

and water, concerted training efforts are under way to reduce the impact of future food emergencies.

One clear outcome of the Southern African drought is the pressing priority to protect and conserve the region's natural resources. Environmental degradation encourages drought. Tree loss reduces precipitation released by passing clouds. Soil erosion encourages run-off. Silting of rivers and dams diminishes surface water available.

Conversely, drought accelerates environmental degradation, as the poor use dwindling resources to help them survive - using up fuel wood, increasing the risk of silting by planting along moist riverbanks, and digging for gold in dry river beds. If drought and its effects are to be reduced, environmental priorities and the survival needs of marginalised farmers must be addressed.

Given the recurrent nature of drought in Southern Africa, action to more effectively harvest and conserve water supplies must be part of any long-term regional development strategy. But, from an economic perspective, "drought-proofing" the Southern African economies also means protecting water supplies for the agricultural sector and hydro-electricity generation for industrial expansion.

Since any integrated response to drought in terms of improving water supplies requires a long-term programme, it puts the emphasis once again on preparedness, contingency planning and early investment in water resources

Cutting the risk

The 1992/93 drought response was a major accomplishment for the households, communities and governments of Southern Africa. At the same time, the drought brought greater poverty, with millions reduced to bare survival. The hazard has been "reduced", but disaster-related vulnerability has "increased".

The current definition of the "most vulnerable" as those with below subsistence income and assets, such as cattle, and with inadequate access to productive resources, would desig-

nate 60%-70% of those in rural Southern Africa, even for the relatively more prosperous countries of Botswana or Zimbabwe. For Angola and Mozambique, 80% of the people could be considered economically vulnerable. In Mozambique, one study defined "destitute" as those living on less than US\$8 per month and eating less than 1,400 calories per day - it was 30% of the population.

Rehabilitation back to precarious margins of poverty is not sufficient to lower disaster risk. For that, the reduction of economic vulnerability - particularly in rural communities - is an urgent priority in Southern Africa.

International lessons

As with many disaster events, the factors that trigger them and the response made by internal and external organisations are often conditioned by the particular social and economic conditions of that area. Thus, many of the factors that enabled the Southern African region to cope successfully with this potentially-devastating drought may not be easily replicated in other parts of the world. Nevertheless, there are certain elements that can serve as pointers for serious reflection by decision-makers at the national and international level.

First, the existence of regional institutions with a political will to cooperate, and adequate and flexible structures that work effectively in practice. Second, the political will at national level to establish a pragmatic partnership between the public and private sectors. Third, the provision of a structural framework in which the energy and potential of the NGO sector can be harnessed. Fourth, a recognition on the part of donors that supporting efforts to strengthen organisational capacity at the regional, national and local levels is the true cornerstone of sustainable disaster reduction.

Lastly, and most importantly, local communities and families almost invariably have the potential to organise their own disaster response and recovery; what external organisations require is the means to help them better achieve this.

Focus 8 Lesotho, South Africa, Zambia: dealing with drought

Subsistence and survival

The factors which contribute most significantly to vulnerability in Lesotho are its mountainous geography, harsh seasonality, soil erosion, subsistence farming, unemployment and a fragile economy which is affected by variations in the remittances from migrant workers employed in South Africa. During the drought - which in Lesotho actually began in 1990-91 - these factors determined whether a family survived without becoming destitute or hungry.

In general, poverty is worse in the rural areas of Lesotho (total population 1.76 million), and is especially severe in the mountain districts. Household incomes in the mountains and rural lowlands are 66% and 50% less, respectively, than those of their urban neighbours. Possibly the most important factor for increased poverty in the mountains is the lower proportion of migrant workers in families - a fact aggravated by rapidly rising retrenchment of mine workers in South Africa.

Lesotho's rural economy depends heavily on migrant labour and subsistence farming, with most households alternating between these complementary economic systems at different times of the year. During the post-harvest months (after May), most of the rural population withdraws from the cash economy to subsist off the annual harvest. However, as household food supplies dwindle, families gradually re-enter the cash economy, usually depending on other income sources to purchase food. In this cycle, the poorest families are only able to produce enough food from their own fields to last a very short period.

Unlike other countries dependent on subsistence agriculture, the most disaster-prone season occurs during the post-harvest months rather than the period immedi-

ately preceding the annual harvest. Because of Lesotho's mountainous terrain, poor weather can easily isolate highland communities from key services and markets. In addition, these areas are repeatedly exposed to drought, hail storms and early frosts - all placing food-security at risk.

In Lesotho, rural subsistence relies heavily on repatriated wage earnings, primarily from migrant workers in the South African mines. It is this cash that allows farmers to buy essential agricultural inputs to ensure a successful crop. One of the most difficult issues in assessing and targeting household relief has been how best to measure access to migrant earnings. Recent poverty studies have shown that widows, retired miners, the disabled and the elderly have the least access to migrant income. However, with the advent of large-scale retrenchment of mine workers during the past five years, the number of highly-vulnerable households has dramatically increased.

In mountain areas, the problem of poverty is further compounded by environmental degradation and limited access. In the foothills and mountain areas, poor roads, steep inclines and long distances between villages make access impossible without pack animals. These transport constraints became real obstacles during the drought when relief goods had to reach isolated villages.

In addition to drought, poor rural communities face the risk of violent snowstorms. These do not have disastrous effects if they occur in June and July - the winter months in which snow falls are expected, and people are prepared and able to cope. However, when a snow fall occurs in October, it becomes a disaster, destroying livestock and crops, causing floods, severing contact with isolated mountain villages and mak-

ing delivery of relief goods and assistance difficult. During these periods of isolation, villagers have no option but to consume food reserves normally set aside for the pre-harvest months and the seed for summer ploughing.

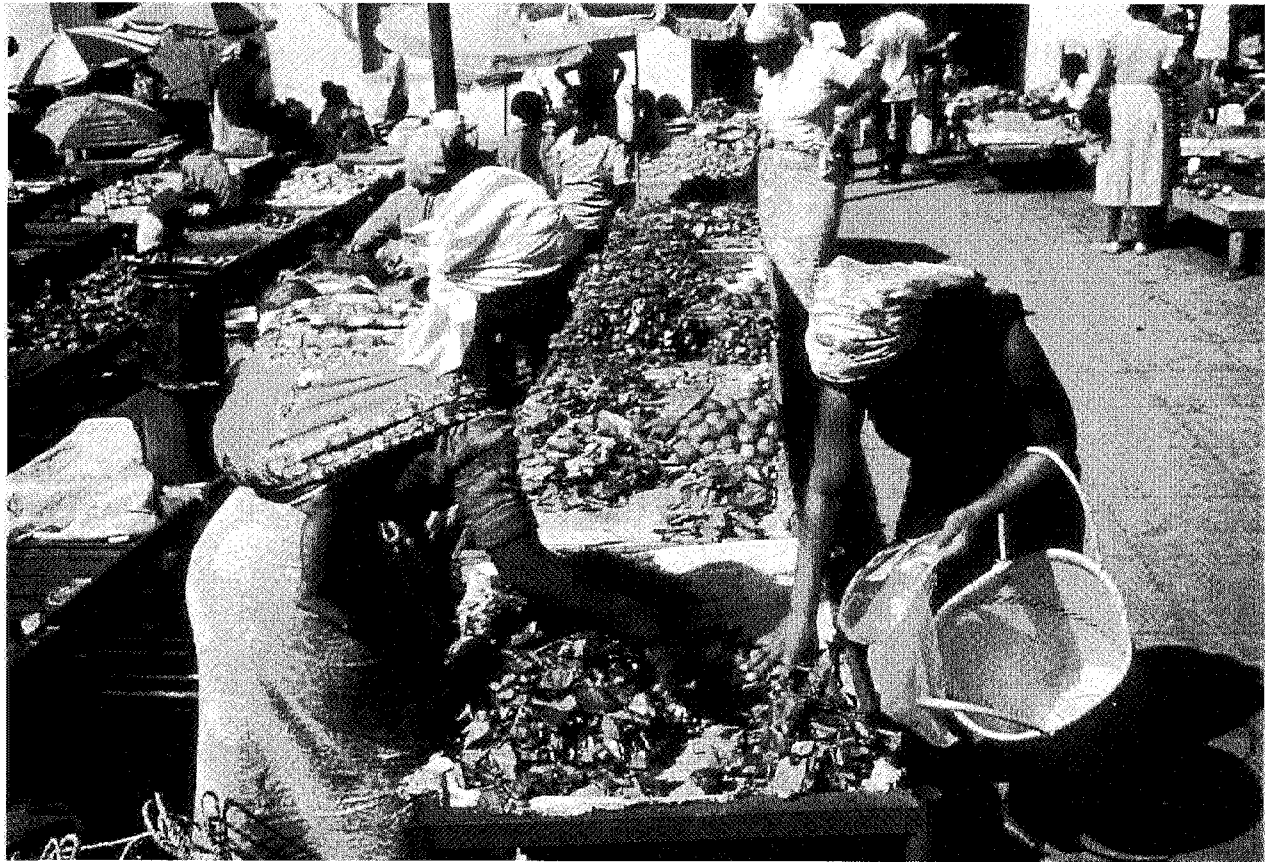
In Lesotho, reducing vulnerability is a multifaceted task. It involves a host of interventions, including soil conservation to prevent further environmental degradation, strengthened food security for mountain dwellers, as well as improved communications and road access in those areas which face the risk of recurrent disaster, whether this be snowstorm or drought.

Soil erosion is a particular problem in Lesotho. Governmental agencies and NGOs must work closely with vulnerable communities to halt soil erosion that is the result of chronic overgrazing and poor land use. There is a pressing need for education, land-use policies and incentives to encourage farmers to rehabilitate and protect their environment for the long-term.

Another priority is to strengthen food security in the mountains so that these communities become more food self-sufficient, as well as to establish sustainable income-generation initiatives to replace the dwindling mine-workers' remittances.

Improving the physical infrastructure in high-risk areas by strengthening road- and communication-links will significantly lower community vulnerability, while improving strategically-located key services and facilities, such as well-equipped health clinics, will reduce individual vulnerability.

Lesotho's mountain dwellers have long coped with the demands of a harsh climate and isolated terrain. There is growing interest in better local weather monitoring, allowing warnings to be dissemi-



The scale and scope of government co-operation across the Southern Africa countries was complemented by massive local action by families, villages and communities to secure and conserve food supplies and to ensure adequate water for livestock. Local efforts, in partnership with additional external resources typified the Southern Africa relief operation
Mozambique 1987 Gideon Mendel/Magnum

nated earlier and preparatory steps to be taken.

Reducing vulnerability in Lesotho is not a simple process. However, these measures will strengthen further community resilience to cope with repeated threats of snowstorm or drought.

Rural Poor at Risk

The special vulnerability of South Africa's rural population can be explained by a mixture of factors: uneven distribution of land and wealth, concentration of health, education and other services in a small section of the population, and - not least - the political and economic marginalisation of black South Africans, the majority of the population.

In rural communities, this combination of poverty, limited access to essential services and widespread unemployment aggravated the effects of last year's drought. Moreover, the drought's already-devastating impact on the farming industry was reflected in high rates of farm retrenchment, causing unemployment. In South Africa, this not only meant that farm labourers lost their jobs, but also their housing, leaving them no alternative but to move closer to towns and cities in search of work and homes.

It is thought that as many as 300,000 farm labourers were affected this way during the 1991/2 drought, fuelling the growth of densely-populated and under-serviced peri-urban squatter settlements. As elsewhere, many shanty towns are in areas exposed to other hazards, including river beds which face a seasonal flood risk. The consequences of sudden immigration seen so often in other parts of Africa - malnutrition and communicable diseases - have become expected features of South Africa's peri-urban landscape

With attention focused on urban unrest and violence in South Africa, the needs of the rural population are neglected. Even with a new democratic government, there is little hope that the situation of the rural poor will improve for many years.

Local response

Zambia's national food security has repeatedly been undermined by droughts in 1982/84, 1987 and 1990, even before the onset of the severe drought conditions in 1991/92. Following a decade of economic decline, much of the country's physical infrastructure had fallen into a state of severe disrepair, with escalating rates of both rural and urban impoverishment.

The drought is estimated to have severely affected approximately two million rural Zambians, largely in the Southern, Western and Eastern Provinces. In these areas, the maize-crop loss ranged between 40%-100%. Most of these communities were located in inaccessible areas, far from functioning road- and rail-links, with limited access to health care and education.

A unique aspect of Zambia's drought operation was that it was initiated soon after a change in government. Local-government elections were due within a few months as the relief operation began. The newly-elected government made the decision to separate relief efforts from the politics of local government elections.

For food relief, Zambia established a practical inter-agency structure at national and local levels called "the Programme to Prevent Malnutrition" (PPM). The national PPM comprised representatives of the ministries of health and agriculture, key UN agencies, such as Unicef and the

World Food Programme, and NGO representatives from each of the 26 geographic areas targeted for food assistance. One NGO was designated to be the "lead agency" per area, to coordinate all NGOs participating in the "Area PPM" Committee. To support the programme administratively, an NGO called "the Programme Against Malnutrition" was created as the relief operation's secretariat.

Through this structure, more than 50 NGOs had access to 247,000 tonnes of maize in district depots for targeted distribution to two million people. The secretariat allowed rapid processing of maize requests and reimbursement of transport and other costs. The National PPM Committee provided the first functioning forum for a wide range of NGOs, government and UN agencies to cooperate in a national emergency. The operational partners were diverse, including small mission hospitals, international NGOs, local organisations as well as government ministries. The efficiency of this contact and the confidence it built between donors, government, NGOs and UN agencies has permitted the structures to "phase-over" into recovery and mitigation planning for drought-prone communities.

Zambia foresees a two year post-drought recovery period. The priorities will be rehabilitating agriculture and restoring national and household food security. Mechanisms developed during the drought provide individual NGOs with the flexibility to carry out health, water, agricultural and development activities which are consistent with their own priorities and programme strengths, while also working with diverse partners to reduce the vulnerability of high-risk communities to future drought.