

The Year in Disasters 1993

Southern Africa: holding back famine

Southern Africa is recovering from its worst drought in living memory, and learning the lessons of its largest and most successful disaster prevention operation. A total of 86 million people, 72% of the region's population, and 2.6 million square miles of land were reported to have been affected to varying degrees by a drought of enormous severity and extent.

Poor rains were already recorded in southeastern Zimbabwe, parts of Mozambique and Lesotho in 1990-91. To make matters worse, one year later, the seasonal rains expected between November 1991 and March 1992 failed throughout the region. The drought placed 20 million people in the SADC (Southern African Development Community) countries at serious risk.

The 10 SADC countries (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe) and South Africa experienced a harvest failure of 30%-80% below normal across the region. In response, from April 1992 to June 1993, roughly five times more food and relief goods (including commercial imports) were successfully transported into Southern Africa than were shipped to the Horn during the 1984/85 famine. The Southern African region, usually a food exporter in aggregate, was required to import 11.6 million metric tonnes of food with estimated food and transport costs of almost US\$4 billion. This volume represented a six-fold increase above normal imports by the region.

Food had to be transported into and across land-locked countries,

through long overland routes and a network of export-orientated ports, roads and railways, a logistics effort of daunting proportion. Only unprecedented regional and international cooperation coupled with the region's reasonably high level of preparedness could meet the demands of such an operation - which has been considered a true success. In part, the effectiveness of this regional response can be attributed to:

- SADC's early-warning system successfully forecasting and disseminating early food-security warnings, coupled with the rapid verification of the extent of the potential disaster by bilateral and multilateral agencies, such as FAO, WFP, USAID and the World Bank;
- creation of the joint SADC and WFP Logistics Advisory Centre to co-ordinate food flows into the region and reduce transport system constraints;
- prompt and decisive actions by some SADC countries which resulted in the early mobilisation of commercial imports and prepositioning of reserve food stocks;
- generally high standard "seamless" regional transport (port, road, rail) and communications network, due to nearly US\$2 billion investment mobilised by the SADC's Southern African Transport and Communications Commission (SATCC), during the previous decade;
- collaboration between the SADC and UN in assessing the emergency and planning the response, and the US\$854 million joint UN-SADC appeal presented at a donors' conference in Geneva on 1-2 June 1992,

which generated US\$600 million;

- the changing political climate which allowed access to ports within South Africa (itself preoccupied with a massive food-import operation);
- access to SADC state ports, including the sustained functioning of the Mozambican transport corridors despite civil unrest;
- effective cooperation and coordination between private sector - including transport operators, cargo handling and clearing agents - and government departments, such as immigration and customs. This permitted easy access to logistics information as well as resource allocation, and allowed the smooth flow of relief commodities.

Impact of the drought

Drought jeopardised every aspect of people's lives: crops and livestock, jobs, possessions and savings; the social cohesion, economic and political stability of communities, and their health. The effects of the drought were particularly severe in those countries also experiencing internal conflict, but no country or community escaped unscathed. Many could only eat once every three days. Children fainted for lack of food; school attendance dropped. The drought's consequences will extend well into 1994.

Women had to walk long distances to gather wild roots and fruits and to collect water. Many sent children to relatives in urban centres. In some areas, families were disrupted as their members had little option but to migrate in search of work. In South Africa, water and food shortages and farm job cutbacks forced 300,000 poor rural people to move to townships.

The lack of water, in particular, caused great human hardship, and closed schools and clinics. Livestock, wild animals and humans competed for dirty and often contaminated water in dried-up river beds and water holes. Without livestock, subsistence farmers lacked draught power necessary to plough and depended on food relief long into 1994 because they could not take full benefit of the 1992/93 planting season.

With clean water in short supply, the risk of epidemic diarrhoea increased dramatically. In parts of Southern Africa, the on set of the rainy season from November to March is normally expected to bring cholera and dysentery. The 1992/93 rains saw an unprecedented number of cases, with cholera being reported for the first time in Zimbabwe since the 1970s, including nearly 7,000 cases recorded in the six months following November 1992.

Food costs indicate the emergency's magnitude. Grain imports cost about US\$1.2 billion. Ocean freight and insurance costs for transport were estimated at US\$487 million. Internal transport, storage and handling charges were US\$670 million. With other associated expenses, total food imports for the SADC countries cost US\$2.4 billion, roughly equivalent to 12% of the region's annual Gross Domestic Product. When South Africa's estimated expenditure of US\$1.5 billion for food imports is included, the total regional cost of food assistance reached nearly US\$4 billion.

Non-food relief items - including water schemes, emergency health interventions, livestock preservation and the provision of seed and hand tools - cost US\$223 million by October 1992.

Zimbabwe illustrates the drought's devastation. Although the country has the most dynamic and diverse economy in SADC, the drought exacted an almost incalculable toll. The volume of agricultural production fell by onethird, contributing only 8% to the GDP, compared to 16% in normal years. While farming revenues plummeted, the government began providing food relief to drought-stricken communities. By November 1992, 5.6 million people - half the population - had registered for drought relief. In addition, during the first six months of 1993, as many as 1.5 million children of eight years and under received supplementary feeding in villages and schools.

External factors

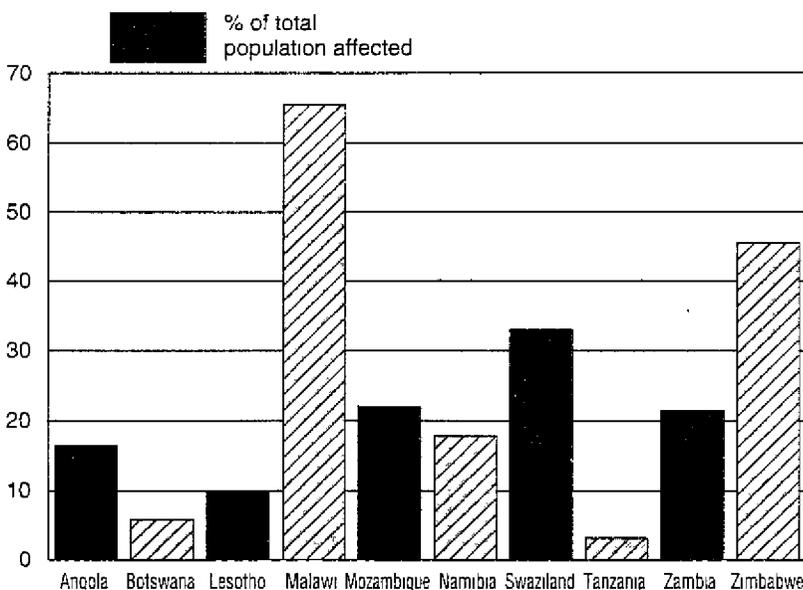
The Southern African region faced several external factors increasing re-

gional and national vulnerability to drought, from economic destabilisation to military conflict, commodity prices to structural adjustment and donor policies. Despite SADC's steady progress in promoting economic self-reliance, many of the region's economies remain dependent on and highly integrated with South Africa. Economic and military destabilisation of countries such as Zimbabwe, Zambia and Mozambique aimed to increase their dependency on South Africa's rail and port systems, compounding existing problems, from Lesotho's limited road net-

work and Zimbabwe's limited rail freight capacity and ageing truck fleet to the regions crumbling rural roads. Conflicts in Angola and Mozambique seriously disrupted food production, forcing many families to depend on food aid brought in with protected humanitarian convoys. In addition, conflict in the region has also caused millions of people to become internally displaced or refugees. The combined effects of this current displacement, along with a past and continuing history of armed conflict, clearly weakened the region's ability to cope with a drought of such severity.

Drought and food security in Southern Africa

Country	% of total population affected	Estimated total population	Estimated affected population
Angola	16.5	8,500,000	1,400,000
Botswana	5.9	1,700,000	100,000
Lesotho	10.0	1,700,000	170,000
Malawi	65.5	8,700,000	5,700,000
Mozambique	22.0	14,300,000	3,150,000
Namibia	17.9	1,400,000	250,000
Swaziland	33.0	756,000	250,000
Tanzania	3.2	25,200,000	800,000
Zambia	21.5	7,900,000	1,700,000
Zimbabwe	45.5	10,100,000	4,600,000
SADC totals	22.6	80,256,000	18,120,000



22.6% of the region's population were affected by the drought. Well co-ordinated and timely relief, coupled with the efforts of indigenous organisations, ensured that food insecurity did not turn into all-out famine.

Source: Consolidated UN-SADC Appeal 1992

The drought coincided with the global economic recession, declining export earnings and the effects on oil prices of the 1990 Gulf crisis. Structural adjustment programmes were underway in Lesotho, Malawi, Tanzania, Zambia and Zimbabwe, leading to rising food prices and declining public sector spending and employment. To comply with international demands for a rigorous economic reform programme, Zimbabwe sold most of its 1.1 million tonne national grain reserve, to contain apparently unaffordable storage costs. A year later, the country had to import grain at three times the price per tonne it received for the stockpile. Measuring the drought's impact: questioning traditional indicators A disaster's impact is traditionally reported in terms of direct losses - usually human health (number injured, suffering disease or malnutrition), lives lost (number dead) and property affected (estimated value of damage). These common benchmarks for measuring impact are most clear when a severe disaster occurs - when mitigation, early warning, preparedness, together with response efforts, fail to avert catastrophic effects.

Ironically, when disaster-reduction measures are taken in advance, minimising impact on human life and health, there is difficulty measuring a hazard's full impact on a community. This was the case in the Southern African drought of 1991/92.

Although as many as 20 million people were considered "seriously affected" across the 10 SADC states, no loss of human life has been directly attributed to drought-related malnutrition - beyond those deaths linked to the deprivations in Angola and Mozambique. In terms of health, the number "malnourished" is also difficult to quantify, in part because indicators conventionally chosen to assess the effect of nutritional emergencies on large populations measure "wasting" or acute protein-energy malnutrition in young children.

However, in Southern Africa during non-drought periods, the baseline prevalence of wasting is normally extremely low, falling to 2% in Zimbabwe and even lower in Botswana.

Because food assistance reached at-risk communities long before the onset of acute malnutrition, it was impossible to assess the drought's nutritional impact using this globally-recognised indicator. This is not to say that the nutritional status of young children was not affected. It calls into question, however, the sensitivity of the indicator "acute malnutrition" to track accurately changes in nutritional status when early emergency interventions take place in a generally adequately-nourished population. We have tools for monitoring the impact of famine on large, often displaced populations in Africa. These measures assume an already malnourished population at increased risk of death due to starvation and communicable diseases. When early interventions pre-empt such changes, death and acute childhood malnutrition are less sensitive indicators of human impact.

In future efforts to reduce the effects of drought in Southern Africa, a leading challenge will be to identify indicators which are sufficiently sensitive to measure human impact and which guide an effective emergency-response, long before the costly onset of death, disease and malnutrition. International emergency response: the lessons learned A remarkable characteristic of the 1991/92 Southern African drought-response was the mobilisation of resources throughout the region. From the extended families, the villages and districts to national and international levels, cooperation and sharing were the foundation of the successful emergency-response.

The coordinated, regional appeal by the Southern African governments was acclaimed by the UN, bilateral donors and NGOs. It rationalised the appeal for funds, showing relative need among neighbours and reducing competition for scarce donor resources. Institutional coordination between SADC and the UN expedited a more effective drought response by the international community. This was the first example of a cooperative emergency response effort ever undertaken between the UN and a regional political body. Steps have al-

ready been taken to formalise this relationship to better strengthen preparedness for the next drought.

The regional transportation system performed well, mainly due to international investment and refurbishment begun by SADC during the early 1980s in an effort to lessen dependency on South Africa's transport system. Because of this infrastructure, along with national expertise, it was not necessary to superimpose an "emergency" logistics system, complete with expatriate personnel, as has been the case in other African emergencies. However, future regional

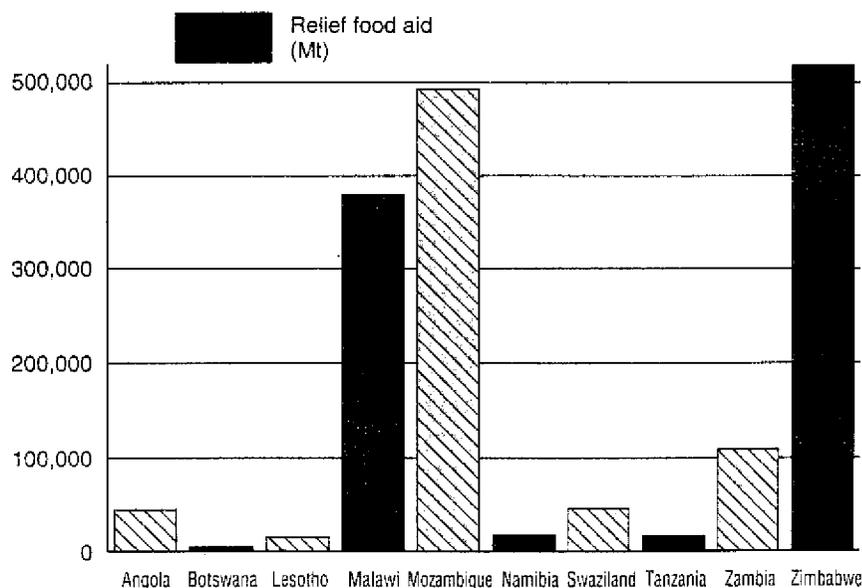
drought responses can be improved.

First, the pledging conference should address the full range of emergency requirements, including immediate food delivery, non-food needs, such as water and health, as well as agricultural inputs and recovery for the next season.

The region was unanimous in advocating that the donor emergency-response make greater use of local personnel and appropriate, locally-produced technology. Serious mistakes can be made by foreign personnel who undertake short-term assignments and do not understand the

Food relief in Southern Africa

Country	Relief Food Aid (Mt)	Value of Relief Food Aid, including transport (million US\$)	Value of Non-Food Aid (million US\$)
Angola	44,969	55.9	25.1
Botswana	5,000	3.1	2.6
Lesotho	15,702	4.9	6.1
Malawi	379,352	164.1	10.3
Mozambique	492,881	198.3	51.4
Namibia	17,850	6.9	12.3
Swaziland	46,475	14.3	1.9
Tanzania	16,500	4.6	1.0
Zambia	109,000	50.1	3.4
Zimbabwe	517,600	182.7	26.2
SADC totals	1,645,329	684.9	140.3



Over 1.8 million tonnes of relief food were moved across the region, in countries whose transport systems are normally geared for export, not import.

Source: SADC Food Security Technical and Administrative Unit, Harare, 1993

socio-cultural context or appropriate technologies. Except for the transport network, the expertise and capacity of SADC nationals were not fully utilised, and often not even acknowledged, by the donors.

In future droughts, efforts must be made to tabulate the national and local contributions to relief. All agree that the amount of labour contributed to implementation of the massive operations was enormous. However, accounting for its full value was not possible. This information gap underlines the importance of gender, as women often carried the major responsibility for child supplementary feeding, participated most in food-for-work projects (about 75%), carried out traditional coping mechanisms (gathering of wild roots and fruits, collection of distant water and fuel, informal market sales), and often carried the donated maize the last few kilometres to the village.

It is suggested that even crude estimations indicating the mobilisation of national resources, especially labour, would be of value, particularly to donors. It would put into perspective the contribution that Southern Africans themselves made to the relief effort. Without donated labour, no maize would have arrived in the villages.

NGOs were vital to the emergency response, either as central players or complementing the work of the UN and governments, and they will play a major role in the continuing recovery, as well as in future emergencies. However, the scale of demands placed on NGOs during the drought raises searching questions about their capacity, in terms of personnel, management and ability to report in a timely way. In general, local NGO response was most successful when operating organisations were linked to and supported by their international partners, bringing together grassroots staff with colleagues at national and international levels.

A strategy for recovery

Overwhelming consensus forces Southern Africans to address the issue of semi-arid agriculture as one

critical component of long-term risk reduction in the region. In this field, considerable knowledge and technical skills already exist within the region. However, government and donor policies have yet to give priority to the food-security needs of those who live on marginal lands.

These are not the communities who will rapidly increase "non-traditional exports"; nor will they contribute greatly to marketed grains or European Community beef quotas. These are the Southern Africans who live in remote areas, where roads and communications are difficult and expensive to install. In almost all SADC states, they are the majority of those who live in the rural areas, or indeed of the entire population.

SADC has already addressed the issue of semi-arid agriculture in developing appropriate seeds and pulses. Now, however, production and distribution of drought-resistant seed varieties (sorghum, millet, cowpeas) is the priority. Technical knowledge about other related approaches, including water harvesting for small vegetable gardens, permaculture, restoration of indigenous grasses and trees, reforestation which focuses on fruit trees, and regional rationalisation of surface water, is well-developed but continues to be underfinanced. The experience of the drought underscores the need for small but sustainable techniques in agricultural production which reduce vulnerability.

Complementing the need for household food security is the importance of strategic grain reserves to ensure regional food self-sufficiency. Those countries which have the potential to be surplus food producers in years of normal rain (Tanzania, Zambia, Zimbabwe) could supply grain to the perennial food deficit countries (Lesotho, Botswana, Namibia). Steps are underway among the 10 SADC members to establish physical stocks which can serve as insurance against the next drought.

Training is recognised as a clear priority. From drought management training for middle and senior government staff to community-based interventions in agriculture, health



The enormous co-operation between the states of Southern Africa - and between the public sector and private companies - to import and distribute millions of tonnes of food supplies was one of the key reasons for the success of the drought relief programme. Ports, normally geared up to process exports, particularly in South Africa, were able to reorganise quickly to handle massive imports.
Mozambique, 1987. Gideon MendelMagnum