveillance data, through the evaluation of the health cards (weighing) of children from 0 to 5 years of age. The trends of the percentages are followed so as to evaluate the nutritional status of the population.

<sup>3</sup> BPN: Low Birth Weight is an indicator of the nutritional status of the newly born and the mother in the last quarter of the pregnancy. Rates over 7% indicate nutritional problems at community level.

<sup>4</sup> See annex 2.

## 4.2. GAZA PROVINCE

### I. AVAILABILITY OF FOOD

#### a) Agricultural production

The first agricultural season was a failure; with losses varying between 70 and 95% in the particularly affected districts, such as Chicualacuala, Mabalane, Chigubo and Massangena. The general lack of food reserves from the present agricultural campaign, mainly due to the drought and to plagues that destroyed the produce in the granaries (*prostephanus truncatus*) has significantly contributed to the immediate food insecurity of the populations. Notwithstanding the significant increase of areas planted with manioc, areas planted at the start of the campaign may have low yields because of hydric stress, although the ones recently planted may have better yields (sweet potato, millet and manioc). The crops from the second season appear to be weak, especially in the northern and interior parts of the province.

#### b) Animal husbandry

Although cattle still appear to be healthy, in some districts the excessive selling of animals is considered a danger to the plans of ongoing cattle restocking, but all in all at provincial level numbers continue to be on the rise. The lack of water for pasture and animals was also mentioned, as was the lack of drinking water for human consumption, particularly in the northern districts of the province, leading to long treks for watering cattle. Wells that do function contain brackish water, not fit for human consumption and irrigation. Price drops per head of cattle of over 40% have been recorded in Mabalane, which may be caused not only by the lifting of the selling ban due to foot and mouth disease, but also to an increase in the selling of stolen cattle from Zimbabwe.

#### c) Food aid

Food aid is specifically being given in the interior, through the programmes of CPT, THR and VGF, yet these do not cover all areas affected by the drought. In some districts of the province, food aid has been offered for more than 3 years.

### II. ACCESS

Availability of industrial and imported products is normal, with slight price increases. Locally produced cereals were scarce to inexistent, and notable is the supply of maize from the central provinces. Higher prices have been recorded in the most remote areas, although in the remaining areas prices are stable. Substantial improvements in access roads allow for a better circulation of products. The absence of local produce has to do with the poor production and the degradation of the farmers' buying power

For example, in Massangena a businessman who during the last few years always sold local produce, now sells around 22 tons of maize from the Central Region per week.

The drop in animal prices in some districts as a consequence of the pressure by the food crisis is notable.

Coverage by the commercial network remains poor, especially in the most remote areas, although some improvements can be noted.

### III. INCOME SOURCES

The main source of income is the selling of animals, cashew nuts and forest products. One notes an increase in the sales of alcoholic beverages in order to buy food, in particular among the poorest families. Remittances from abroad, especially from the RSA continue to be an important and considerable source of income for the populations.

### IV. UTILIZATION

#### a) Nutrition

Nutritional surveillance data (Low Birth Weight (BNP) and the Insufficient Growth (CI)) show a progressive increase, above all in the northern districts, but they remain below the critical values so that at present one can not speak of an emergency situation, rather it is a situation that calls for vigilance. There have been reported cases of anaemia, especially in Mabalane. Due to the long tradition of migrating to the mines in the RSA, the province is one of the most problematic when it comes to HIV/AIDS.

#### b) Water

The availability of water has been decreasing in most districts, both for human as well as for animal consumption. Water levels in the Limpopo registered much lower values than in the year before (40% less in Chókwè).<sup>5</sup>

#### c) Consumption

Most families in the areas visited have reduced the number of meals from two to one per day. The consumption of forest food resources (*chicusto*) is the very common in the province's interior, and for a longer period.

The main food sources are purchasing and hunting, whereas normally it is own production, although there are areas where production is insufficient the whole year round. At present families do not have food reserves, resorting to premature harvesting of manioc in particular. Manioc is consumed alongside purchased maize, but one expects that consumption will be limited because it has been harvested before the time of ripening.

#### d) Education

The number of pupils leaving school due to the crisis is insignificant, although pupils do leave due to the traditional migration of families looking for work. Provision of food by the school has been an incentive for maintaining school attendance.

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<sup>5</sup> See annex 2: Hydrological information.

## V. SURVIVAL STRATEGIES

In decreasing order of priority, the most salient survival strategies mentioned are the intensification of informal work, including temporary migration, the intensification of firewood and charcoal production, requests to buy on credit in the shops, the use of low-lying areas for vegetable production, the selling of property such as animals, the consumption of “hunger food”, and the reduction of the number of meals.

### 4.3. INHAMBANE PROVINCE

#### I. AVAILABILITY OF FOOD

##### a) Agricultural production

The first season of the present agricultural campaign was characterized by slight and irregular rains that caused the loss of a large part of the year’s crops in the field. The food crisis hit the districts of Funhalouro, the south of Mabote, the west of Panda, as well as the interior of the districts of Govuro, Inhassoro, Vilanculos and Massinga. The southern region with low-lying areas is more favourable for the production of vegetables and sweet potato in the second season, the land is prepared and it is rain dependent. One expects that if the production of alternative vegetables is not good, the situation will worsen from August onwards.

While there is no significant incidence of crop plagues, the occurrence of groundnut worm in the southern and central parts of the province has been noted, and concentrations of grasshoppers have been observed about everywhere in the districts although damage has not been significant. Mildew remains the major cause for the decrease of cashew production in the region.

Seeds and agricultural inputs fairs have been realized in all districts, although not regularly and without reaching all localities. A farmer’s family faces high costs in purchasing agricultural products in shops and markets.

##### b) Animal husbandry

	<b>2004</b>	<b>2005 (estimated)</b>
<b>Cattle</b>	<b>103.040</b>	<b>113.353</b>

Cattle in general appear to be in good shape and the conditions of pastures are good thanks to the recent rains. Breeders report, however, that in some areas herds had to be moved because of a water shortage. Few families own cattle and goats (except for Funhalouro). Cattle have been suffering from various diseases, such as babesiosis, rickettsiosis and brucellosis, which have been hampering breeding. Newcastle disease has substantially reduced the number of poultry at the family household level. In some districts, for instance in Morrumbene, Funhalouro and Panda, the animal husbandry promotion programme is being implemented, but it is still in its initial phase so that its impact is not yet visible.

### **c) Food aid**

Food aid has had positive impacts, particularly in the most affected areas, where the number of new enrolments has increased. The existing disparity between boys and girls has almost disappeared. In general, the food aid programme “Food for Work”, offered by WFP is being scaled down and in other cases it is being closed from 2003 onwards. This assistance has encouraged programmes that promote drought resistant crops and instruction on nutrition. Only a few schools have been receiving support from WFP in providing lunches to pupils. Some children receive their second meal through the school-feeding programme, particularly in the more remote areas.

One notes that women play an important role in deciding which crop is to be produced, as well as in managing and preparing the little food the family stores in its granaries

## **II. ACCESS**

Purchasing power of most families in the areas in the interior is low, due to the few alternative income sources they have. On average a 20-litre can (about 18kg) of maize costs between 90,000 and 150,000 MZM, a can of groundnut is between 70,000 and 100,000 MZM and a can of beans costs 150,000 to 200,000 MZM. Prices in the interior are higher than those in areas along the National Highway EN1.

## **III. INCOME SOURCES**

The income sources of the farmers in the areas visited are rather weak. Poultry breeding (chicken and duck) for example diminished because of Newcastle disease, which contributed to a decrease in the number of poultry in all districts. Fishery also diminished, either because of the shrinking of lakes and lagoons, or because of “a reduction of the number of fish in the sea”.

Due to the recurrent drought periods, the populations have taken recourse to alternative sources for their subsistence, namely the selling of cashew nuts, *mafura*<sup>\*</sup> and *sura*<sup>†</sup> where it is being produced. On the other hand, there are small areas in the districts where some farmer families engage in offering their labour for work in other people’s *machamba*<sup>‡</sup> in exchange for some food.

Cashew nut and cashew juice contribute significantly to the income in the most affected areas. Some families still have some money from the selling of cashew from the previous harvest, especially in the most affected areas.

## **IV. UTILIZATION**

### **a) Nutrition and health**

In spite of the food insecurity situation in the visited districts, there are as yet no reports of deaths because of malnutrition. The rate of insufficient growth and of malnutrition is on the

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<sup>\*</sup> Oil extracted from mafura tree [note translator].

<sup>†</sup> Sap from wild palm tree [note translator].

<sup>‡</sup> Plot of land for agricultural purposes, mostly for subsistence farming [note translator].

rise due to insufficient nourishment and the data indicate that these cases occur in the most critical areas.

As far as health is concerned, an increase in the number of malaria cases, as well as in those of respiratory problems, tuberculosis and HIV/AIDS is observed. Not every district has a GATV, which is why HIV is detected through opportunistic diseases or through analysis of donor blood.<sup>6</sup>

The existing Health Posts as yet do not cover the entire population, and the distances to be travelled are large. Various population concentrations have been visited by health personnel, in particular during the vaccination campaigns, and by maternal/child health personnel through their mobile brigades.

#### **b) Water and sanitation**

One noted that, due to the prolonged drought, the water level in water holes has dropped and some low areas no longer have water. The number of wells with manual pumps has decreased, forcing people to walk long distances, on average 2 to 3 hours, to fetch water for their homes. Although the Save River is an important water source for the populations of Zinave and Save, the water levels are very low.<sup>7</sup>

All resident dwellings have latrines, but they are all made from traditional materials. Improved latrines do not exist.

#### **c) Consumption**

In general, the main nourishment in the good season, i.e. in times of regular rainfall, consists of maize, groundnut, manioc and beans during the first period. In the second period, conditions permitting, the farmers produce manioc, rice, sweet potato and various vegetables in the localities that have low-lying areas suitable for growing these crops.

However, in the last few years (since 2001) the drought hitting these districts has been chronic and it has become worse in the course of 2005, causing the loss of all harvests from the first period.

The situation of drought has forced the populations to resort to consuming tubers and other wild plants, which only in times of hunger help make up their meagre diet. During the good periods families consume two meals per day, but at present it is only one and leftovers, if there are any, are for the children to eat in the afternoon.

#### **d) Education**

The last months have witnessed migratory movements, one of the causes for children dropping out of school. The data provided by the DDEs point to an increase of the absentee rate in the EP1 in comparison with the EP2, since parents take the smallest children with them when they leave for other areas. The school network, especially the EP1 network, covers all localities of the visited districts.

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<sup>6</sup> See the data on nutritional surveillance in annex 1.

<sup>7</sup> See hydrological information in annex 2.

There are very few EP2 and EP3 schools, mainly in the district capitals, which impedes the children from continuing their education. School access (new enrolments) has been increasing, although in some of the areas most affected by drought cases of absenteeism due to parents leaving for other areas have been recorded.

The disparity between boys and girls has almost completely disappeared, which shows the effectiveness of the gender awareness campaigns directed towards the communities. The absentee rate hovers around 3-4%. The introduction of school lunches, a programme implemented by JAM with support from WFP, significantly contributed to the decrease of absenteeism, as well as to the significant growth of school attendance.

Literacy courses and Adult Education are other factors that contribute to continuing school attendance, since parents are aware of the value of attending school.

## V. SURVIVAL STRATEGIES

The increased felling of poles\*, in particular *mecrusse* / *cimbire*, clandestine hunting and small-scale fishing on lakes are other ways of survival for families, especially in the districts of Mabote, Funhalouro and Panda. In the most critical districts visited by the mission, namely Javane, Mavinga, Dzimane, Tsenane, Malaia, Sitila, Gotite, Chivalo and Djodjo, the populations restrict themselves to the consumption of wild tubers, green plants such as *cacana*, pumpkin leaves and sweet potato, small animals they fetch from rivers, such as *choa* and *Chicacana* and game.

The selling of small animals and other products, such as salt, *cimbire* and *sura* also serves as a source for purchasing bare essentials. In the most extreme cases, like in Funhalouro, families only have one meal per day, consisting of *macuacua*, a wild fruit only consumed during times of hunger.

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\* Important building material for traditional constructions [note translator].

## **4.4. SOFALA PROVINCE**

### **I. AVAILABILITY OF FOOD**

#### **a) Agricultural production**

The main food crops are: maize (in the coastal region), rice, millet, mexoeira, sugar cane, manioc, sweet potato, cowpea, pumpkin, citrus fruit, pineapple. The agricultural campaign in general was weak, mainly due to irregular rainfall. Drought resistant crops, like manioc, are not widely grown in some districts, because the farmers only grow small quantities of manioc. Apart from millet, mexoeira and manioc, drought resistant crops such as sweet potato, watermelon, melon and pineapple are being promoted during the 2005/06 campaign in the districts of Muanza and Marromeu, in order to mitigate the effects of drought in the districts.

The availability of low-lying areas is limited, only those who live close to the banks of permanent rivers have access to them. In the district of Muanza vegetable seeds have been distributed for being used in low-lying areas.

Sandy soils and the destruction of crops by wild animals, monkeys, plagues (snails) and culm borer in maize, all contributed to low agricultural yields. The second season seems to be affected by the absence of rain and a change in rainfall periods. In the few low-lying areas, the population is planting sweet potato and beans, using manual irrigation.

The lack of sunflower seeds, which is considered to be a commercial crop, is a big constraint on stimulating production.

#### **b) Food aid**

There are districts in the province, like Chemba and Machanga, which will face food shortages. Some districts have been benefitting from the food aid programme since 2002. The WFP jointly with the Ministry of Women and Social Action (MMAS) is assisting vulnerable people, such as the elderly, orphans, women heads of households and the disabled.

In the district of Muzanza WFP supports education with the school lunch programme, jointly with Save the Children/Norway, which facilitated the purchase of school material in 2001/2004. Organizations such as Dorcas Aid International, and the Christian Council of Mozambique, were partners of WFP in the distribution of food. The distribution of free food has been directed towards the most vulnerable groups, such as orphaned children, the elderly, and the disabled, among others.

#### **c) Animal husbandry**

Information provided by the DDA indicates that animal production is increasing. Mention was made of some INP (National Integration Programme) programmes and of PROAGRI in the district of Muanza, which are promoting breeding of goats, ducks and ant-thrush and the establishment of hand presses for the extraction of oil from sunflower and other oleaginous crops.

Losses of poultry due to Newcastle disease, which is most prevalent in October and November, have been reported. The general condition of cattle seems to be good, with no loss of weight, although the coming months may see a deterioration due to their prolonged exposure to drought.

## **II. ACCESS**

Buying power varies among families of the same community, as well as between different communities. However, the lack or the complete absence of a market (where communities may purchase or sell food) constitutes one of the limiting factors common to most semi-arid districts visited by the evaluation team. This situation is brought about by the bad condition of access roads and the geographical location of the villages. The fact that farmers cannot negotiate on equal terms with traders also results from these conditions.

Price increases are another factor that will restrict the acquisition of cereals in the coming months. In Muanza for example, the price of maize was between 2,500 and 3,000 MZM/Kg, whereas at present it is between 15,000 and 25,000 MZM/Kg. In the district of Marromeu, the price of maize varied between 1,500 and 2,000 MZM/Kg in March and July last year, while it was 4,500 MZM/ Kg in March 2005. Beans were sold at 18,000 MZM/ Kg. The lack of markets where *abacaxi* and vegetables can be sold is a big impediment to boosting production and to increasing the income of family households.

## **III. INCOME SOURCES**

Income sources vary in accordance with the local conditions, which most favour initiatives related to small businesses, like for example in the district of Muanza the selling of firewood, charcoal and fish in areas along the coast, which constitute strategies for increasing family incomes. Temporary work, such as cutting sugar cane for the factory in Marromeu and *ganho-ganho*<sup>\*</sup>, where individuals earn amounts varying from 20,000 to 150,000 MZM per week, are a way of supporting one's family for some residents of villages close to the district capital. The selling of charcoal is limited, and it is done clandestinely. The selling of honey, alcoholic beverages made from sugar cane and other agricultural product also constitute income sources.

The selling of goats and *ganho-ganho* contribute on a small scale to the family income. Animals are only sold or exchanged in the last resource. Selling game meat mainly constitutes an income source for families in Muanza and Marromeu. The fact that there is a ban on this activity does not make itself felt.

Another income source is the selling of cotton. Poor family households are able to get 1,500,000 MZM for a bale of cotton. The farmers with the biggest plots manage to gain 6 million meticais per ha. However, since crop yields are down because of the drought, the impact of this activity on incomes is small.

The family households that have medium to high incomes gain money by using the same sources as the poor ones. Their incomes are big because they succeed in planting bigger

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<sup>\*</sup> Denotes temporary informal work, often on a daily basis. Literally it says, "earn-earn" [note translator].

fields of cotton. The poorest households practice *ganho-ganho*, and grow other crops, such as groundnuts.

#### **IV. UTILIZATION**

##### **a) Nutrition**

Data from the nutrition department show that last years insufficient growth rates were higher than this year. Nevertheless, in view of the worsening food security situation in the province, monitoring should continue. Malaria, conjunctivitis, diarrhoea and vomiting were mentioned as the most common diseases (community and health posts). There are no cases of cholera.

##### **b) Water and sanitation**

Access to drinking water is rather limited in all districts and communities visited. On the basis of the study made, one notes that a considerable number of people have had to change their water source due to the drought, especially those who fetch water from small rivers. Inquiries indicate that people have to walk up to 6 hours to fetch water. The water quality is bad; most people said that at present they fetch water from wells dug in beds of rivers run dry.

##### **c) Consumption**

Most interviewed communities stated that the poorest only have one meal per day, and the situation might worsen still. In the visited districts, the interviewed communities indicated that their food reserves would last until May/June. Meanwhile they already reduced the number of dally meals from 3 to 1.

##### **d) Education**

Due to hunger, fewer children go to school; the highest absentee rate is recorded among girls (Chemba locality of N'susso). While interviewing the community we were told that many children miss lessons because they help their parents on the *machamba* on the islands and they also have to chase away monkeys, which form a real plague. Schools having a lunch programme show a higher influx of pupils.

#### **V. SURVIVAL STRATEGIES**

Intensifying activities such as *ganho-ganho*, selling of firewood and charcoal, and the selling or exchanging of animals has been the major survival strategies of the communities in times of crisis. However, with the drought, these survival alternatives have diminished.

The manufacture and selling of traditional beverages made from forest resources (wild fruits) and of agricultural products (sugar cane and others) also constitutes a major survival strategy. A focus group with women indicates that the consumption of strong alcoholic beverages is slightly decreasing because of the hunger. In the Chemba district one noted a higher consumption of wild roots and fruits in response to the current crisis.

## **4.5. MANICA PROVINCE**

### **I. AVAILABILITY OF FOOD**

#### **a) Agricultural production**

The irregularity of the rainfall negatively influenced maize production. Although millet crops are also affected by the drought, the majority of the population will succeed in harvesting something. The farmers managed to sow several times until December. Manioc is not a significant source of food, since farmers only cultivate small quantities of it.

The province is limited as far as low-lying areas are concerned; only the family households living near the banks of permanent rivers have access to this kind of land. It should be noted that the second season is not important for cereals, but it is for vegetables and for the planting of sweet potato and beans that are manually irrigated.

Fairs of agricultural inputs have been realized during the campaign in November, in some administrative posts of the districts of Guro, Tambara and Macossa. The interviewed communities in the affected districts stated that their food reserves might last until June/July. In the meanwhile they already reduced the number of daily meals from 3 to 2. The households that sowed millet may harvest in July, which may help them to overcome this crisis.

#### **a) Food aid**

In general the province is self-sufficient as far as food is concerned, but there are districts in the province's interior, such as Macossa, Machaze, Tambara and Guro, which face chronic food shortages. These districts have benefitted from food aid programmes since 2002. The current drought also affected part of the district of Mossurize (which is considered to be the granary of the province) around the administrative post of Dakata, bordering on the districts of Machaze and Chibabava.

The WFP, jointly with the Ministry of Women and Social Action, is helping vulnerable people such as the elderly, orphans, women heads of households and the disabled. In the district of Machaze 6,948 people receive assistance. In Mossurize the WFP supports education in one school through its school lunch programme. The Health department assists in reducing vertical mother-child transmission, helping HIV-positive mothers with nourishment during pregnancy and the period thereafter, until the child is 18 months old. At present 46 pregnant women benefit from this programme, which can cater for 50 women maximum.

In Guro, Macossa and Tambara, the WFP also has programmes that assist the most vulnerable groups, but these programmes are currently being closed down.

#### **b) Animal husbandry**

Although the Veterinary Services of Manica have not registered the number of animals in 2004, all indications are that animal production is increasing. Several organizations in the district of Macossa, such as GPZ, the FAO and PROAGRI were cited, who are promoting the

breeding of goats and the use of ploughs and carts. Losses of animals due to infestations by ticks have been reported in Manioca and Tete provinces. The 6,000 MZM fee charged for the use of a cattle disinfections tanks causes breeders to not join the animal disinfections programme. Measures are being taken to control the border with Zimbabwe in order to reduce the infection of animals by foot and mouth disease. For example, at present there is an outbreak of haematinic carbuncle in Zimbabwe, which has not reached Mozambique as yet. Measures are being taken by government authorities to control the borders so as to reduce transport of animals. An animal vaccination campaign has been carried out in January of this year, which also included the vaccination of chicken against Newcastle disease.

The general condition of cattle is good. Goats are mostly held in the districts of Guro, Tambara and Macossa. As an illustration, the VAC in 2004 pointed out that a total of 67.6% of the population has goats, as against a mere 7.7% owning cattle.

## **II. ACCESS**

Buying power varies between families of the same community, as well as between the different communities. However, the lack or the complete absence of a market (where communities may purchase or sell food) constitutes one of the limiting factors common to most semi-arid districts visited by the evaluation team. This situation is brought about by the bad condition of access roads and the geographical location of the villages.

In general maize prices are slightly higher, with differences of up to 10%. The districts with the highest prices are Mossurize (100,000 MZM) and Machaze and Tambara (80,000 MZM).

Price increases will be another factor that will limit the purchase of cereals in the coming months. In Machaze for example, the price of maize in April of this year was 80,000 MZM/can, whereas in April of last year a can of maize cost between 45,000 MZM and 50,000 MZM. Macossa also witnessed a rise in maize prices: while a can of maize in April of last year was around 35,000 MZM, this year it is between 40,000 and 45,000 MZM. In the district of Guro, maize was 50,000 MZM while in the same period of lat year the price was 30,000 MZM.

## **III. UTILIZATION**

Access to drinking water is rather limited in all districts and communities that were visited. This lack of drinking water is even being felt in the district capitals like Machaze and Macossa, where the water supply systems are out of order.

On the basis of the study made, one notes that a considerable number of people have had to change their water source due to the drought, especially those who fetch water from small rivers. The inquiries indicate that people have to walk 3 to 4 hours on average to fetch water. Most people said that at present they fetch water from wells dug in beds of rivers run dry.

In the district of Macossa there are 50 wells at the moment, 10 of which are out of order. Therefore, and because of the dispersion of people, they have to walk over 5Km in order to

fetch water. In the district capital for instance, only 5 wells are operational for the entire population. The small system has been out of order for two years.

Diarrhoea was reported from health centres, especially from children under 5 years of age. This is related to the consumption of unsuitable water and levels are not alarming yet. There are no cholera cases.

In general the nutritional surveillance data on children indicate a positive nutritional situation. During the first quarter of this year 6.4% of the children reportedly suffered from insufficient growth in Machaze, while in the previous year the number for the same period was 6%. The insufficient growth rate for the first quarter of this year in Macossa was 4%. Finally, the district of Guro showed an alarming 10% insufficient growth rate.

Most interviewed communities state that until now they enjoy two meals per day, while indicating that the situation may get worse.

In some schools of the province's interior (the Administrative Post of Dakata, locality of Gunhe) cases were reported of tutors and parents requesting school to authorize children to be absent during certain periods of time, in order for them to look for food. Interviewed about this the community explained that when engaging in *ganho-ganho*, people sometimes leave their children behind without food. When they attend schools that do not have a school lunch programme, these pupils are forced to be absent systematically.

#### **IV. INCOME SOURCES**

Income alternatives are varied compared with the income sources of family households from the interior semi-arid areas of Gaza and Inhambane. Family households have a variety of goods to sell. Buyers come from far, to buy honey and alcoholic beverages made from honey.

During the last few years, cotton has been introduced as a commercial crop, which is why the family households gain much money with this crop, which is relatively drought resistant. The poor family households in 2002<sup>8</sup> succeeded to earn around 3,000,000 MZM by selling cotton. The income for this year is 2/3 of this. The selling of game meat, which constitutes an income source mainly for the families in Macossa, is not having a big impact since it is legally banned.

Remittances form another source of income for the farmers. The selling of goats, handicrafts and engaging in *ganho-ganho* marginally contribute to family incomes.

Family households with medium incomes and those that are rich have income from the same sources as the poor ones. But their incomes are higher due to the fact that they succeed in planting bigger areas of cotton, as well as of other commercial crops, such as groundnut.

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<sup>8</sup> According to the data from the Vulnerability Analysis of 2002.

Some farmers have been harvesting cotton, for example in Macossa, and tea in Mossurize, which will improve the income sources of the community. In these cases the farmers stated crop losses in the order of 2/3, due to the drought (in the case of cotton this is calculated on the basis of the total income obtained through the selling of the produce). In Macossa and Mossurize, the growing of tobacco also constitutes a source of income.

## **V. SURVIVAL STRATEGIES**

Just like in other parts of the country, people use natural resources as part of their survival strategy. They also engage in *ganho-ganho*, sell animals and firewood, and produce and sell alcoholic beverages (made from *maçanica* and honey). In bad times people intensify these activities. For those who live close to the Zambezi and Buzi rivers, fishing is an additional source of income and food. Consuming more wild fruits also is part of the survival strategy.

Normal activities of men and woman are not disrupted. Some poor families as well as women headed households have labour problems due to a lack of active people within the family, which constitutes a chronic problem. Orphans, elderly and disabled form the most affected social groups, who at the same time are the least active. They cultivate small *machambas*, have few animals and basically survive through family support and assistance from the WFP.

## **4.6. TETE PROVINCE**

### **I. AVAILABILITY**

#### **a) Agricultural production**

The northern area of the province has had agricultural surpluses, as well as climatic conditions favourable to agricultural production. The southern area of the province normally faces food shortages, due to the aridity of the soil and little rainfall. However, this region favours cattle breeding.

This year the province was characterized by a shortage of rains in October. From the third week of November until the end of January rains were regular. From February to April there was few rainfall, which affected were the production of crops, especially of maize.

The districts visited by the evaluation team (Mutarara, Mágoè, Changara and Cahora-Bassa) show the lowest production levels, varying between 900 and 3900 tons. These districts have been the granaries of the province (the whole North of the province). Drought resistant crops, such as manioc, are not widely grown in the province. The farmers only grow small quantities of manioc. Millet and sorghum are also grown.

The exploitation of low-lying areas in the province is limited. The district of Mutarara has most access to low lying areas. Only the family households living near the banks of the Zambezi River have access to low grounds. The destruction of crops by hippopotamuses and elephants additionally decreases the use of low-lying areas. The second season is not important in the province. In Mágoè for instance, vegetables were sown on the banks of the Mucumburi River, which one intends to harvest in June and July for the purpose of subsequent exchange against maize.

## **b) Food aid**

All the districts located in the province's Southern region, as well as the districts of Zumbo and Mutarara benefit from food aid. The food fund promoting "Food for Work" activities is closing down in most districts. The food assistance programme at schools is still ongoing. Districts such as Mutarara are initiating an assistance programme – the implementing agency will be World Vision - aimed at the chronically ill. Vulnerable groups continue to receive assistance and the Ministry of Women, through the Social Action, and supports vulnerable people, such as the elderly, orphans, women heads of families and the disabled.

## **c) Animal husbandry**

The districts located in the south of Tete Province are favourable to animal production; most animals are produced in the district of Changara. Animal numbers in general are increasing.

Prices of animals, in particular of goats have gone up slightly. As an example may serve that at the time of the VAC 2002 the price of goats at the Marara fair was 130,000 MZM, while the price this year is 150,000 MZM. Still, the people interviewed state that in the coming months animal prices may increase. The farmers as well as the GPZ (Zambezi Valley Office) lament the fact that no massive government subsidized disinfections campaigns have been carried out for at least three years, whereas the tsetse fly is heavily affecting the Administrative Post of Chintoo. This situation is caused by the proximity of game reserves or parks. When animals are being transported they are vaccinated at the expense of the receiver. At the Administrative Post of the locality of Baué, an outbreak of African swine pest was recorded.

At the time of realizing the evaluation, the general condition of cattle was good. There is no sign of weight loss. It is to be expected that in the coming months the general condition of cattle will deteriorate, because of prolonged exposure to the drought. The evaluation team noted the massive departure of goats from the province.

## **II. ACCESS**

During most years, production surpluses in the northern part of the country are sold to the neighbouring countries Zambia, Malawi and Zimbabwe at competitive prices. This year the selling of maize to the neighbouring countries has been diminishing.

The price of maize varies between the districts. As an illustration: maize in Sena and in Tete city was 50,000 MZM/20L can in March/May, while in Mágoè maize was 75,000 to 100,000 MZM. The price of a can of maize in Chiúta is very low because of the poor access roads.

## **III. INCOME SOURCES**

The selling of animals, especially of goats, constitutes a major income source in the visited districts. The selling of agricultural surpluses has been the second major income source. However, this year no agricultural surpluses are being sold.

In the district of Mágoè one noted an increase in the number of family households cultivating cotton. The poorest family households also engage in cotton cultivation. In a good year the family households get 1,300,000 MZM for a 300-Kg bale of cotton. It is to be expected that

the selling of cotton constitutes an alternative solution for minimizing food shortages. The price increase of goats from 125,000 MZM to 250,000 MZM also will increase the family income. Selling of sesame in Mutarara is another source of income. A total of 600 farmers was producing cotton as against a total of 2000 at present, including the poor ones.

#### **IV. UTILIZATION**

##### **a) Nutrition**

Cases of diarrhoea reported in the health centres are not alarming and are related to the consumption of water unfit to drink. In Cahora-Bassa the Insufficient Growth rates in the first quarter of this year hovered around 4.4%, while they were 3% in the same period of last year.

##### **b) Water and sanitation**

Access to drinking water continues to be a problem in all districts visited. In the locality of Boroma in Changara district for example, the community indicated that it has three (3) water wells, two of which function, resulting in people having to queue and spending much time in fetching water. In the locality of Mufa-Cancone, the population fetches water from waterholes in riverbeds run dry. In Mutarara the evaluation team worked at the administrative posts of Charre and Nhamayabue, and observed that the water sources are at a distance of 1 Km from residences. In the locality of Baué, water from the operational waterholes is brackish, and the water pumps present are out of order. At present the community walks 3 Km to fetch water from the river.

##### **c) Consumption**

Normally the communities enjoy 3 meals per day. However, in some of the visited districts the number of meals had diminished to 2, while at some administrative posts communities only had one meal per day: the locality of Boroma in Changara district for instance, and Casindira in the district of Mágoè.

##### **d) Education**

Data from the first quarter of this year from Cahora-Bassa district indicate that about 153 children stopped attending school. Cases like these have not yet happened in the district of Changara.

#### **V. SURVIVAL STRATEGIES**

In general terms, survival strategies are similar in most parts of the province. The family households intensify the selling of animals, especially of goats.

Cases of exchanging dry fish and salt from the Zambezi River for maize from Zimbabwe have been reported. The selling of alcoholic beverages, mainly *aguardente*<sup>\*</sup>, and the practice of *ganho-ganho*, are on the rise.

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<sup>\*</sup> Originally a Portuguese brandy, in Mozambique mostly distilled from fruits [note translator].

## **4.7. ZAMBÉZIA PROVINCE**

### **VI. AVAILABILITY OF FOOD**

#### **d) Agricultural Production**

Data on the development of agricultural production show that the three districts from Zambézia Province on average registered a growth during the last two campaigns, despite irregular and below-average rainfall. Although manioc and millet seem to be all right in some localities, if the current situation continues these crops may also deteriorate within a short period of time.

In times of good harvests, farmers have food for a period of 3 to 5 months, and within this period they do not need to buy food. However, in the bad years, like the current campaign, some farmers have food reserves for 2 months at the most (25%), some families have reserves for less than 1 month (40%), and the remaining 35% have no reserves at all.

Apart from the reserves in granaries and on the fields, the farmers have purchased their seeds at the fairs that are, although less frequently, held locally. Many families in the districts of Pebane, Nicoadala and Mopeia complain about the lack of seeds, some state to have eaten their seeds because of the hunger situation, while others lost them because of unsuccessful sowing. Some localities in the districts of Pebane and Mopeia benefited from the distribution of maize seeds, manioc shoots and seed potato (sweet), offered by DDA, SPA and WV.

#### **e) Food aid**

None of the visited districts reported having received food aid, nor any other form of food assistance, during period of serious hunger with the exception of Chinde where food aid has been offered during the last few years.

**f) Animal husbandry**

Data on cattle breeding from the last years show an increasing trend, in almost all visited districts. Goats and poultry are very important in the districts of Pebane and Nicoadala. Although the number of animals is rising, there is a notable prevalence of diseases affecting domestic animals, such as Newcastle disease in birds, rabies in cats and dogs, African pest and tsetse fly disease.

**II. ACCESS**

As far as prices are concerned, due to the lack of organized markets for agricultural products in general, one notes that few of these products are sold by the families. The families that do succeed in marketing their produce, mostly manioc, maize and rice, have benefited from the development of food prices throughout the province.

Prices of goods (maize, manioc, rice, beans and groundnut) and services in the districts are very high as compared to the two previous campaigns. According to SEMA, this price increase is caused by three factors: this year's large reduction in cereals production, the awareness campaigns that urge the population not to sell too much produce because of the drought, and the precautionary measures by the producers themselves who hope for price rises. Taken together they contribute to the circumstance that, since prices have risen from 1,000 to 1,500 MZM/kg, more products are being offered on a daily basis at the Lioma route, than before.

Some product prices of the current year:

- Pebane:* Manioc 12,857 MZM/kg, Groundnut 60,000 MZM/can, and Feijão Jugo: 50,000 MZM/can; Maize: 60,000 MZM/20-litre can; Rice: 10,000 MZM/kg; Millet: 2,000 MZM/can
- Nicoadala:* Rice: 120,000 MZM/20-litre can
- Mopeia:* Manioc: 125,000 MZM/50-kg bag, Maize: 150,000 MZM/20-litre can; Rice 150,000 MZM/20-litre can

### III. INCOME SOURCES

In general, one may conclude that in all visited districts of Zambézia Province, agriculture constitutes the main income source, and that over 90% of the families depend on agriculture for their survival. In times of successful campaigns, more than 80% of the families exclusively engage in agriculture, while 35% switches between agriculture and fishing.

In good harvest seasons, farmers offer about 40% of their produce up for sale, 35% is for proper consumption and the remaining part are seeds.

Apart from food crops, 90% of the family households sell manioc, 60% sell maize, 50% sell rice and 45% sell groundnut, while cashew and coconut are also sold, albeit on a smaller scale.

The diversification of income sources of the farmers frequently takes place during times of bad harvests caused by drought (as is the case with the current campaign) and when they run out of reserves.

Many farmers take recourse to producing traditional beverages, small handicrafts, engage in petty trade (Nicoadala) or offer help fishermen.

### IV. UTILIZATION

#### a) Nutrition

In almost all districts visited the malnutrition rate tends to decrease, basically due to the consumption of *fuba* on the part of nursing mothers and children. However, its distribution is not as yet sufficiently generalized so as to ensure an optimum nutritional situation in all districts.

#### b) Water and sanitation

The drought reduces water availability in the rivers, causing families to walk ever-longer distances to fetch water. In the localities of Murateia, Munhonho and Chamanga in Pebane, Nicoadala and Mopeia respectively, families have to walk more than 40 minutes to fetch water from rivers or from wells dug in dry lakes.

#### c) Consumption

The number of meals does not vary much among the districts, although it does vary according to the level of production. Thus, in times of good agricultural harvests, families enjoy between 2 and 3 meals per day. During bad times, families have 1 to 2 meals per day.

At present, in some localities such as Caba-Serra Grande in Mossuril, and in Mopeia and Nicoadala, there are families who enjoy one or almost no meal per day. Extreme cases are recorded, from one meal in Caba-Serra consisting of *chima*\* and fish day in day out without any possibility of variation, to the daily consumption of wild roots and water plants in Mopeia district.

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\* Cooked mash, mainly from manioc [note translator].

In general, in all districts the families consume typical foods and they reduce the number of meals.

**d) Education**

Although in general cases are recorded from families adopting extreme survival mechanisms, no cases have been reported of school going children who are not attending school due to engaging in activities on behalf of the family, or of children dropping out or having problems with admission.

**V. SURVIVAL MECHANISMS**

Due to the current situation of drought in almost all districts, farmers have been looking for various alternative survival mechanisms outside. Most farmers, over 60%, consume or sell seeds. Some choose to work on the *machambas* of farmers who have larger plots of land, others engage in fishing and petty trade. Many farmers take recourse to the making and selling of traditional beverages, small handicrafts, petty trade (Nicoadala) and to assisting fishermen. Sometimes families consume wild roots and water plants (*nhica*) in Mopeia, or collect wild fruits (Minane, Maybebe, Mathiele and banana roots in Pebane).

**4.8. NAMPULA PROVINCE**

**I. AVAILABILITY**

**a) Agricultural production**

In general the most grown crops in the three districts visited in Nampula (Mossuril, Memba and Nacala-a-Velha) are manioc (main basis of nourishment), followed by maize, rice, beans, groundnut, millet, mexoeira, sweet potato and, on a small scale, vegetables. Cashew and coconut are also produced for generating family income. In general, one produces more short cycle crops than those of long cycle (millet, beans, rice and sesame).

Root rot in manioc has been one of the main obstacles to food security, together with monkey plagues and stealing of crops. In Mossuril, manioc production in times of good harvests provides for about 5 months of food from August onwards. In the areas least affected by natural disasters in the district of Memba (northern part), production takes about 6 months, whereas in the southern part, where the situation is bad, it only takes 3 months on average. Food reserves in Nacala-a-Velha normally last for 4 to 5 months. The low fertility of the soil also has been one of the main constraints.

**b) Animal husbandry**

This activity is practised both by the private sector as well as by the family sector, on the basis of a free pasture system for cattle, sheep and goats. Poultry farming is not as yet important in the private sector, it is only practised by the family sector, without registration of numbers of animals. The growth of these numbers is very slow, due to the absence of a husbandry promotion programme in the district: during the last 5 (five) years the number of

cattle rose from 650 to 900. One should note the presence of Newcastle disease in chicken, and that of diarrhoea and parasitic diseases in sheep and goats.

**c) Food aid**

Food aid has been given in the form of supplementary nourishment to pregnant and nursing women and children between 0 and 5 years of age, in particular in the province's coastal region and its northern part.

**II. ACCESS**

Product prices in general vary according to the period, i.e. prices are lower during harvest time and relatively high during the critical months (August/October).

**III. INCOME SOURCES**

For most coastal districts, fishery and collecting of seafood, the production of cashew and handicrafts and the selling of charcoal/firewood and chicken constitute the main income sources. The selling of alcoholic beverages is also reported to be an income source.

**IV. UTILIZATION**

**a) Nutrition and health**

Most salient features in this regard are STD/AIDS, malaria, intestinal parasites, malnutrition and one also notes the first cases of sanguineous diarrhoea. It should be noted that in the district of Nacala-a-Velha a decline in malnutrition rates has been recorded, due to the consumption of "Corn Soya Blend" (CSB) by children and pregnant women.

The level of HIV is in general on the rise, despite the existence of prevention programmes and an AIDS Nucleus, working together with the local authorities.

**b) Water and sanitation**

Difficulties in obtaining drinking water remain real. In Memba for instance, women walk a distance of 3 km and then loose almost half a day lining up in the enormous line.

**c) Consumption**

In Memba the population in times of hunger eats the tuber popularly called *Minane*, water plants (*Etie* and *Cocoa*) as well as a grass species (*Nahequereque*). At present people still have limited food reserves.

**d) Education**

Children do not encounter problems in attending school, but while still young they have to divide their time between school and helping out with fishing.

## V.

## VI. SURVIVAL MECHANISMS

Consumption of wild fruits (*maçanica, murrava*) as well as of roots (*Inhama*) is noted in Mossuril. The increase in the consumption of seafood and of fishing activities constitutes some of the main survival mechanisms, together with the selling of handicrafts, charcoal/firewood, alcoholic beverages and chicken. In Memba, the most affected farmers, i.e. those living in the district's south, from early on start to migrate to the north, where they engage in *ganho-ganho* on the *machambas* of the farmers of that region. During bad times the population in Nacala-a-Velha practices *ganho-ganho* (fishery) for the owners of big ships and on the *machambas* of some farmers, in exchange for food.

### 4.9. CABO DELGADO PROVINCE

#### I. AVAILABILITY OF FOOD

##### a) Agricultural production

In comparison with the same period of the last campaign, the average monthly rains recorded this year were higher, albeit irregular, in particular during the first season of the current agricultural campaign. In some districts excessive rains caused the yellowing of crops due to flooding and difficulties in weeding. The banks of the Rovuma River occasionally suffer from floods that sweep away crops.

Due to the irregular rainfall registered in the period of sowing and crop development, the populations of some villages decided to skip the second season. There are also production problems due to the invasion of *machambas* by animals (elephants, rats, monkeys). The occurrence of plagues is not significant. Lethal yellowing of coconut palms has been noted, since 1999, causing significant damage, as well as the cashew disease (*Oidium Anacardium*). There have never been seeds fairs. In 2003 and 2004 maize, millet, groundnut and vegetable seeds were provided by the SPA.

##### b) Animal husbandry

The population in the three visited districts breeds goats, sheep and poultry. The presence of cattle was not mentioned, nor noted. Newcastle disease was prominent and has substantially reduced the number of poultry at family household level. In some districts goat promotion programmes are being implemented, but it is still too early for these to make a visible impact.

##### c) Food aid

Only a few schools have been receiving support from the WFP in providing lunches for their pupils. Some children get their second meal by way of the school food programmes, especially in the most remote areas (for example the Mueda district).

In 1997 the INGC provided support in the form of food for work. Quantities were sufficient and the amount of work was reasonable (50 kg per family). In 1999 families received 4 kg

and the amount of work was bigger. In 2002, because of the drought ravaging the district, the INGC provided 10 tons of maize, which was distributed among 4 administrative posts.

## **II. ACCESS**

Infra structural problems with markets and access roads, especially in Mueda and Palma, hamper the commercialization of the farmers' produce. The problems are most serious in the localities of Nigomala and Quirinde respectively. The buying power of most families in the visited districts in general appears to be deteriorated, due to the overall rise in prices of basic foods. As an illustration: one kilo of maize that cost 3,000 MZM last year now costs 5,000 MZM.

## **III. INCOME SOURCES**

The income sources of farmers in the visited areas are rather limited and for the poor families they consist in the selling of beverages, handicraft and in fishing. In the districts of Palma and Macomia, the main income sources are *ganho-ganho* (83%) and remittances (17%). In general, all families practice *ganho-ganho* through the year. In Macomia one noted the cutting and selling of poles for construction purposes. In the district of Mueda the selling of sesame (78%) occurs mainly in July and August and chicken (22%) are sold from June to December. In this district the population also exchanges goods with other populations and with people from Tanzania. Poultry breeding (chicken and ducks) is decreased due to an outbreak of Newcastle disease, which reduced the number of poultry in all districts. The richest families sell goats, the average families sell other goods (bicycles, radios, beds).

## **IV. UTILIZATION**

### **a) Nutrition and health**

In all districts visited, malaria is reported to be worrying, because of its frequent occurrence. HIV/AIDS cannot be diagnosed in these districts. However, over 90% of the people interviewed stated to have knowledge about the existence of the disease, but few people know how to avoid getting infected.

Some villages do not have a health post, nor any other health agent able to attend the community, as is the case in Ninga (Mueda) and in the district of Macomia. However, while not having a health post, some benefit from an all-round health agent who attends the communities.

### **b) Water and sanitation**

One notes that due to the prolonged drought, the water levels in wells, rivers and lakes decreased. Drinking water is not available, some people use wells, other use water from rivers, water holes and from other sources. The average time needed to fetch water varies

between 30 minutes and one hour. Because of the unfavourable soil conditions the use of latrines is low and people frequently defecate in the open.

**c) Consumption**

In general the average income and richer families enjoy three meals per day. The poorest have two daily meals and in times of crisis only one. In some districts (Mueda and Macomia), it is the women who decide about the meals, sometimes after consulting their husband.

**d) Education**

Some of the poorest families in the Palme district sent more children to school. School access (new enrolments) is on the rise and one noted that the DPE is raising awareness so as to diminish desistence.

The existent disparity between boys and girls is almost nil, which shows the efficiency of the awareness campaigns on gender that have been realized in the communities. The desistence rate hovers around 3-4%. The introduction of school lunches, a programme implemented by the WFP, significantly contributed to the reduction of desistence, as well as to the significant increase in school attendance.

**V. SURVIVAL STRATEGIES**

The most practised survival strategies during times of crisis are the reduction of the number of meals (51% in Palma district and 44% in the district of Mueda); the consumption of green, unripe food (16%); the consumption of seeds (9%); the selling of goods (bicycles, clothing, bed); the selling of goats (rich families) and the consumption of wild fruits.

**4.10. NIASSA PROVINCE**

**I. AVAILABILITY OF FOOD**

**a) Agricultural production**

In general the province registered regular rainfall from October until March. Under normal conditions, the region of Majune produces maize, millet, cowpea, groundnut, ricinus, tobacco, rice, manioc, sweet potato and vegetables. Mecanhelas produces maize, rice, manioc, millet beans, vegetables and tobacco.

The lack of vegetable seeds and of manioc shoots was cited as a problem. Apart from irregular rainfall, Mecanhelas suffers from the presence of wild animals such as elephants, hippopotamuses, monkeys and swine, and from plagues, affecting manioc and tobacco (plant louse). There has never been a seeds fair.

Final production estimates indicate a rise in the production of cereals (16%), vegetables (21%) and manioc (15%), as compared to the previous campaign (DINA, May 2005).

**b) Animal husbandry**

The two districts produce goats, sheep, ducks and chicken. The presence of cattle was mentioned, although cattle were not spotted during the field visit. Animal production tends to rise since 1999, with the exception of swine.

**c) Food aid**

Majune and Mecanhelas never received food aid. The only support that exists is among families. There is no food aid in the schools.

**II. ACCESS**

Infra-structural problems (markets and access roads) exist, which hamper the commercialization of the farmers' produce. There are only informal traders. There is practically no variation in the prices of the primary necessities of life, from last year onwards. Small differences are noted in prices of products that originate outside the area. For example, the price of a kilo of sugar increased from 15,000 MZM last year to 25,000 MZM this year. The price of edible oil increased from 40,000 to 50,000 MZM per litre.

**III. INCOME SOURCES**

The income sources of the farmers in the visited areas are rather fragile and for the poor families they consist in the selling of agricultural products, animals and eggs, mainly between July and December.

In Majune, as a source of income, the selling of chicken and ducks represented 77% between July and December; that of eggs was 23% between July and December. In Mecanhelas sales of agricultural products increased to 55%; *ganho ganho* 25%; selling chicken 16%; selling eggs 4%. Generally speaking all families engage in *ganho-ganho*, throughout the year. In these districts people still exchange goods among themselves and with people from Malawi.

**IV. UTILIZATION**

**a) Nutrition and health**

In both visited districts malaria was mentioned as most preoccupying, because of its frequent occurrence. HIV/AIDS cannot be diagnosed in these districts. However, over 90% of the people interviewed stated to have knowledge about the existence of the disease, but few people know how to avoid getting infected. Both districts have a health post. In Majune one noted cases of malnutrition.

**b) Water and sanitation**

Drinking water is not available, some people use wells, other use water from rivers, water holes and from other sources, insufficient for supplying the whole community. The average time needed to fetch water varies between 30 minutes and one hour. Because of the unfavourable soil conditions the use of latrines is low, people frequently defecate in the open.

### **c) Consumption**

During good times people enjoy three meals per day. Currently the number of meals has been diminished. Normally *chima* of maize and millet, rice, manioc leaves and sweet potato, cowpea and fish are the products consumed. When there are ceremonies, people consume pork and game meat. This year, there are changes in the diet. At present people are eating bran and manioc leaves.

The districts bordering on Malawi do not store maize, because there is much demand from Malawians, contrary to the situation last year when people did store maize. As far as rice and millet are concerned, during this campaign these will not be commercialized and the balance is negative.

### **d) Education**

School access (new enrolments) is on the rise and one noted that the DPE is raising awareness so as to diminish desistence. There are very few EP2 and EPC schools, especially in the district towns, which makes it difficult for children to continue studying.

## **V. SURVIVAL STRATEGIES**

The most practised survival strategies in times of crisis are: the consumption of wild fruits (61%); *ganho-ganho* (17%); reducing the number of meals (9%); the consumption of seeds (8%); the consumption of food before it ripens (5%). Especially in Majune people migrate to other villages (6%), and they also buy and sell products between the town and the village. In the district of Mecanhelas, the consumption of seeds stood out in the village of Chiuta. Support of families among themselves was noted in Majune, but there is no support of family households headed by women. These families are not really approached.

## **5. CONCLUSIONS**

### **5.1. Southern Region of Mozambique**

The interior of Gaza Province (Chigubo, north of Chibuto, Guijá and Mandlakaze and the south of Mabalane), the high Limpopo (Chicualacuala, Massingir and the north of Mabalane, as well as Massangena, which shows high malnutrition rates already<sup>9</sup>, are severely affected by the drought. In these localities, the entire population that is considered to be poor, and part of the average income population, are affected. This is due to the drastic decline in agricultural production and to the limited opportunities for income generation, as compared to the other districts of the province. This is due to the drastic decrease of agricultural production and to the limited opportunities for income generation, as compared to the other districts of the province.

Most family households from the districts in the province's coastal area do not have immediate problems in nourishing themselves, because the decline in maize production may

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<sup>9</sup> See Table on Nutritional Surveillance in Gaza, in the Annex.

be compensated by the increase in the production of manioc. Nevertheless, analysis shows that the poorest family households must be at the very limit of their recourses, thus probably being in need of assistance from October of this year onwards. The availability of water has been reduced and sanitation is precarious.

In the interior of Inhambane - Mabote, Funhalouro and east of Panda – the food security situation is very worrisome as well. At present most family households in this zone only enjoy one meal per day, basically consisting of food, which is exclusively consumed in hunger periods, such as *macuacua*. Opportunities for income generation like for instance distilling alcoholic beverages and producing cashew are diminishing because of the seasonality of the wild fruits.

In the coastal area in southern Inhambane (coastline of Massinga, Morrumbene, Maxixe, Jangamo and Inharrime), households have various income sources, which include the selling of citrus and coconut. The coastal areas north of Govuro, Inhassoro, Vilanculos and Massinga should be closely monitored, especially as regards the poorest family households. The interior of these districts is already encountering problems, with people only having reserves for about one month.

Although malnutrition rates are stable, their monitoring in the coming months will be important. Cases of school absenteeism were only reported from the interior of Inhambane Province where people tend to migrate. In the remaining areas there were no noticeable cases of absenteeism. Water sources are declining significantly, both the surface sources as well as underground sources.

Generally speaking, the situation in Maputo Province is less alarming than that in the other two southern provinces, with the exception of Moamba district, where survival mechanisms may turn out to be at the very limit of their flexibility. Meanwhile, even with irregular rainfall, the situation in the districts of Magude and the north of Namaacha may improve because of the alternatives available to the local populations, above all informal and border trade and, given that the migration rate to neighbouring countries (South Africa and Swaziland) is high, remittances. Malnutrition rates appear to be stable, with a light tendency to rise. Marracuene in particular registers a high Insufficient Growth rate (14,0).<sup>10</sup>

## **5.2. Central Region of Mozambique**

In Sofala, the evaluation team considered the districts of Machanga and Chemba to be the most critical. The greater part of the population only enjoys one meal daily and has limited opportunities in terms of income generation, thus being in need of immediate assistance. The administrative posts of Galinha and Chupanga in the districts of Muanza and Marromeu respectively, are also badly affected.

Availability of drinking water is at a critical level in all districts visited by the evaluation team. Although malnutrition rates are stable, their monitoring during the coming months will be important.

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<sup>10</sup> See Table in Annex 1.

In Manica Province the district of Mossurize, the granary of the province, was affected this year, especially the administrative post of Dakata. The administrative posts of Nhamassonge, Mandie and Mungari in the district of Guro were also affected and the population needs assistance. Until June of this year, the population will have reserves by selling animals for the purchase of food. The administrative post of Ngawala is the most affected by the drought on the one hand, and on the other hand it suffers from the bad condition of the access road that links this post to the district town. Thus, the family households do not improve their survival mechanisms to face the drought. The administrative post of Nhamagua is the most productive of the district, but this year it is also affected by the drought.

Although the evaluation team did not visit the district of Tambara, it is in the same predicament as the Guro district, given that they belong to the same zone as far as food production is concerned, and provincial technicians confirmed this view. The administrative posts of Buzua and Nhacafula were most severely affected this year. The whole district of Machaze was affected, including the administrative post of Save, which is considered to be the most productive. The poorest family households will be affected by the crisis, since they also do not receive remittances from South Africa that can be used to better face setbacks during bad times. Malnutrition rates have the tendency to rise slightly, although Guro already has a 10% Insufficient Growth rate.

In Tete the whole district of Mágoè was affected, as well as the administrative posts of Charre and Nhangoma, in Mutarara district. Two administrative posts in the district of Changara, namely the localities of Boroma and Cachembe were affected, and they need immediate aid. The family households started to sell goats already, in order to face the food shortages; the administrative post of Luenha has also been affected. The water problem is real in all administrative posts visited. Despite the fact that the malnutrition rates are stable, their monitoring during the coming months will be important.

### **5.3. Northern Region of Mozambique**

This region is normally the most productive. According to the Early Warning Department of MINAG, the production estimates for basic food crops indicate an increase for the current agricultural campaign.

In Zambézia Province, the lack of rain is particularly being felt by the most sensitive crops, such as rice and maize, however, food security and vulnerability are stable, except for Chinde. Here, the location, access problems and recurrent disasters that are characteristic of this district do not allow for a rapid consolidation of food security. The most severe problem concerns the availability of water, be it for human consumption or for agricultural use. According to SIMA three factors have caused price increases in Lioma/Milange: this year's large reduction in cereals production, the awareness campaigns that urge the population not to sell too much produce because of the drought, and the precautionary measures by the producers themselves who hope for price rises. Taken together they contribute to the circumstance that, since prices have risen from 1,000 to 1,500 MZM/kg, more products are being offered on a daily basis at the Lioma route, than before.

In Nampula, the agricultural campaign was normal, with good perspectives for production, nevertheless, root rot in manioc together with the low fertility of the soil in the coastal areas of the province have negatively influenced the campaign's performance. Meanwhile, the food aid that was offered, especially in Memba, substantially contributed to the reduction of the malnutrition rates in the district. Problems with water availability are being recorded. Newcastle disease was one of the diseases that substantially reduced the number of poultry at the family household level.

Despite irregular rains, optimum harvests are expected in Cabo Delgado. One observed the spread of *Oidium* in cashew, a circumstance that might affect future production. The isolation, poor access roads and poor medical assistance were among the main difficulties referred to. Again, Newcastle disease was one of the diseases that substantially reduced the number of poultry at the family household level. The introduction of school lunches, facilitated by the WFP, significantly contributed to the diminishing of desistence as well as to an increase in school attendance.

Production constraints in Niassa, apart from rainfall, were the lack of vegetable seeds and of manioc shoots, and the presence of wild animals such as elephants, hippopotamuses, monkeys and swine. There have never been seeds fairs; meanwhile final production estimates indicate a rise in the production of cereals (16%), vegetables (21%) and manioc (15%), as compared to the previous campaign (DINA, May 2005).

## **6. ACTIONS AND RECOMMENDATIONS**

It is incumbent upon the specific sectors to elaborate the respective plans of responding to the drought, based on the information provided by the present report. Meanwhile, the SETSAN VAC recommends:

- To carry out detailed sector surveys in the most vulnerable areas identified by the VAC, with a view to elaborate specific action plans in response to the drought.
- These plans may later be integrated in the national plan to prepare for and respond to droughts, coordinated by the INGC.
- To reinforce sector mechanisms (duty stations) for monitoring the impact of the drought, especially in the areas of education (desistence, school material, gender), health and nutrition (cases of malnutrition and diarrhoea) and vulnerable groups. The Ministry of Health already has established duty stations and trained staff, who may be put into action in response to the current situation of drought.

### **6.1. AGRICULTURE**

Various mitigation activities, such as the holding of agricultural inputs fairs, awareness raising in communities, the multiplication of manioc shoots and seed potatoes (sweet), the rehabilitation of weirs as well as the planting of cashew trees, are ongoing through the Agricultural Action Plan.

The agricultural sector should concentrate on the following actions in order to mitigate the effects of the drought:

- Management of existing irrigation systems, reconditioning of damaged water pumps, accompanied by training in management and maintenance aspects;
- Increase quality and improve control of seeds distributed at fairs;
- The use of rainwater for agro and animal husbandry purposes, including the promotion of weirs:
- Vaccinations against Newcastle disease: re-supply the stock of Newcastle vaccine with a view to complete the vaccination plan:
- Due to the exaggerated exploration of natural resources, inspection services are intensifying the surveillance of illegal hunting and improper felling of trees. In the meanwhile it is necessary to promote reforestation with native species;
- Intensify control/treatment of *Oidium* in cashew, and of the post-harvest plague *prostephanus truncatus*.

## **6.2. WATER AND SANITATION**

In order to ensure that the populations of the most affected districts have access to water, the sector should:

- Promote training courses for trainers, on methods of collecting and using water that may be duplicated in the provinces;
- Make a detailed technical survey of the viable options of improving water sources and their conservation in the most affected places;
- Involve provincial and district directorates in supporting small-scale community projects in the field of water use and water management;
- Support the districts in their efforts to construct water dams for small water reservoirs;
- Help communities to improve the quality of consumed water through chlorination and the adoption of other water purification methods;
- Make sure that all interventions are accompanied by hygiene education programmes so as to ensure the proper utilization of infrastructures;
- Improve the access to water and sanitation, at least in primary schools.

## **6.3. NUTRITION**

In this sector vaccination and nutritional surveillance campaigns by the sanitary units are ongoing, however, the nutritional surveillance rates (Insufficient Growth (CI) and Low Birth Weight (BPN)) show the tendency to increase, which is why one recommends:

- That the respective sanitary units closely monitor the nutritional situation in the districts identified with high CI and BPN rates;
- To intensify nutritional education activities and their link with rural extension activities;
- To identify and refer children with clinical malnutrition for therapeutic treatment;
- To step up sanitary prevention activities, such as support to the vaccination and Vit A distribution programme, campaigns on cleaning, the raising of awareness of the importance of drinking water.

#### **6.4. EDUCATION**

- Reinforce the monitoring of the level of diligence and the desistence rate, both among the teachers as well as among the pupils of the districts affected by the drought;
- Continue and expand the school lunch programme in the semi-arid areas, until the next harvest in March 2006;
- Promote the establishment of school *machambas* at rural schools.

#### **6.5. FOOD AID**

Immediate food aid is recommended for extremely vulnerable people, i.e. the very poor and the poor that do not produce, have no reserves, do not engage in the second season and whose income sources are limited until March 2006. This includes the livelihood groups 1, 2 and 3, that is, the groups facing shortages, which are highly dependent on agriculture and on cereals. From October onwards, the households that have run out of reserves and start to sell their goods, who belong to livelihood group 4, will be included.

**Table. 4: Number of affected people**

Region	District	Administrative Post	Immediate Vulnerability				From October onwards	
			LG1	LG2	LG3	Sub-total	Group4	Sub-total
Maputo	Magude	Magude	2974	1846	2205	7025	3384	3384
		Mapulanguene	81	50	60	191	92	92
		Motaze	415	258	308	980	472	472
		Mahele	134	83	99	316	152	152
		Panjane	227	141	168	536	258	258
	Moamba	Moamba	1382	858	1025	3265	1573	1573
		Pessene	1139	707	845	2691	1297	1297
		Ressano Garcia	978	607	725	2310	1113	1113
		Sabie	1334	828	989	3150	1518	1518
<b>Maputo Total</b>			<b>20465</b>				<b>9859</b>	
Inhambane	Funhalouro	Funhalouro	5975	1387	427	7789	2561	2561
		Tome	2741	636	196	3573	1175	1175
	Govuro	Save	2428	474	279	3182	1870	1870
	Inhassoro	Inhassoro	9700	1895	1115	12709	7470	7470
	Mabote	Mabote	4903	1138	350	6391	2101	2101
		Zimane	1427	331	102	1860	612	612
	Massinga	Chicomo	10527	2057	1210	13793	8106	8106
	Panda	Mawayela	1263	293	90	1647	541	541
	Vilanculos	Mapinhane	13854	2707	1592	18153	10669	10669
<b>Inhambane Total</b>			<b>69096</b>				<b>35104</b>	
Gaza	Chibuto	Alto Changane	2231	863	803	3897	1785	1785
		Changanine	1194	462	430	2086	955	955
	Chicualacuála	Chicualacuála	3851	2107	1562	7521	690	690
		Mapai	4395	2405	1783	8582	788	788
		Pafuri	1190	651	483	2325	213	213
	Chigubo	Chigubo	1896	1038	769	3703	340	340
		Ndindinza	1736	950	704	3390	311	311
	Chokwe	Macarretane	6533	2526	2351	11409	5225	5225
	Guijá	Mubanguene	4545	1757	1635	7937	3635	3635
		Nalazi	1369	529	493	2391	1095	1095
		Mabalane	Mabalane	2789	1526	1132	5447	500
	Mabalane	Combomune	2333	1276	946	4556	418	418
		Ntlavene	1947	1065	790	3802	349	349
		Manjacaze	Macuacua	2654	1026	955	4636	2123
	Massangena	Massangena	2140	1171	868	4179	384	384
		Mavue	1275	698	517	2489	229	229
Massingir	Mavodze	1819	996	738	3553	326	326	
	Zulo	1880	1029	763	3671	337	337	
<b>Gaza Total</b>			<b>85574</b>				<b>19703</b>	
Sofala	Chemba	Chemba	1170	3218	1316	5705	3012	3012
		Chiramba	1021	2808	1149	4978	2628	2628
		Mulima	1651	4540	1857	8047	4249	4249
	Machanga	Machanga	1960	5391	2205	9557	5046	5046
		Divinhe	1992	5478	2241	9710	5127	5127
	Marromeu	Chupanga	1848	5083	2079	9011	4758	4758

	Muanza	Galinha	1009	2774	1134	4917	2596	2596
<b>Sofala Total</b>						<b>51924</b>		<b>27417</b>
Manica	Guro	Mandie	1629	1719	2126	5474	1312	1312
		Nhamassonge	869	918	1135	2922	700	700
	Machaze	Machaze	9788	10332	12779	32900	7884	7884
	Macossa	Nguawala	291	307	379	977	234	234
	Mossurize	Dakata*	541	571	707	1819	436	436
	Tambara	Buzua	1322	1396	1726	4445	1065	1065
		Nhacafula	1149	1213	1500	3863	926	926
<b>Manica Total</b>						<b>52400</b>		<b>12557</b>
Tete	Cahora-Bassa	Chitima	4064	4938	9722	18725	5690	5690
	Changara	Marara	7112	8641	17013	32766	9956	9956
	Mágoè	Mpheende	1486	1806	3555	6847	2080	2080
		Chintopho	2676	3251	6400	12327	3745	3745
		Mukumbura	2085	2533	4987	9605	2918	2918
	Mutarara	Chare	2202	7158	12270	21631	4877	4877
		Inhangoma	2870	9329	15993	28192	6356	6356
<b>Tete Total</b>						<b>130092</b>		<b>35622</b>
Zambézia	Chinde	Chinde	10767	7601	316	18684	19002	19002
<b>Zambézia Total</b>						<b>18684</b>		<b>19002</b>
<b>Grand Total</b>						<b>428234</b>		<b>159265</b>

\* Only part of the Administrative Post

# Annex 1



## INTERVIEW AT DISTRICT LEVEL

**District:** \_\_\_\_\_ **Date:** \_\_\_\_\_

From 24 April to 07 May 2005 SETSAN, through the GAV, intends to realize another mission to monitor and evaluate the food security and nutrition situation, based on the analyses made by another working group, also from SETSAN, the GASPAN (Food Security and Nutrition Early Warning Group).

### OBJECTIVES

The main objectives of this survey are to:

1. Determine the current food security and nutrition situation in the country;
2. Determine the types of intervention needed to minimize the impact of the drought on the livelihoods of the population in the rural areas;
3. Offer concrete recommendations with a view to improve decision making as well as to influence the Crop Food Supply Assessment Mission (CFSAM), which will take place from 23 April to 01 May 2005 in the country.

### MAIN DATA TO BE COLLECTED AT DISTRICT LEVEL

1.1. Indicate the number of the total population in each administrative post and in the various localities

District	Administrative Post	Localities	Total population
	<b>Administrative Post</b>	<b>Localities</b>	<b>Total population</b>
	<b>Administrative Post</b>	<b>Localities</b>	<b>Total population</b>

1.2. List the main crops normally produces by the farmers?

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1.3. Indicate the total quantities produced in the following years:

Year	Maize	Millet	Mexoeira	Rice	Beans	Cowpea	Feijão. Jugo	Groundnut	Manioc	Sweet Potato	Potato
2000											
2001											
2002											
2003											
2004											
2005											

1.4. Prices of the most important products in the last 6 years (in Meticais)

Crops	2000	2001	2002	2003	2004	2005
Maize						
Millet						
Mexoeira						
Rice						
Beans						
Cowpea						
Feijão-Jugo						
Groundnut						
Manioc						
Sweet Potato						
Potato						

1.5. Rain patterns in the last 6 years

Province	District	2000	2001	2002	2003	2004	2005

1.6. Data on animal production during the last 6 years (or, if possible, the last 10 years)

Livestock	Administrative Post			Administrative Post			Administrative Post			Administrative Post		
	Total of animals			Total of animals			Total of animals			Total of animals		
	Locality	Locality	Locality	Locality	Locality	Locality	Locality	Locality	Locality	Locality	Locality	Locality
	1999											
Cattle												
Goats												
Sheep												
Chicken												
Ducks												
Other												
	2000											
Cattle												
Goats												
Sheep												
Chicken												
Ducks												
Other												
	2001											
Cattle												
Goats												
Sheep												
Chicken												
Ducks												
Other												
	2002											
Cattle												
Goats												
Sheep												
Chicken												
Ducks												
Other												
	2003											
Cattle												
Goats												
Sheep												
Chicken												
Ducks												
Other												
	2004											
Cattle												
Goats												
Sheep												
Chicken												
Ducks												



**5 Diseases developed by domestic animals in the last 5 years**

Diseases	1999	2000	2001	2002	2003	2004

**6 Incidence of diarrhoea related diseases (number of cases and deaths)**

District	Adm. Post	1999	2000	2001	2002	2003	2004

**7 HIV incidence, according to your opinion**

District	Adm. Post	1999	2000	2001	2002	2003	2004

**8. Nutritional Surveillance**

District	Nutritional Surveillance	1999	2000	2001	2002	2003	2004
	BPN						
	CI						
	BPN						
	CI						
	BPN						
	CI						
	BPN						
	CI						
	BPN						
	CI						

Note: BPN = Low Birth Weight; CI = Insufficient Growth

9. Which are the three most important kinds of food consumed during the dry season (October – February) and which are their sources (production, purchase, selling/barter, collection of wild fruits, or offerings)?

Year	Kind of food	Source
2000 -2001		
2001 - 2002		
2002 - 2003		
2003 – 2004		
2004 – 2005		

10. Indicate the province and the district where seeds were distributed and/or where fairs were held

District	Mechanism	2000	2001	2002	2003	2004	2005
	Distribution						
	Fair						
	Distribution						
	Fair						
	Distribution						
	Fair						
	Distribution						
	Fair						

11. Indicate with an x the normal duration (in months) of the production by farmers, who do not take recourse to purchasing or to other survival mechanisms.

Year	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
2001													
2002													
2003													
2004													
2005													

12. How does the population survive during the months when the production of the *machamba* is insufficient? (Indicate the option most encountered).

- Purchases \_\_\_\_\_
- Remittances \_\_\_\_\_
- Ganho-ganho* \_\_\_\_\_
- Food aid \_\_\_\_\_
- Other \_\_\_\_\_

a) If they purchase food, which are the main income sources?  
List at least 3 income sources most used by the community.

- Poor families \_\_\_\_\_ Average families \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

13. What is the real situation in the district in the face of the drought afflicting the country?

a) how long is the food going to last?

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## Annex 2



Interview of a Focal Group

**Village:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Team:** \_\_\_\_\_

**District:** \_\_\_\_\_ **Group in accordance with Possession of Riches** \_\_\_\_\_ **# of interviewees**

**Men** \_\_\_\_\_ **Women** \_\_\_\_\_

### Composition of the interview:

- The interview should be held with representatives of the selected group, identified by the community leaders.
- Each group should at least contain 3-4 men and 3-4 women. If possible, the women and men should be interviewed separately.

### Goals:

- Discover the relative contribution of the different food sources in the course of the reference year.
- Discover the relative contribution of the different income sources in each reference year.
- Collect information on survival strategies, any negative effects, restrictions on adopting certain strategies, etc.

### Processes:

1. Introduce the team and explain the objectives of the interview to the focal group.
2. Check the composition of the group so as to guarantee a relative homogeneity.
3. Explain the reference year and ensure that the interviewees mention the reference year during and at the end of the interview.
4. Collect information on the typical family of this group, according to possessions (for instance whether it is a core family or an extended family, polygamous, etc.), its size and composition, and prepare a profile of possessions.

Size of the Family		Profile of Possessions	
Number of family members		Land	
Nr. of persons able to work		Animals	
Total number of children of school age		Other	
Total number of children attending school			

### Other commentaries on the family and the profile of the possessions

Find the approximate food needs for each family type in the table below.

Size of the family: Year	4	5	6	7	8	9	10
Kgs of cereals per family: per year	800	1.000	1.200	1.400	1.600	1.800	2.000
per month	65	85	100	115	135	150	165

*Note: based on the numbers concerning the needs approximately 200Kgs of cereals (or the equivalent in cereals) per person per year.*

**1. Food sources – in the reference year**

- a) Ask the interviewees to give an idea of their food sources in a typical year – not only at present, but in this season in particular. These sources should fit into the categories listed below.
- b) Ask the interviewees to describe each food source in more detail (for instance the type of crop).
- c) Check whether all food brought into the family by women, children and men are included.

Check List	Food source	Category
1. Own agricultural production		
2. Own animal production		
3. Wild plants		
4. Fishing and hunting		
5. Donations/sharing		
6. Loans		
7. Emergency aid		
8. Purchases		
9. Barter		
10. Stocks		
11. Other		

- a) Ask the interviewees to classify the main food sources in accordance with the order of importance (quantity).
- b) Beginning with the most important food source, quantify to what extent the family has ACCESS to it in the reference year.

If agricultural products are included, complete the following table:

Crop For instance Sorghum	Vegetables For instance 2-3 weeks	Harvested For instance 5 sacks	Seed For instance 0.5 sacks	Sold For instance 1 sack	Other – Stored or exchanged for instance 0.5 sacks	Available for Consumption for instance 3 sacks

Repeat the process with other food sources, and make sure to describe the following for each food source:

- c) When they were produced and consumed
- d) Detail what happens with produce when it is not consumed
- e) If produce is sold, in which period takes this place, and for how much
- f) For purchases, find out how much is bought per month, at what time of year this group buys food and what the price is during the months they buy. (Note: this helps you later to fill in and compare the information on incomes)
- g) Assess the contribution of the second season
- h) Assess the contribution of domestic animals as food source
- i) Assess the trend in animal numbers in comparison to last year

**2. Income sources – in the reference year:**

- a) Ask the interviewees to give an idea of their main income sources in a typical year – not only at present, but in this season in particular. These sources should fit into the categories listed below.
- b) Check whether all income brought into the family by women, children and men is included.
- c) Classify the main income sources in accordance with the order of importance (mainly money accumulated in the course of the year).

Check List	Income Source (Describe)	Category
1. Selling of agricultural produce		
2. Selling of cattle		
3. Selling of animal products		
4. Employment/work		
5. Remittances		
6. Selling of natural resources		
7. Small trade/businesses		
8. Donations/sharing		
9. Selling of emergency aid items		
10. Other		

- a) Quantify the income sources, beginning with the most important

**3. Compare the prices of the above products with those of last year**

3.a) Check whether there are some exchange mechanisms that do not involve money. \_\_\_\_\_ If so, how do they function? \_\_\_\_\_

3.b) What influences this exchange? \_\_\_\_\_  
 \_\_\_\_\_

3.c) Analyse the terms of exchange (definition of the value of each product) \_\_\_\_\_

3.d) To which social group do the families that engage in exchanges belong? \_\_\_\_\_

3.e) Assess how the current situation influences this activity \_\_\_\_\_

**4. Strategies in a bad year:** How do these families survive a bad year? Make a list of the expansion of food and income sources below.

Food/Income Sources	

4.a) List and classify the survival mechanisms

4.b) Indicators of the deterioration of the situation in the coming 3 months

**5. Opportunities and limits:** Are there strategies used by other socio-economic groups in the village, and which are used little by this group? Which are these, and why?

Food/Income Sources	Reason why they are being used little

**6. Dynamics of the Community:** To what extent do community members cooperate among themselves or help each other, be it through formal arrangements or through informal ones? \_\_\_\_\_

6.a) What support do families headed by women receive? \_\_\_\_\_

6.b) Has this support changed over time? Yes \_\_\_\_\_ or No \_\_\_\_\_ If yes, why? \_\_\_\_\_

**7. Dynamics of Food Distribution:** Are the participants receiving food aid at present? Yes \_\_\_\_\_ or No \_\_\_\_\_. If yes, what type of food aid? \_\_\_\_\_

7.a) Did the participants receive food aid in the past? \_\_\_\_\_

7.b) If yes, to what extent were the distribution mechanisms effective? \_\_\_\_\_

7.c) How can they be improved upon? \_\_\_\_\_  
\_\_\_\_\_

**8. Role of women in decision-making concerning food:** What is the role of women in the making of decisions concerning food (including decisions on the kinds of crop to be planted, when to sell or store them, etc.?) \_\_\_\_\_  
\_\_\_\_\_

8.a) Has this changed over time? \_\_\_\_\_ If yes, how and why? \_\_\_\_\_  
\_\_\_\_\_

**9. Number of meals**

9.a) Number of meals enjoyed under normal conditions \_\_\_\_\_

9.b) Number of meals enjoyed in times of crisis \_\_\_\_\_

9.c) How many meals does one have at present? \_\_\_\_\_

9.d) Has the quality of the diet changed? \_\_\_\_\_

**10. Sanitation**

10.a) Type of water source that exists \_\_\_\_\_

10.b) Water quality \_\_\_\_\_

10.c) Distance to fetch water \_\_\_\_\_

10.d) Assessment of the current situation with regard to the current campaign \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**11. Any other observations or commentaries?**

## Annex 2: Livelihood Groups

### Group 1: Subsistence farmers who are not self-supporting

The production system is limited, with 65% producing cereals and 51% manioc or sweet potato. Half the AFs of this group produce beans as well. The group represents the lowest access rate to land, given that its AFs only have *machambas* on high ground, which produce less in years of drought. Livestock farming is limited.

### Group 2: Basic subsistence farmers

The production system focuses on the production of cereals. The production of beans is low, with 36% of the AFs involved. The same goes for producing manioc and sweet potato, which is practised by a mere 26% of the AFs. The AFs possess *machambas* on high grounds, and some of them own low-lying *machambas*. Livestock farming is limited to swine, chicken and goats/sheep.

### Group 3: Farmers dependent on cereals

Subsistence farmer, large cereal producers, but no manioc or sweet potato. Households have their *machambas* on the high ground. Some AFs produce vegetables. Livestock farming is limited to swine, chicken and goats/sheep.

### Group 4: Farmers with a diversified production system and informal work opportunities

The production system is diversified, growing of cereals, beans, manioc or sweet potato and also vegetables. AFs generally have a *machamba* on high grounds although some also have low-lying *machambas*. Most AFs engage in livestock farming.

Group 4 differs from the other groups in the importance that informal work has for the AFs. The main sources of income are informal work and agriculture, for men as well as for women.

### Group 5: Farmers with a diversified production system and animals

The production system is diversified, with 55% of the AFs growing cereals, beans, manioc or sweet potato. This group produces more vegetables than the other groups. The AFs cultivate on average 1.1 *machamba* on high grounds and a 0.6 one on low grounds. Compared with the other groups, livestock farming is more important. All AFs own cattle, some swine, chicken and many AFs have sheep/goats.

### Group 6: Self-supporting farmers with income from agriculture

The production system is diversified, with all AFs growing large quantities of cereals, beans and manioc or sweet potato. Some 55% produce beans and 17% vegetables. The AFs cultivate little more than the average, with one *machamba* on high grounds and some have one on low grounds.

### Group 7: Farmers with a diversified production system and with income from formal work and remittances

The production system is diversified, with most AFs (76%) growing cereals, manioc or sweet potato, beans (65%) and vegetables (27%). On average the number of *machambas* on high grounds equals that of those on low grounds. Livestock farming is diversified. Around 15% of

the AFs possess bovine animals and the ownership of other animals is similar to that of other groups. One of the AF's members is formally employed.