Famine Early Warning Systems Network

Mozambique Food Security Update

6 February 2003

Highlights

- Insufficient and erratic rains over the last three months have resulted in extremely poor harvest prospects throughout southern Mozambique, and in parts of the central region, according to field assessments and detailed analyses of satellite data.
- First season maize production, which accounts for the majority of the annual production of this staple crop, will be largely lost in the affected areas. Beans and groundnuts are severely affected as well. Even drought-tolerant crops such as sorghum and millet, as well as recently planted cassava, are showing signs of stress.
- For a few parts of the central region, additional rainfall in February could lead to a slight improvement in crop prospects. In most of the southern region, the season is largely over and rainfall now will do little to improve the crop outlook.
- This poor outlook for first season crops is likely to cause a dramatic increase in food insecurity in the affected zones. The situation is especially worrying for three reasons: this is the second consecutive year of drought in most of these areas; the food aid response to the 2001/02 drought has been significantly lower than assessed needs; and the next major harvest is more than one year away.
- Conversely, heavy rains have resulted in localized flooding in Nampula, Cabo Delgado and northern Zambézia. Intensive and continuous rains have flooded rivers such as Nipiode and Licungo in Zambézia province, Ligonha (bordering Zambézia and Nampula) and Meluli in Nampula, causing some damage. Away from the flooded areas, crop prospects in the productive northern region are very good.
- Maputo prices have been stable in January. A steady supply of maize from Sofala Province is the primary reason why the prices are not fluctuating. Small quantities of yellow maize appeared in some Maputo markets, priced significantly lower than white maize.
- There is a large gap between assessed food aid needs and planned responses. On a national level, the WFP planned distributions for January will only meet 43% of the latest estimated needs – covering only 283,202 people compared to the VAC assessed needs of 654,865. The number of people in need is certain to increase due to the current climate conditions.

This monthly bulletin is produced by FEWS NET in collaboration with its partners, including the Early Warning Department (DAP) and the Agricultural Market Information System (SIMA) of the Ministry of Agriculture and Rural Development (MADER), the National Institute of Meteorology (INAM), the Food and Agriculture Organization (FAO) and the World Food Program (WFP).

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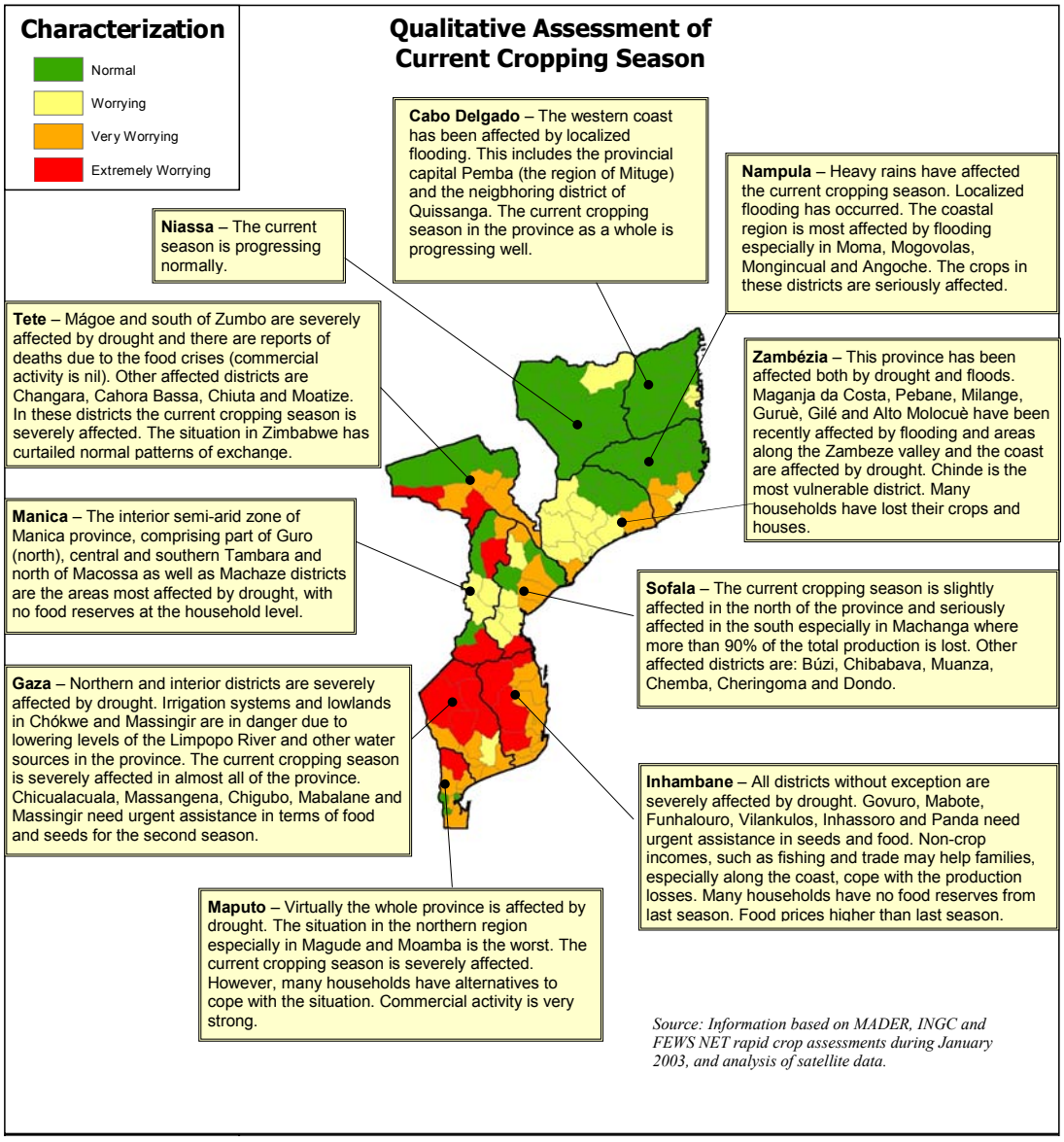
First season crop prospects very poor in southern and part of central Mozambique

It had been hoped that the first season's harvest would bring relief for households who suffered from poor harvests in the 2001/02 production season, especially in the south and central areas of Mozambique. The opposite situation appears to have developed, as poor prospects for the first season harvest may lead to a dramatic increase in food insecurity over the coming 12 months. The harvest, expected in the next 1-3 months, is likely to be very poor, especially in those areas affected by drought last season. Although it is too early to make any quantitative production estimates, a qualitative assessment of the season to date is shown below. A report summarizing the analysis that contributed to this map has been prepared by MADER/DINA, FAO and FEWS NET and will be released soon.

Inhambane, Gaza and Maputo Provinces are most severely affected, with virtually all districts facing near crop failure. Parts of Sofala, Tete and Manica also face a severe reduction in first season production. Crop prospects remain good for the productive northern region. Flooding, brought about by excessive rainfall, has caused some infrastructure and crop damage in the north, but away from the flood areas, crop growth is excellent. While this northern production may improve the national food balance, production in the north normally does little to ameliorate shortages in the south due to transport constraints.



Rapid crop assessment in the southern region

FEWS NET, in coordination with the Ministry of Agriculture (MADER) and the Disaster Management Institute (INGC), carried out a crop assessment from 20 to 30 January. The assessment covered 17 districts of southern Mozambique in the provinces of Sofala, Inhambane, Gaza and Maputo (see the table below). These districts had been identified using RFE and NDVI satellite images to indicate those displaying severe drought conditions. The assessment was conducted to ground-truth the images and to assess the dimension of the problem. The final report with more detailed information has been produced as separate document. The table below shows the crop conditions at the time of the assessment. The estimates, derived from discussions with local agricultural officials, are only indicative at this time, but provide an overview of the seriousness of the situation. Formal production estimates will be produced by MADER in the next few months.

Qualitative Estimate of Percentage of Crop Lost Due to Drought							
Province	**District**	**Maize**	**Groundnuts**	**Beans**	**Sorghum**	**Millet**	**Tubers**
Sofala	Buzi	70%	*	50%	70%	70%	*
	Chibabava	60%	*	*	60%		*
	Machanga	90%	*	*	*	*	*
Inhambane	Inhassoro	90%	90%	90%	*	*	*
	Mabote	*	90%	90%	*	90%	80%
	Vilankulos	90%	90%	*	*	*	*
	Massinga	50%	40%	60%	60%	60%	60%
	Panda	90%	50%	50%	*	*	*
	Inharrime	70%	50%	50%	*	*	50%
Gaza	Mandlakazi	90%	90%	*	*	*	50%
	Chibuto	60%	60%	60%	*	*	*
	Guija	90%	90%	90%	*	*	*
	Mabalane	90%	90%	90%	*	*	*
	Chicualacuala	90%	90%	90%	90%	90%	90%
	Massingir	90%	90%	90%	90%	90%	90%
	Chokwe	90%	90%	90%	*	*	*
Maputo	Magude	90%	90%	90%	*	*	*

***** - Non-staple food or not planted

The staple maize crop has been most affected throughout the regions visited. Even in some normally-productive lowland areas (*zonas baixas*), maize is performing very poorly due to a lack of rainfall and soil moisture. Most of the maize crop has reached the maturation phase, and further rainfall will do nothing to improve the prospects. In a few districts, such as northern Buzi, Chibabava, Mandlakazi and Chibuto, additional rainfall during the month of February could lead to a slight improvement in the overall situation. Groundnuts and beans were similarly affected. The unexpectedly high percentage of drought-resistant tubers lost was seen mostly in recently-planted crops.

Irrigation schemes along the Limpopo River also face a lack of water. The river levels in main branch of the Limpopo River are very low at present, and the discharges from the Massingir dam are minimal. If additional rainfall does not occur in the areas of South Africa feeding the Elephantes tributary, water will become scarce for the irrigation scheme at Chokwe and for other downstream users.

Conclusions and recommendations from the mission about the visited districts:

- In the areas visited, rains started during the expected period, but stopped for over 30 days during the critical stage of crop development, severely affecting rain-fed crops, especially maize.
- Maize is expected to suffer losses between 50% and 90%. Some crops such as groundnuts, cassava and beans are still surviving, but due to high temperatures and the intensifying drought, additional rainfall is needed within the next several weeks to save the crops.

- For most crops in most regions, even if it rains in February, it will be too late for the first season.
- Food security problems will be compounded by the fact that this is the second year of drought, since households have already been maximizing their coping strategies for a year.
- Food aid distribution programs are providing some relief and are well received but the quantities are too small to have a major impact.
- Seeds were largely available for the first season planting, but will be a major constraint for second season planting. Mainly vegetables are planted during the second season, although maize is produced in small quantities. Timely distribution of seeds appropriate for second season planting will be critical. However, it was noted that even a successful second season would not have a major impact on food availability because of the quantity and types of crops produced.
- Besides the visited districts, similar problems are reported in the following districts: Bilene, Chigubo, Massangena, Govuro, Funhalouro, Homoine, Cheringoma and Muanza.

The assessment mission is recommending close and continuous monitoring of the food security situation in all the southern districts of Mozambique and other districts indicated on the map above due to the seriousness of the situation. A more complete analysis of food security and household coping strategies is necessary to provide a full picture of the scope of the emergency.

Rainfall images show heavy rains in the north and intensifying drought in the center and south

As further confirmation for the mission's findings, figures 2a and 2b show the general pattern of rainfall distribution during January 2003. Nearly the entire northern region of Mozambique registered rainfall in excess of 250 mm for the month, which is well above normal. The southern part of the country, including much of southern Tete, registered below normal rains. A small spot in the south shows significant rains, which occurred during the beginning of the month as result of a low-pressure system that affected the area.

Figure 2a: Rainfall estimate 1 – 31 January 2003

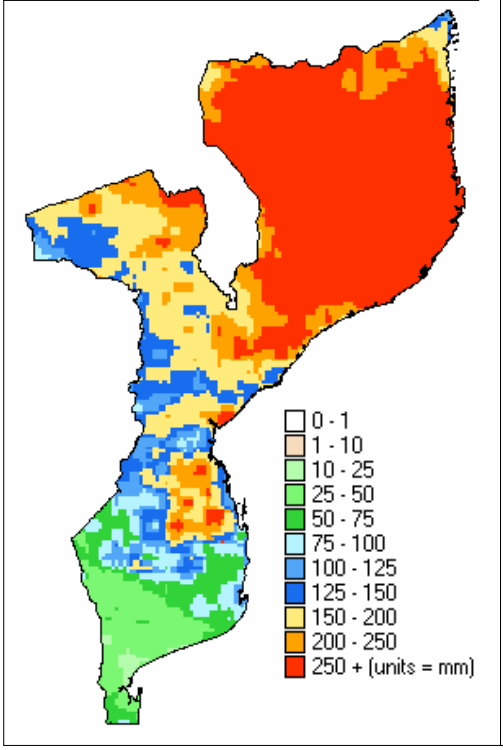
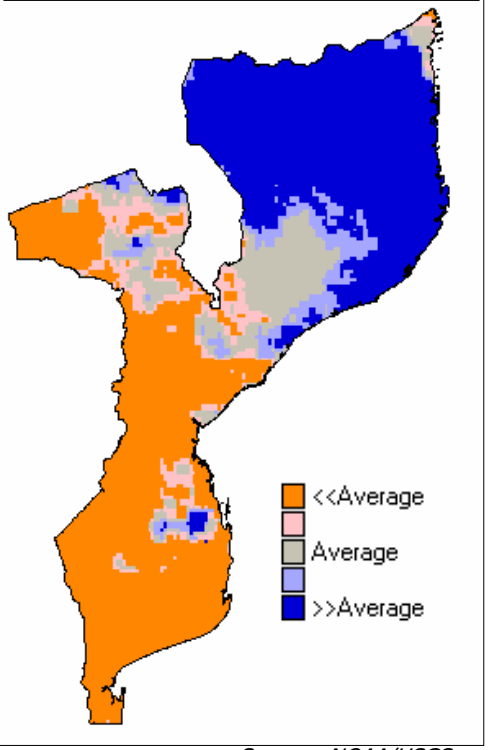


Figure 2b: Difference from short-term average (1995-2001)



Source: NOAA/USGS

Localized floods have occurred in Nampula, Cabo Delgado and northern Zambézia. The affected districts are Quissango and Pemba in Cabo Delgado, Mogincual, Mogovolas, Angoche and Moma in Nampula and Maganja da Costa in Zambézia. Intensive and continuous rains caused rivers such as Nipiode and Licungo in Zambézia province, Ligonha (bordering Zambézia and Nampula) and Meluli in Nampula to flood. This flooding damaged infrastructure such as roads, bridges, houses and railways. The railway connecting Nacala port in Nampula to Malawi has been cut twice in less than a month. Important roads connecting the Cabo Delgado capital of Pemba to other districts have been temporarily cut.

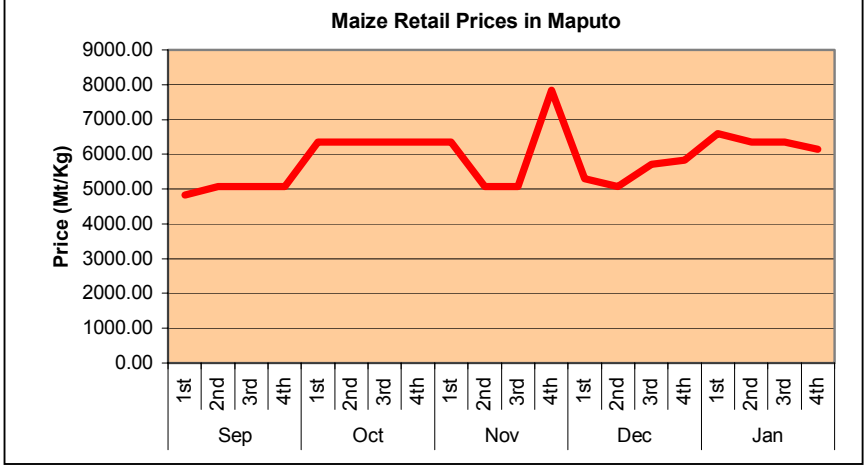
Figure 2b shows the clear delineation between the areas that have received good rainfall and those that have not, dividing the southern part of Tete and Zambézia from the northern part of those provinces. The central region can be thought of as a transition area in terms of rainfall performance. Conditions are generally normal to above normal north of that line, and below normal south of that line. The entire southern region is clearly under severe water stress.

Maize prices in Maputo stabilized; flow of products affected in the north

Even though prices normally rise at this time of year before the harvest, in Maputo prices have been fairly stable. This comes after a spike in late November when households sought maize for seed. According to SIMA (Sistema de Informação de Mercados Agrícolas), the markets in Maputo are fully supplied with maize originating in Nhamatanda and Gorongosa in Sofala province. Nhamatanda is a major supplier of white maize for markets in Beira as well. This steady supply of maize is the primary reason why the prices are not fluctuating. SIMA reported that yellow maize was seen in small quantities in Maputo. The origin of the yellow maize is unknown. If the quantity of yellow maize increases in Maputo markets, it may bring some relief for poor consumers as it is being sold at 60% of the price of white maize (for 3810 to 4444 MT/Kg compared to 6150 Mt/Kg).

In northern zones, especially in Zambézia province, heavy rains temporarily interfered with the flow of products such as white maize, beans, cowpeas, and shelled peanuts from the supply areas to markets.

Figure 3 *Source: SIMA*



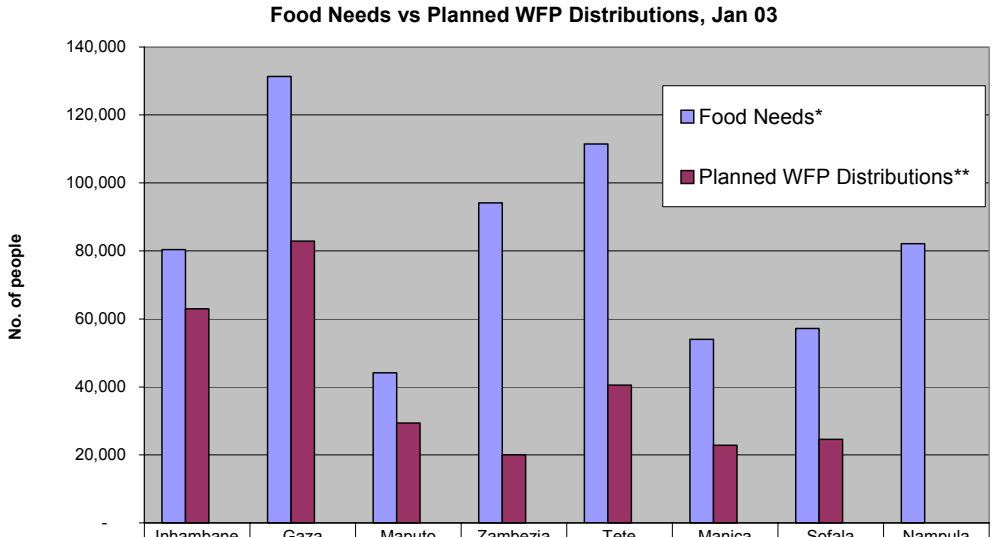
Response to the drought: Growing gap between food need requirements and planned distributions

The main response to the drought situation has been the distribution of emergency food aid from the World Food Program by NGOs and other partners. Most of the food has been distributed in the form of Food for Work, although WFP is also supplying some food for Vulnerable Group Feeding programs, for those unable to work. Of the 515,000 people estimated to require emergency food aid in Mozambique based on the results of the Crop and Food Supply Assessment Mission in May 2002, WFP planned to meet only part of the needs, covering 350,000 beneficiaries for July-August and 440,000 for September 2002-March 2003. WFP's EMOP expected other stakeholders, such as the government

and NGOs, to cover the balance of the food aid requirements. The VAC assessment in November/December increased the estimates of the population in need to 654,865 people. Given the increased estimates of needs, there would still be a significant gap even if WFP managed to meet 100% of its plan. Precise information is not available about distributions of food aid outside of WFP channels, but quantities are thought to be relatively small.

Unfortunately, WFP has not been able to meet 100% of its target of 440,000 people because of problems with food aid supplies from donors, the requirement to mill genetically modified food aid maize, and a lack of NGO partners to carry out distributions. The graph below shows the gap between the latest estimates of needs from the VAC and WFP's planned distributions for January. On a national level, the WFP planned distributions for January will only meet 43% of the current needs – covering only 283,202 people compared to the VAC assessed needs of 654,865. The number of people in need is certain to increase due to the current climate conditions.

Figure 4



	Inhambane	Gaza	Maputo	Zambezia	Tete	Manica	Sofala	Nampula
Food Needs*	80,383	131,319	44,149	94,150	111,497	54,000	57,200	82,167
Planned WFP Distributions**	62,953	82,913	29,400	20,000	40,495	22,844	24,597	-
Percentage Covered	78%	63%	67%	21%	36%	42%	43%	0%

National Totals:
VAC estimated Food Needs = 654,865 people
Planned WFP Distributions = 283,202 people
Percent of Needs Covered by WFP in Jan = 43%

* VAC Estimate, Dec 02
**FFW and VGF