Impact and Livelihoods

6.1 Introduction

While it is not possible to make a definitive statement about the extent to which Mozambique's affected population has recovered, it certainly seems that there has been substantial level of recovery after the 2000 floods.

The community survey found that a very positive feature of Mozambique's recovery work has been the rehabilitation and reconstruction of damaged infrastructure. Communities have welcomed schools, health posts, water supplies, and roads. The funding available through the recovery programs made it possible not only to repair or replace existing infrastructure, usually to higher standards, but also to build new facilities where none existed before. In the areas where additional facilities were provided, they were provided in accordance with previously identified priority areas, and human and financial resources were made available to staff these new facilities. For example in Chokwe, 249 new classrooms were built in the recovery phase. In total 101 schools were rehabilitated, constructed and equipped. An additional 4,500 children were enrolled at school in the district.

Opportunities were also taken within recovery work to extend ongoing programs. For example, UNICEF was able to commence implementation of a school health program. Malaria prevention activities were extended to cover the whole of Gaza province under the National Malaria Control Program (UNICEF 2000d; Cosgrave 2001).

The government's PARPA identifies isolation and lack of roads as major contributing factors to rural poverty. The reconstruction of existing roads and the provision of some new roads have been welcomed by remote communities.

6.2 Response to livelihoods

The community survey found that agriculturally based rural communities with low levels of capital investment or agricultural inputs were generally well served by livelihood strategies rapidly implemented after the floods. Seeds and rudimentary tools were distributed, people resettled, and plots of land were distributed for farming. The seeds and tools distributions were well coordinated and adapted to the realities of each of the areas covered. The introduction of new crops was carried out with extensive consultation and follow-up by the agencies. For example the introduction of orange flesh sweet potato was widely carried out in the flood-affected areas, introducing an ongoing food security and nutrition initiative by the Agricultural Research Institute. As a food security crop with high potential for improving infant feeding, women were particularly involved in the extension work, which emphasized weaning foods for young infants and included planting techniques and preparation of the potato.

Many households lost significant numbers of large livestock. Poorer households lost chickens and ducks. Livestock is an important part of a household livelihood and acts as a hedge against crop loss. Cattle are symbols of wealth and power within the community. The re-stocking of high value animals such as cattle was less common in all of the areas visited. When cattle were distributed it was always through a formal association or group distribution system. Small livestock were distributed with varying degrees of success. A number of villages were decimated by Newcastle's disease in chickens shortly after the restocking had been completed. The inability of the government and/or agencies to address the question of asset depletion

in the form of cattle loss has meant that the rural communities are significantly more vulnerable than they were before the floods.

The survey also found that communities reliant on fishing as part of their livelihood strategy suffered from the same constraints identified for the cattle rearing communities. Fishing was originally a household activity before the floods, but due to the cost of the capital equipment for fishermen, associations carried out the asset replacement. Fishermen have begun to work together in order to access the boats and nets offered. It is not clear whether the associations will continue to exist in the long-term or were merely convenient distribution mechanisms.

Some agencies supported livelihoods through existing savings and credit programs. In a well-established small credit scheme in Chokwe, the NGO World Relief gave cash grants to its clients after the floods in order to restock their businesses and begin repayment of the loans. This scheme was particularly targeted at female-headed households. The intervention was highly successful, as businesses were kick-started and the debtors did not default on their loans. Other organizations gave cash grants to supplement the distribution of construction materials.

USAID carried out a major resettlement grant scheme involving cash distributions tomore than 106,000 rural families in over 30 districts. The scheme distributed US\$9.7 million and aimed at helping people to reestablish themselves and also to jump-start economic activity. Each (usually female) head of household received a payment of about US\$92.

According to an independent evaluation (Abt 2002), grants were primarily spent on household goods (e.g., dishes, pots, pans, blankets), clothes, and livestock. The money was spent mainly near local distribution points, thus remaining in the region and stimulating sales and job creation by retail traders. Food prices increased substantially during and after the floods, but food inflation effects of the program were minor, given the tendency by households towards purchases other than food. The program contributed to the revitalization of distribution networks in affected areas. The extra income that trickled up to local retailers in the form of increased business allowed them to restock their stores and repair damages caused by the floods.

The community survey found that post-emergency training and capacity building was minimal with very few organizations working with the communities to identify existing skills for re-skilling, marketing opportunities, or alternative income sources. It appears that interventions to tackle these issues are seen as the prerogative of the development programs. This resulted in missed opportunities in terms of restoring and enhancing livelihoods for the affected communities. For example, the extensive infrastructure rehabilitation did not maximize impact on the communities by using intensive labor-based construction, skills of local craftsmen/women, and the creation of skills inventories for future use. In the road schemes that it supported, DFID did encourage the use of labor-intensive methods, rather than fully mechanized approaches. The National Roads Administration is gradually introducing social clauses into all road-building contracts in order to maximize the impact on local communities.

Many external agencies, particularly NGOs, insisted on collective distribution mechanisms for capital items, for example, cattle. Households generally needed to be part of an association or a trust group to receive livestock. In the area of housing construction, committees were formed to allocate, inspect, and implement the work. The external agencies also generally insisted on a gender balance in decision-making positions. It is difficult to judge whether this will result in new social groupings and ways of working in the communities, or whether the communities will return to their previous social organization. However, according to the fieldwork carried out, beneficiaries saw the changes as positive and stated that the approach had the added value of knitting the communities together after the disruption of the disaster. It seems therefore that there has been a mixed sensitivity of agencies to livelihoods in recovery programs.

6.3 Resettlement

After the 2000 floods, 43,400 families were resettled to less flood-prone areas (IFRC 2002). Shelter assistance to those not resettling on approved sites was forbidden (Cosgrave 2001). The temporary accommodation centers were closed down as soon as possible after the disaster, and lack of preparatory work at some resettlement sites caused unnecessary suffering according to the Disasters Emergency Committee (DEC) evaluation.

The community survey shows that the resettlement program raised a number of issues:

- Many of the resettled populations had to move a considerable distance from their farms. This led to the
 households taking one of two options refusing to move and maintaining their homes in the lowlands
 but not receiving any official support, or living in the resettled areas and building temporary shelter near
 the farms during peak agricultural work periods. Facilities such as schools and health clinics are being
 provided in the resettled areas.
- Families resettled from the city of Maputo were please to find themselves with more space and privacy than previously experienced in the overcrowded suburbs. This was mentioned as a positive aspect. However, these families were faced with reinventing livelihood strategies becoming farmers instead of petty traders and social disruption with the male members of the household staying in the city during the week and only returning home at weekends in order to maintain jobs and other income earning opportunities. The majority of households in Marracuene was pleased with the new housing arrangements and felt that the fresh start may help to create a community spirit not apparent in the city, where criminality was one of the major risks to household livelihood security.
- In areas such as Chokwe where land was not an issue, resettled families were accepted and absorbed. By contrast, in Marracuene the resettled population has found it difficult to find land for farming in the area and was having to "borrow" land from residents in a type of sharecropping scheme. Initially in the resettled areas resident families did not benefit from new housing, but this created conflict within the communities, and the national NGO involved decided to expand the re-housing program to include all affected residents in the settlement areas.

These issues illustrate the sensitivities and complexities associated with resettlement. It seems crucial that there are full evaluations of the schemes so that lessons can be learned for the future.

6.4 Housing

The community survey found that the provision of housing during the recovery period was one of the most positive interventions for affected populations. The general housing stock was improved in the hardest hit areas. There was no standard plan for house construction. Some NGOs required that communities organize themselves to build houses using a rotating system and mutual support. In other areas construction firms were hired to build the houses with a community housing committee formed to supervise the works. In northern Inhambane, households were provided with materials and cash in order to pay for labor.

In contrast to the education and health sectors, there were no standardized plans for low cost housing. The type of housing provided was largely decided by the NGOs and external agencies and was dependent on the amount of money available. As a result, standards varied considerably. Surprisingly many of the agencies failed to provide sanitation facilities. None of the new housing complexes, built to house displaced populations, contemplated alternative low cost sewerage options, such as septic tanks.

6.5 Gender equality

The recognition of the position of women by external agencies during recovery appears to have led to some changes. In Chokwe, people claimed that gender relations had changed since and because of the disaster due to exposure to new ideas introduced by agencies. They cited a more active participation by women in community groups. External agencies insisted on female participation, for example in housing committees. In Marracuene, a less isolated area than Chokwe, people did not believe that changes in gender relations could be attributed to the floods, but had already been taking place due to factors including male migration and some increase in women's access to education.

The community survey found cases of good practice by implementing agencies working on resettlement that insisted that housing and land be registered so that women's rights were recognized. This was an important first step towards increasing women's habitational security.

6.6 Political impact

The floods also demonstrated the political implications that natural disasters can imply. Inevitably the government's handling of the 2000 and 2001 floods responses and recovery were seen in political terms through the perspective of relationships with the Renamo opposition party. The opposition, mainly based in the north and center of the country, used the amounts of money pouring into the south after the 2000 floods to demonstrate that Frelimo was favoring its own areas. Apart from the fact of the magnitude of the disaster, this analysis also ignored the fact that, beyond the Maputo region, areas such as Gaza province received relatively little international development assistance prior to 2000 compared with areas further north.

Government arrangements for handling the recovery funds were done in such a way as to ensure that donor funds and government expenditure was not diverted from ongoing work in non-flood-affected areas. Some agencies, such as the Mozambique Red Cross, were sensitive to the issue of possible imbalances of expenditure and attention between the south and the north and ensured that their northern branches were fully involved in training opportunities and development of community based preparedness schemes.

The 2001 floods occurred in mainly Renamo areas, and clearly the government had to ensure that it was seen to respond as seriously and on a scale with the floods of the previous year. Hence the base for coordination of the 2001 response was in Beira rather than Maputo. Nevertheless the government had a dilemma because the 2001 floods were lesser in scale than those in 2000. It also judged that there could not be a repeat of the Rome donor conference. Instead the government organized a lower profile donor meeting in Maputo that included a strong element of report-back on 2000 floods recovery.

6.7 Mitigation and preparedness

As stated earlier, opportunities were taken in the recovery programs to realize infrastructure that will be better able to withstand future flooding. This included building road embankments with drainage points to allow water to drain away quickly, to make some public infrastructure stronger and to resettle populations on higher land (IFRC 2002).

Recovery plans also included provision for improving disaster response and mitigation. Investments have been made in the Meteorological Institute (INAM) and in the INGC (GoM 2000f). The INGC's annual national preparedness plans have improved in quality. However there are concerns about the speed of work in developing the capacities of the INGC.

From the community survey field work, it seems that although district administrators may be aware of the need for contingency planning, there has been little real capacity building to support the good intentions. In

general, district administrations do not have the resources or experience to put into place mitigation and preparedness strategies. There is a need to capitalize on the positive experiences of coordination and generally good donor impression to build robust institutional mechanisms for disaster management at the district level.

National and international agencies have updated their strategy papers and also prepared annual contingency plans (UNRC 2001a; UN system 2002). A range of agencies including the Mozambique Red Cross, CARE, GTZ, the Christian Council of Mozambique and LWF are developing programs for community based disaster preparedness and disaster risk management, as well as revamping their disaster response capacities. However, in the areas covered by the fieldwork no agency was working with the communities to carry out vulnerability assessments on which to base mitigation plans.

The field survey found that communities were able to state clearly the safe areas in the vicinity of their villages. They were also clear that they would respond to flood warnings in the future. However, questions of preparedness were not raised by the communities who generally saw themselves as victims of the "acts of god" and not active players in the prevention of future disasters.

The further development of regional preparedness and early warning within the SADC early warning system and water management strategy frameworks will be crucial for Mozambique's flood preparedness and mitigation.