# SECTION I: THE MOZAMBIQUE COUNTRY CASE STUDY

# Introduction and Background

#### 1.1 The ProVention Consortium lesson learning review

This report is part of a five-country review of lessons learned from recovery after major natural disasters. The other four country studies – on Bangladesh, Honduras, India, and Turkey – have been completed, and a synthesis report summarizing the findings of the review, and drawing out similarities and differences between the different experiences of recovery, is forthcoming.

The lesson learning review has analyzed the strengths and weaknesses of recovery assistance from governments, donors, and civil society following major natural disasters. Lessons learned and good practice identified through this analysis will be of use to the donor community and governments in developing more effective policies and procedures, and in crafting future disaster assistance programs. For this reason one focus of the exercise is on how replicable good practice is achieved, and how constraints to overcoming good practice are overcome. The review has been made up of country visits (Honduras and Mozambique); desk studies (Bangladesh, India, and Turkey); and community surveys (Honduras, India, and Mozambique), with a strong focus on understanding recovery-related livelihoods of the affected population, and whether these have been supported by external interventions. Countries were selected to provide a representative picture of recovery.

The ProVention Consortium is a global coalition of governments, international organizations, academic institutions, the private sector, and civil society organizations aimed at reducing disaster impacts in developing countries. The Consortium functions as a network to share knowledge and to connect and leverage resources to reduce disaster risk. It focuses on synergy and coordination so that efforts, and benefits, are shared. Further details on the ProVention Consortium and its work can be found at www.proventionconsortium.org.

For the review as a whole, Tierney's (1993) definition of recovery has been used:

Longer-term efforts to (1) reconstruct and restore the disaster-stricken area, e.g. through repairing or replacing homes, businesses, public works, and other structures; (2) deal with the disruption that the disaster has caused in community life and meet the recovery-related needs of victims; and (3) mitigate future hazards.

#### 1.2 Background to the Mozambique country case study

Mozambique was selected for review as an example of a post-conflict country faced with a major natural disaster. It also offers an example of recovery not only in an extremely poor and primarily subsistence livelihood population, but also in a country favored by donors and receiving substantial amounts of relief and recovery assistance. The review provides an overview of the recovery processes and highlights livelihoods and agriculture. The floods in 2001, following those in 2000, provided an opportunity to see whether lessons had been learned between the two disasters.

The review is based on a range of interviews with key stakeholders (see annex A), as well as identification and analysis of relevant documentation. Stakeholders were selected to cover a range of government, donor, multilateral, bilateral agencies and organizations, as well as international and national NGOs.

The study was supported by a Mozambican non-profit organization, Associação de Nutrição e Segurança Alimentar (ANSA). ANSA also carried out a complementary community survey in three locations to assess the impact of recovery on communities and the roles played by local government and agencies. This review and the community survey were designed to focus on overlapping areas and to garner responses concerning recovery from both key stakeholders in the government and agencies and the affected population. The full community survey report appears in Section II of this document.

Apart from NGO evaluations of specific emergency programs, apparently no other post-emergency research has been carried out looking at recovery programs and their impacts on communities.

The areas visited were chosen to represent the characteristics of the flood-affected areas:

#### Chokwe

- Remote rural areas affected by the floods
- Rural area, closer to roads, affected by the floods

#### Marracuene

- Rural area affected by the floods, with resettlement
- Resettlement area (urban overspill)

#### Northern Inhambane

- Remote rural area affected by the floods with resettlement
- Rural area, resettlement close to road rehabilitation

The main constraints to this review were:

- A lack of evaluative and independent reports on the recovery phase
- The breadth of the subject matter to be covered, the review being an attempt at a small-scale, systemwide review
- The practical difficulties of getting interview time with key busy people in both the Government and various international agencies
- Due to scheduling difficulties, the reduction of the review team size shortly before the mission took place.

Chapter 2 of the report looks at the background to natural disasters in Mozambique. Post-flood recovery is then analyzed in terms of policy (chapter 3), systems (chapter 4), resources (chapter 5) and impact and livelihoods (chapter 6). Finally chapters 7 and 8 deal with conclusions, lessons learned and recommendations.

## **Background to Natural Disasters in Mozambique**

#### 2.1 Natural disaster context in Mozambique

The World Bank notes that natural disasters, along with the social and economic impact of HIV/AIDS, are one of the main risks to the achievement of Mozambique's poverty reduction strategy. From 1965 to 1998, there were twelve major floods, nine major droughts, and four major cyclone disasters. Droughts, exacerbated by the impact of the war, have had the most devastating impacts. Four major droughts and famine between 1980 and 1992 caused an estimated 100,000 deaths (Maule 1999; World Bank 2000c; 2001b) (see also Annex B).

The geography of Mozambique is dominated by ten main river systems that cross the country from west to east and drain into the Indian Ocean along Mozambique's 2,500 km coastline. The catchment areas of these rivers drain water from vast swathes of southern Africa, stretching into Botswana. The management of water flows from two major dams, the Cabora Bassa and the Kariba, also has a major impact on flood risks in Mozambique. Early warning and flood control systems for Mozambique are therefore a regional issue that involves close collaboration with other countries of the Southern Africa Development Community (SADC).

In addition to flood risks from high rainfall in the river catchment areas, Mozambique is prone to tropical cyclones that travel up the Mozambique Channel, particularly in the period of January to March each year.

Given Mozambique's propensity for natural disasters, a surprisingly small amount has been written on this subject. There is a distinct lack of analysis of flood-prone areas, flood impacts, and potential mitigation and preparedness measures. A review of the literature in 1999 found no information regarding socio-economic vulnerability to floods. Only 16 of the country's 500 hydro-meteorological monitoring systems were functioning in 1997 (Maule 1999).

There are historical reasons for the acknowledged lack of preparedness for the 2000 floods. Until the late 1990s, disaster management in Mozambique was a reactive process, mainly due to the instability and insecurity caused by 17 years of war (Maule 1999). Following the end of the war in 1992, the government of Mozambique, the Mozambique Red Cross, national NGOs, and international agencies wanted to move away from the war-time relief mode. Development became the priority, and disaster prevention and preparedness were not intergrated into those efforts.

The government disaster relief agency (Departamento de Prevenção e Combate as Calamidades Naturais, or DPCCN) had an unsustainable post-war delivery infrastructure of 3,000 staff and 400 vehicles. In 1999, Government decree no. 37 replaced the DPCCN with the National Disaster Management Institute (Instituto Nacional de Gestão de Calamidades or INGC) with an emphasis on coordination rather than delivery (see sections 3.1, 4.2).

During the same period, national agencies such as the Mozambique Red Cross and the Christian Council of Mozambique scaled down their disaster response capacities that had become financially unsustainable. One international NGO reported that it was working actively "to root out the remnants of emergency thinking" in its staff.

The scaling down of preparedness and response capacities during the late 1990s coincided with a period of few major disasters. This resulted in diminishing institutional memories (Maule 1999). Disaster preparedness and contingency planning among all agencies dropped off the list of priorities (UNICEF

2000a). Agency strategy documents for Mozambique did not heavily feature the possible threat of major natural disasters.

Seasonal flooding took place in early 1999, and the INGC and other agencies did draw up contingency plans for 2000 in anticipation of further flooding, although not on the scale that occurred. The government appealed for US\$2.7 million for immediate preparedness and mitigation activities, but less than half of that amount was pledged by international donors (ISDR 2002).

#### 2.2 The Mozambique context for recovery

Mozambique is one of the poorest countries in the world, listed 170<sup>th</sup> out of 173 in the UN Human Development Index (UNDP 2002). Sixty-nine percent of the population lives below the established poverty line of US\$ 0.40 per day.

The country has faced seemingly overwhelming odds since Independence in 1975. The Portuguese rapidly left a highly undeveloped country with very low levels of education and training and an economy and transport system skewed to the rest of southern Africa's economic needs. The creation of the rebel Renamo (Resistência Nacional Moçambicana) movement by the Rhodesian government in 1976, which was subsequently backed by South Africa, led to a 17 year civil war and an extended period of attack and destabilization by South Africa in defense of its *apartheid* system.

The war resulted in at least one million deaths and devastated many parts of the country and its infrastructure. Over one third of the population was displaced at some point, and 1.7 million lived as refugees in neighboring countries. Sixty percent of primary schools and 40 percent of primary health posts were destroyed.

Following a peace agreement in 1992, elections were held in 1994 and the UN supervised the return of refugees and internally displaced people, and the demobilization of 92,000 ex-combatants.<sup>2</sup>

Mozambique remains a developing democracy with substantial tensions between the Renamo areas of the north and center and the Frelimo areas of the south, including the capital Maputo. Second general elections were held in 1999 and Renamo, disappointed by the result, challenged the validity of the elections and threatened to set up its own government. These political developments were overtaken by the 2000 floods, but the volatile relationship between the two political parties in the Parliament remains an impediment to Mozambique's transition to a more stable political environment (MRC 2002). Rioting in parts of the north and central provinces of Mozambique in November 2000 was a painful reminder of the ongoing tension following the bitterly fought civil war. North-south tensions are further exacerbated by the difficult road communications in such a long country, with the major transport routes running east-west.

Economically, the Frelimo government, under heavy pressure from donors, started to transition from a centrally-planned economy with a socialist approach to a market economy back in 1987. Since the war ended, the country has maintained a high growth rate, averaging 8 percent, partly due to the catching up process once land was accessible, and once substantial recovery projects and mega projects began, such as the Mozal aluminum plant that started production in 2000 (Batley; GoM 2001c).

There are a number of features of this economic growth:

Agriculture and fisheries contribute 31 percent of Mozambique's GDP and engage 80 percent of the
population. Services, including tourism, account for around 40 percent of GDP, and manufacturing and
construction contribute 19 percent (African Development Bank 2002).

<sup>&</sup>lt;sup>2</sup> 70 percent of demobilized ex-combatants found secure jobs (UN 2000).

- Mozambique has received continuingly high levels of international donor support and has a substantial dependency on foreign assistance, with more than 50 percent of its public spending and about two thirds of public investment coming from external sources (Batley 2002).
- Economic growth has tended to be concentrated in and around Maputo, and to a lesser extent in Beira, in the center. Maputo produces 40 percent of GDP and accounts for 10 percent of the population (GoM 2001c). The impact of economic growth has been uneven with parts of the population of urban areas benefiting disproportionately, particularly in Maputo.
- There are substantial differences in social conditions across the country. The Infant Mortality Rate for Maputo is 60 per 1000 live births and 183 for Zambezia. In 1997 only 14 percent of women and 44 percent of men in the north were literate, compared with 77 percent and 93 percent, respectively, in Maputo (EC 2002).
- Mozambique's economy remains very dependent on neighboring economies, particularly that of South Africa. Zimbabwe's economic decline has had a negative impact on the Mozambican economy.
- There have been social costs of economic restructuring, for instance the liberalization of the cashew nut processing industry involved a loss of 10,000 jobs (IRIN 2/10/02).
- In September 2001, Mozambique became the third country (after Bolivia and Uganda) to reach the HIPC completion point, resulting in a reduction of total external debt by 73 percent since 1996 (WB News Release 25/9/01).
- Mozambique continues to be held back by its poor infrastructure. It still remains uneconomical or impractical to move food surpluses from one part of the country to another.
- The acute shortage of Mozambicans with higher education qualifications also remains a major impediment to development (WB 2001d). In 2000, only 6 percent of staff in the Ministry of Planning and Finance held university degrees (Fozzard 2002).

The Action Plan for the Reduction of Absolute Poverty (PARPA) envisages reducing the proportion of GDP spent on priority social areas during 2004 and 2005 in order to help bring government budgets into balance and reduce the country's dependence on external assistance. It remains to be seen whether this shift in resourcing can be squared with the massive need for continued investment in basic services such as health and education (MRC 2002a; SCF 2000a).

The Mozambican population is predominately young and rural, with only 23 percent of the population living in urban areas (provincial capitals) and almost half of the entire urban population living in Maputo city. (UN System Mozambique 2001). Mozambique has one of the lowest urbanization rates in the world (GoM 2001c).

A significant factor bearing on the response to and recovery from the floods of 2000 and 2001 has been Mozambique's positive relationship with its donors. The donors developed sympathy, respect, and solidarity for Mozambique during its suffering as an anti-*apartheid* Front Line State. Strong links were developed then with Nordic governments and the UN. Wider donor respect has grown through the 1990s as a result of the management of the economy and the success of the peace process. A key element of this donor support has been the United States' commitment, seeing Mozambique's continued political stability and economic growth as essential to its interests in southern Africa.

"Mozambique has become Africa's most successful example of post-conflict reconstruction and development. Rapid economic growth, poverty reduction and political stability have been underpinned by market reform, democratic development and national reconciliation" (EIU Mozambique Country Profile 2001).

"Mozambique is to be commended for its successful record of policy implementation, which has, over more than a decade, brought stability and rapid economic growth to one of the world's poorest countries."<sup>3</sup>

There is a long history of donor coordination in Mozambique and a continuing high level of coordination that has increased significantly over the last few years. Every sector has a donor or donor/government focal group. Increasingly, donors and government are moving towards coordinated sector-wide approaches and common mechanisms for appraising, monitoring, and funding sector programs. Health, education, agriculture, roads, and macro-financial support all have particularly strong donor or donor/government groups. Non-sector specific groups also exist, such as the EU Heads of Cooperation Group (DFID 2001).

In spite of the scale of donor support and the power that lies in donors' hands, there is a sense of partnership with the government in which the latter keenly exerts its sovereignty. Much of the donor-supported assistance is focused on working with and in support of government departments. However there have been some concerns that donors have weakened public administration by using semi-autonomous project management units and by hiving off government staff to their own projects (Montes 2000).

In relation to the impact of the flood disasters of 2000 and 2001 and the subsequent recovery process, some features of Mozambique's society can be noted:

- Nearly 70 percent of Mozambique's population falls below the official poverty line.
- Female-headed households are prominent in the South, as is a matrilineal society in the North. Mainly male migrant labor to the mines of South Africa has been an important livelihoods feature; 25 percent of households receive remittances (UNRC 2001a).
- As in the rest of southern Africa, HIV/AIDS is becoming a dominant feature of mortality rates. AIDS prevalence was 16 percent in 2000, but over 20 percent along some transport corridors (UNRC 2001a). HIV/AIDS now constitutes the greatest single threat to development (WB 2000f) and a constraint on economic growth with an estimated medium term loss of 1 percent growth of GDP (GoM 2001c).

The capacity and resources to work land are generally the limiting factors to cultivation in many areas of Mozambique (GoM 2001c). However, there was a low incidence of land conflict as millions of people returned to rural areas after the war ended, with the allocation of land being managed through local processes and with local leaders (Tanner 1996). The 1997 Land Law represented an important effort to integrate customary and formal legal frameworks, to secure land rights for communities, families and individuals, and stimulate development in rural Mozambique. It emerged from an unparalleled process of dialogue and collaboration between the government, civil society, and specialists (Tanner 2002). Some conflicting interests in land and resource use did emerge in post-war Mozambique, particularly in areas near Maputo (McGregor 1997). The community survey found that the post-flood resettlement program caused tensions in these areas.

#### 2.3 The 2000 and 2001 floods

Mozambique's floods in 2000 were created by a succession of tropical storms, starting with depression Connie between 4-7 February. Cyclones Eline and Gloria followed later in the month. Heavy and persistent rain across southern Africa resulted for the first recorded time in the simultaneous flooding of the Limpopo, Incomati, Umbeluzi, Save, Buze and Pungoe rivers. At least 700 people died, 650,000 were displaced and 4.5 million were affected, totaling about a quarter of Mozambique's population (GoM 2000f).

<sup>&</sup>lt;sup>3</sup> IMF Executive Board Deputy Managing Director and Acting Chairman Shigemitsu Sugisaki News Brief 01/93 Sept 20 2001 after a third review of Poverty Reduction and Growth Facility (PRGF).

The flooding devastated the agriculture sector, partly because of the prolonged nature of the inundation in some areas. 140,000 hectares of crops were destroyed or seriously damaged and irrigation systems were also destroyed. An estimated 350,000 livestock were lost or seriously injured and 6,000 fisherpeople lost 50 percent of their boats and gear (FAO 27/3/00).

A massive national and international relief operation avoided greater loss of life with 16,500 people rescued by aircraft and over 29,000 by boats (IFRC 2002). The displaced were accommodated in 100 temporary centers, the largest being Chiaquelane with a peak population of 80,000 people. Public health measures avoided measles and cholera epidemics. A feature of the international aid coordination was that it was set up within the INGC, with the latter being led during the peak of the operation by the Minister for Foreign Affairs and Cooperation. In this way, Mozambique preserved an element of national sovereignty and control.

The government of Mozambique made three successive appeals totaling US\$160 million for emergency assistance during February and March 2000 with a response of over 100 percent.

The 2001 floods mainly affected Zambezia, northern Sofala, then the Tete and Manica provinces in Central Mozambique during February and March. The floods were caused both by prolonged and intensive rains at the end of 2000 and in early 2001 in central Mozambique, and by neighboring countries' increasing flows from the Kariba and Cabora Bassa dams. In March coastal Nampula was hit by cyclone Dera. About 500,000 people were affected, of which 223,000 were displaced (see GoM 2001d for further details). Loss of life was minimal because of the slower onset of the disaster, as compared with the "wall of water" impact of the 2000 floods further south.

On February 21, the government of Mozambique declared a flood emergency and appealed to the international community for US\$30 million in emergency assistance. By mid-May 2001, 93 percent of the appeal had been met (GoM 2001d).

Agencies were better prepared to respond to the 2001 floods because the systems and contacts established in 2000 were in place. The rolling nature of the disaster made it a somewhat less daunting emergency than the 2000 floods. The government, the UN system, and the major agencies, such as the Mozambique Red Cross, had all undertaken lessons learning exercises and developed contingency plans, which resulted in significant improvements in responses (UNICEF 2002d). Preparedness measures had been taken, including the pre-placement of food, boats, and other relief materials. Contact with neighboring countries also resulted in some coordination of discharges from the Kariba and Cabora Bassa dams.

### **Policy**

#### 3.1 The context of poverty reduction and disaster management policies

Mozambique's recovery from the 2000 and 2001 floods took place in the context of the country's wider reconstruction and development following the end of the war in 1992. The objective of the government's Action Plan for the Reduction of Absolute Poverty (PARPA) 2001 – 2005 is to reduce the incidence of absolute poverty from 70 percent in 1997 to less than 60 percent in 2005 and less than 50 percent by 2010 (GoM 2001c). An assessment of the PARPA found that national ownership of the Plan was quite strong and that it was likely to contribute positively to Mozambique's poverty reduction efforts (Falck 2001). Various agency strategic frameworks are aligned to the PARPA, including the UN Development Assistance Framework (UNDAF) and the World Bank Country Assistance Strategy (CAS).

The PARPA does not give prominence to disaster mitigation and preparedness, however. A short section appears under "Other Areas of Action," after sections on tourism and the environment, which states that the national capacity to respond to natural disasters will be strengthened and the standard of the national early warning system improved (GoM 2001c). There are no specific indicators or budget allocations listed (GoM 2001c).

The National Policy on Disaster Management was passed in October 1999. This document marked a shift from a reactive approach to a proactive one towards disaster management aimed at developing a culture of prevention. The policy set up the National Institute for Disaster Management (INGC), replacing the DPCCN (see section 2.1). The INGC was intended to play mainly a coordinating role. The role of the community is stressed in the principles of the policy, although mechanisms for stimulating community level participation and building on people's disaster coping mechanisms are not described. The role of the INGC is further discussed in chapter 4.

The national policy focuses mainly on disaster response and preparedness. The INGC's role in terms of post-disaster rehabilitation involves mobilizing resources, ensuring linkages between emergency and rehabilitation phases, and keeping the ministerial level Coordinating Council for Disaster Management (CCGC) informed of rehabilitation activities.

National disaster policy has yet to have the legal backing of a national disaster management plan. As of the end of 2002 a draft plan was in the pipeline but yet to be brought before parliament. As a result, the INGC lacks a legal framework for action.

In general many agencies had allowed disaster management and mitigation to drop out of their strategy and planning documents. DFID's 1998 Country Assistance Strategy had a brief mention of drought and cyclone hazards but no mention of floods. The 1998 – 2000 World Bank Country Assistance Strategy (CAS) had little reference to the threat of natural disasters. However the 2001 – 2003 CAS notes a need to improve the Bank's evaluation of hazard exposure and help the government incorporate appropriate measures for reducing and transferring risks of future loss or damage (WB 2000f).

In policy terms, donor, UN and national agencies reacted to the 2000 disaster by updating their strategy documents and by renewing a commitment to disaster preparedness, response and mitigation. The 2000 UN Common Country Assessment (CCA) gave a high profile to disaster management under the right to personal security (UN 2000b). However, there was little specific coverage in agencies' policies of recovery strategies.

#### 3.2 Recovery objectives and strategy

The objectives of the government's reconstruction appeal were to:

- Re-establish minimum conditions for population resettlement
- Restore basic services potable water, sanitation, health, and education
- Restore self-sufficiency
- Restore social and economic infrastructure, providing employment opportunities wherever possible
- Strengthen national capacity to manage and execute infrastructure works
- Restore public infrastructure
- Restore private sector activities (GoM 2000d).

The recovery strategy was planned to function within a stable macroeconomic framework and to have a decentralized approach. It consisted of two parts:

- Restoring public services and reconstruction of public infrastructure with capacity building of public administration to manage future disasters in a sustainable manner
- Assisting the private sector through support for small economic agents, emphasizing the importance of small shops that support agricultural marketing and links between formal and subsistence economies (GoM 2000d).

The government's objectives and strategy for recovery following the 2001 floods were very similar (GoM 2001d).

In general recovery took place in the context of the PARPA with broad reconstruction and development policies already in place. Some policy development was needed, such as in the case of housing resettlement. There is also a move to develop a more comprehensive national water policy, which focuses mainly on water supply and does not refer specifically to natural disasters.

The government's policy, supported by the World Bank and other donors, was to move as quickly as possible from the relief mode to a recovery agenda. The government of Mozambique saw recovery as an opportunity to move parts of the country forward developmentally and to act as an engine for development. An underlying philosophy has been that reconstruction of infrastructure systems should not merely restore the previous level of development, but rather should promote activities that will lead to reducing the vulnerability of the population and infrastructure to future disasters.

The community survey for this review notes that a number of policy issues have been raised during the recovery period and could form part of the contingency planning for government, donors, and implementing agencies in future disasters (see chapter 8 and Section II).

The community surveys noted some examples of good practice in relation to recovery work that responded to the needs and situation of women. However, in policy terms, there seems to have been little priority given to gender equity.

### **Systems**

#### 4.1 Needs assessment

The World Bank and the government rapidly conducted overall the damage and needs assessment after the floods in order to move the agenda swiftly away from emergency relief and to prepare for a donor conference. It seems important that there was government ownership of the assessment report that went to the donor conference.

Several ministries and agencies at the national and local levels undertook more detailed assessments for program planning purposes. It is not possible to generalize about these assessments, but there is a sense that beneficiary participation in assessment and program design was not generally given a high priority (Cosgrave 2001) (see section 4.4).

#### 4.2 Coordination and implementation of recovery

Mozambique's national disaster management bodies are defined in the 1999 national policy on disaster management (see section 3.1) and are outlined in box 4.1 below.

#### Box 4.1: Mozambique's national disaster management bodies

**Coordinating Council for Disaster Management (CCGC)** - the government body chaired by the Prime Minister responsible for policy decisions relating to disasters. It comprises the Ministers of key areas including Foreign Affairs and Cooperation, Public Works and Housing, Transport and Communications, Health, Agriculture, and Rural Development.

**National Institute for Disaster Management (INGC)** - responsible for disaster management and the coordination of prevention activities, relief to disaster victims, and the rehabilitation of affected infrastructure. The INGC is an institute under the Ministry of Foreign Affairs and Cooperation and has provincial offices throughout Mozambique.

**Disaster Management Technical Council (CTGC)** - chaired by the INGC director, the Council comprises the Ministerial members of the CCGC plus representatives from bodies such as the Mozambique Red Cross, UN agencies, NGOs, etc. It is responsible for coordinating sector and ministry early warning systems, defining national alert and early warning systems, and proposing declarations of emergencies to the CCGC.

Sources: GoM 1999; UNRC 2001b.

In practice, as mentioned in section 3.1, the INGC's role in recovery is limited, and recovery responses were generally managed and coordinated by the line ministries with the oversight of the CCGC.

Much of the post-flood recovery work was undertaken within the framework of existing development programs. On a practical level, as the community survey found, this meant that reconstruction could be facilitated using standard ministry drawings and specifications for schools, health posts/centers, and hospitals. This was not the case for the construction of houses (see section 6.4).

The rate of implementation of reconstruction was a cause of concern to the government. It attributed donor requirements to delays in implementing recovery programs for such things as tendering, drawing up project documents, and developing budget mechanisms (GoM 2001d). It certainly seems that some donors have yet to institute systems that could facilitate the quick implementation of recovery programs. The gap in procedures between rapid relief response and lengthy development program procedures continues. The speed of recovery implementation has also been related to capacity and bureaucracy within the government (SIDA 2000b).

The government's 2000 reconstruction appeal document talks about a central c oordinating body to support the recovery of the private sector (GoM 2000f). However there is no evidence that this body has been active.

Donor coordination, both between donors themselves and with the government, was already well established before the disasters struck (see section 2.2). Existing coordination structures have continued to handle discussion of the recovery phase.

Some observers noted that recovery operations slowed as bureaucratic procedures were reinstated after the relief phase. Some NGOs experienced increasing problems and long delays in clearance with customs. This issue is linked to a wider need for clearer systems, policy, and legislation for the regulation of NGOs, including clarifying importation procedures (MRC 2002a).

A number of agencies used a reprogramming or reallocation approach to hasten their response. The World Bank reprogrammed some of its existing loans as a faster and more flexible way to meet Mozambique's short- and medium-term recovery needs, rather than designing and implementing a new multi-sectoral flood rehabilitation project (WB 2000d). As a result, nine of the fifteen operations, including roads, agriculture, health, and education had elements restructured to provide reconstruction funds totaling over US\$30 million (World Bank 2002).

A notable example of good practice was the World Bank roads program that already had a disaster contingency fund built into the original budget, thereby short-circuiting reprogramming procedures.

A broader issue about reallocations and reprogramming is that the impacts and funds involved tend to disappear off the monitoring and evaluation radar screen. It seems important that these mechanisms are monitored so that, for example, possible negative impacts on existing projects can be assessed and lessons for improvement learned.

#### 4.3 Coordination and implementation at the district level

The community survey in three of the flood-affected areas found that coordination between the local authorities and external agencies was seen by all key informants as one of the positive aspects of the post-emergency period. Agencies felt they were able to reach more affected people, reduce duplication, and increase accountability. An example of good practice in Marracuene and Manhica was the preparation of standard beneficiary lists in collaboration with the external agencies, the communities, and the local authorities. Time was taken to ensure the accuracy of the lists was based on a consensus. The lists were regularly updated and used by all agencies and the government for the resettlement of the population.

However the survey also found that although district authorities were able to maintain a certain level of coordination of post flood interventions through committees and regular meetings with external agencies, the balance of power remained with the agencies. The success of the coordination work depended very much on the philosophies of the external agencies and their commitment to coordination measures, rather than the organizational ability of the local government. Agencies were often reluctant to be fully transparent about their resource allocations and plans, and individual agency agendas could tend to dominate. In

Vilanculos however, it has been possible for the district coordination mechanism to be institutionalized, which in late 2002 aided drought relief activities in the province.

#### 4.4 Community participation and communication

The community survey found that beneficiaries were often poorly informed about recovery plans and activities, a situation that was tolerated as people had low expectations and very little awareness of their possible rights to information. Communities were never informed about the amount of money offered to them and were rarely informed about what they could expect to receive. People were grateful for what they did receive, but were not sure whether they had received all aid that was available. People were often called to meetings to be counted and put on lists, but were not told the purpose of the exercise. Nobody was aware of the full reconstruction picture in the communities visited. This lack of information led to a sense of powerlessness and dependency.

NGOs do not generally reveal their budgets to the local government; the local government does not share financial information with the NGOs; the central government does not reveal the amounts sent to the local government; nobody informs the recipients about possible goods and funds that may be available. The weight of power over information rests squarely with the "giver" and not the "receiver."

The community survey also found that community participation in recovery remained rudimentary and generally consisted of providing labor, participating in committees, and complying with a set of rules decided by external agents. In the words of one of the beneficiaries in Chokwe, "we were asked to stand in queues to leave our names, we didn't know what we were queuing for, just left our names and waited."

### Resources

#### 5.1 Donor conference and response

The International Reconstruction Conference held in Rome on May 3-4, 2000 was the key mechanism for raising funds for Mozambique's post-flood recovery. The appeal document and CD-ROM produced for that meeting had strong government ownership, with additional support provided by UNDP and the World Bank. UNDP played a key role in facilitating the conference (Simkin 2000).

The total reconstruction program appeal was for US\$449.5 million, and subsequent pledges totaled US\$456.48 million (Table 5.1). By August 2001, US\$437.15 million had been committed by agreements and US\$323.69 million had been disbursed or was under execution (72 percent of the total appeal amount).

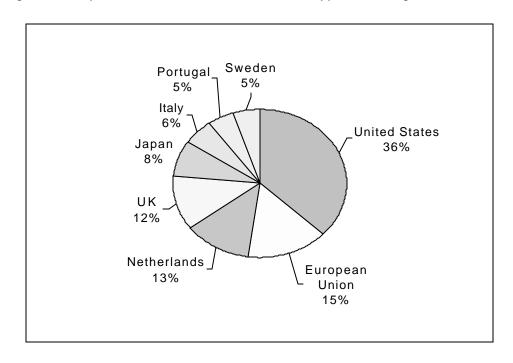
Table 5.1: Donors' response to the 2000 flood appeal as of August 28, 2001 (US\$ million)

	(US\$ million)	% of Appeal Amount
Appeal Amount	449.5	
Pledged in Rome	437.9	97
Confirmed post Rome	456.48	101
Committed by agreement	437.15	97
Disbursed or under execution	323.69	72

Excluding World Bank and Spanish government loans totaling US\$45 million

Figure 5.1 shows the proportional contributions of the major donors. The evolution of donor responses is given in Annex C.

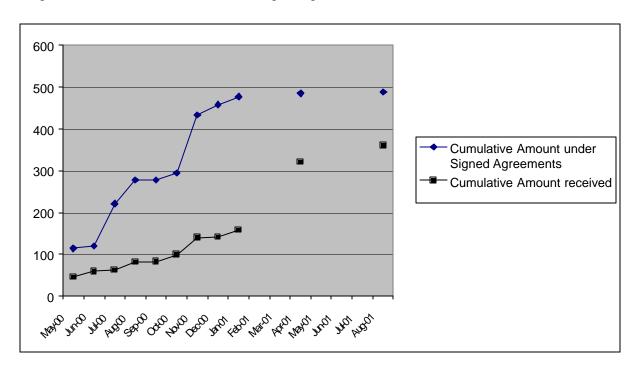
Figure 5.1: Proportion of donor commitments to 2000 appeal as of August 28, 2001



There were a number of reasons for the extraordinarily high level of donor response:

- The pre-existing level of donor support and commitment to Mozambique<sup>4</sup>
- Some carry-over of impact from the very high level of international media coverage for the floods
- The importance of organizing the conference as soon as possible after the disaster to benefit from the sympathy for Mozambique's plight
- The quality and credibility of the appeal document
- Follow-up to the conference: The government quickly signed legally binding agreements with the donors to firm up their pledges.

Figure 5.2: Reconstruction funds under signed agreements and amounts received (US\$ million)



In the appeal, the government stressed its commitment to maintain macroeconomic stability. Recovery expenditure was included in an additional government budget, separate from the main budget, to avoid imbalances with ongoing programs. The government aimed to make the impact of recovery income and expenditure on the national budget neutral. Both the government and UNDP advised donors to fund through existing government channels in order to strengthen national systems of accountability, transparency, and scrutiny. Figures for December 2000 show that about two thirds of funds were channeled through the Bank of Mozambique or the Treasury (see figure 5.3) (GoM/UNDP 2000b).

<sup>&</sup>lt;sup>4</sup> In their support to development programs, donors tend to focus on one or two provinces. This means that response to disasters "out of area" can present them with a dilemma as to whether to respond or not. However, in general this has not been a major issue.

Undefined Bank of 1% Mozambique **NGOs** 10% 3% Donor 28% National Treasury 36% **UN System** 5% Sector Account 17%

Figure 5.3: Channels of reconstruction funds amount (US\$ million) as of December 2000

Human resources for recovery were not raised as a significant issue during this review. However, it seems likely that recovery efforts have exacerbated Mozambique's structural shortages of skilled personnel, particularly in government when international agencies and the burgeoning private sector are paying.

#### 5.2 Balance of payments and debt relief

The total losses to the Mozambican economy from the 2000 floods were estimated at US\$600 million, of which direct losses amounted to US\$273 million and the balance to reduced production (US\$247 million), reduced exports (US\$48 million) and increased imports (US\$31 million). The consumer price index showed a rise of 9.7 percent in prices between January and March 2000. The GDP growth rate was 2.1 percent in 2000 compared with 8 percent in 1999. Inflation for 2000 was 11.4 percent against a government target of 10 percent, the highest in four years. There was a 66 percent increase in the cost of petroleum derivatives imports from 1999 from US\$72.5 million to US\$120.5 million (BoM 2000; GoM 2000f).<sup>5</sup>

The negative economic impacts of the floods were offset by the positive response to the government's reconstruction appeal and the first earnings from the MOZAL factory (BoM 2000). In 2001 the economy started to recover, reflected by a GDP growth of 13.9 percent attributed to agricultural production, post flood reconstruction, and MOZAL exports (BoM 2001).

The impact of the 2001 floods on economic growth was not expected to be significant (GoM 2001d), and the Bank of Mozambique noted that the economic impact of the 2000 and 2001 disasters was not seen as a major economic factor in the medium term (GoM 2001c).

Government policy throughout both years of floods was to maintain a stable macroeconomic framework and as much as possible to avoid recovery expenditure adversely affecting rates of inflation and levels of state

<sup>&</sup>lt;sup>5</sup> Arising from relief flights, increases in the price of crude oil plus more consumption for cars.

savings (GoM 2001d). This policy was as successful as might be expected, given the inherent weaknesses of the economy on the one hand and the levels of additional external support on the other.

The World Bank issued a Flood Emergency Recovery Project (FERP) loan of US\$30 million after the 2000 floods to help Mozambique maintain macroeconomic stability by supporting a higher level of imports necessary for relief and reconstruction activities (WB 2000d). Under this loan agreement, approved April 20, 2000, arrangements for procurement and disbursement were streamlined. Part of the loan could be set retrospectively against emergency purchases, and the normal World Bank rule that limited expenditure up to 50 percent on any one item was waived. In fact, the loan was used for the importation of petroleum products.<sup>6</sup>

According to the project evaluation, the loan achieved its main objective of helping to stabilize the economy after the floods. Although the impact of the FERP on inflation cannot be fully disaggregated, it seems likely that it had a positive signaling effect on exchange rates. The World Bank's comprehensive damage and needs assessment of the likely macroeconomic impact of the 2000 flood, which was made rapidly after the flood event, helped to set the agenda for the Rome donor conference, lent added credibility to the government's appeal for support, and probably acted as a catalyst for other multilateral and bilateral agencies, leveraging other funds (WB 2002).

In April 2000 the World Bank approved accelerated debt relief worth US\$10 million to cover 100 percent of IDA debt interest over the next 12 months. Under the existing HIPC process US\$120 million was shifted from debt service to social sectors during 2000. These funds were not limited to flood-affected areas (UNICEF 2000d).

#### 5.3 Sectoral responses

Although the overall scale of donor support for recovery was good, the spread across sectors appears to have been uneven, partly reflecting the donors' own priorities (Table 5.2). Productive sectors, agriculture, and education have been well subscribed, while health and social welfare, repairs of public buildings, and preparedness, early warning, and capacity building have been less well funded. For example, the National Meteorology Institute (Instituto Nacional de Meteorologia or INAM) has struggled to get funds for areas such as the replacement and reactivation of river and rain gauges and the development of a storm radar system (IFRC 2002). Elements of the capacity building program for the INGC have been greatly delayed and had still yet to commence in November 2002.

Table 5.2: Funding by sector for 2000 post-flood reconstruction as of May 30, 2001 (US\$ million)

	Appeal	Confirmed in Rome	Disbursed	% Disbursed against Appeal
Education	36.0	35.2	12.4	34
Health & Social Welfare	54.3	16.1	6.9	13
Social Sector - total	90.3	51.3	19.4	21
Infrastructure - total	213.8	255.3	65.5	31
Agriculture	58.9	62.5	37.0	63
Productive Sectors - total	123.6	152.9	103.0	83
Vulnerability Reduction	21.9	11.3	4.3	20

<sup>&</sup>lt;sup>6</sup> The preparation of this loan benefited from World Bank experience of responses to Hurricane Mitch in Honduras, floods and earthquakes in Turkey, and the 1998 flood in Bangladesh.

The 2000 appeal included an element of US\$77.7 million for the rehabilitation of the private sector, which was the first time that such an element had been supported by donors in an emergency appeal for Mozambique (GoM 2000f; UNGA SG 6/02).

#### 5.4 Corruption

Issues of corruption and organized crime have been increasingly noted as concerns in Mozambique (Gastrow; Hanlon). The assassination of Carlos Cardoso, a widely respected independent journalist in November 2000 who had been investigating a major banking scandal, brought these issues sharply into focus (UNRC 2001a). The 2001 annual donor consultative group meeting expressed concern about corruption and the slow place of legal and judicial reform (SIDA 2001b).

However, there do not appear to have been any major diversions of reconstruction funds, and generally donors were satisfied with the use of the funds (IRIN 7/9/01). For example, a water rehabilitation project funded by the Netherlands government that involved 66 contracts and covered US\$20 million with Mozambican companies received a clean audit and value for money report, with the work being speedily completed.

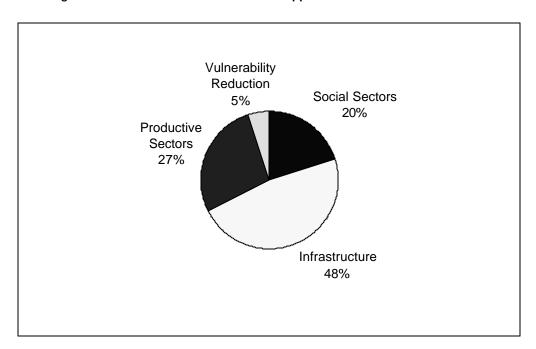


Figure 5.4: Allocations of reconstruction appeal to sectors, 2000

Table 5.3: Commitments of donor funds by sector as of May 3, 2001

	Total
Education	36
Health and Social Action	54.3
Sub-Total: Social Sectors	90.3
Water and sanitation	27.1
State buildings and equipment	26.6
Roads and Bridges	58.8
Railways, aviation and communications	60.3
Mineral resources and energy	16.4
Support for population resettlement	24.5
Sub-Total: Infrastructure	213.8
Agriculture	59
Livestock	4.4
Fisheries	22.1
Industry	12
Trade	19
Tourism	7.1
Sub-Total: Productive Sectors	123.6
Meteorology	7.1
Environment	5.3
Demining	7
Strengthening disaster management car	2.4
Sub-Total: Vulnerability Reduction	21.9
GRAND TOTAL	449.5

### 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.

### Conclusions and Lessons Learned

#### 7.1 Overview

It is not possible to make a definitive judgment on the effectiveness and impact of the recovery processes after the 2000 floods. A wide range of agencies undertook lessons learned exercises looking at their responses to the 2000 and 2001 floods. After the 2000 floods the DEC agencies undertook a major evaluation of their relief and early rehabilitation work (Cosgrave 2001). Remarkably little evaluative activity has been done for the recovery period. An exception to this was the independent evaluation of the USAID cash relief scheme (Abt 2002). There has been little effort by any agency to pull together the documentation on recovery.

However, Mozambique's recovery from the 2000 floods appears to have been broadly effective and generally well handled. Recovery programs have provided an opportunity for investments in upgraded services and infrastructure (Cosgrave 2001). Evidence from the community survey illustrates many ways in which some affected populations have been assisted, albeit somewhat passively, to resume their livelihoods. Increased social capital was the most important positive aspect for affected populations and was achieved through the rehabilitation and construction of social infrastructures giving access to schools and health facilities. There are some indications that some of the new social structures created, associations, community committees and resettlement areas, will strengthen the safety net for future disasters, but it is too early to state categorically that this will be a lasting effect of post-emergency intervention.

On the negative side, asset depletion has been neglected in the post-emergency period. This is a serious problem due to the fragile nature of the rural economies.

The 2000 floods in Mozambique demonstrated clearly that it is possible to make an impact and carry out extensive recovery activities when the disaster is high profile and the amount of money donated to the affected populations is large. In lower profile emergencies, all the donated money is usually absorbed during the expensive relief period, leaving little room for maneuver in the recovery period. This was not the case in Mozambique where resources were pledged and continued to arrive over the two-year post-flood period.

In terms of Mozambique's development of its disaster preparedness and mitigation plans, much will depend on the level of government and donor commitment. The importance of this area is shown when there is a devastating disaster of the kind experienced in 2000, but institutional memories can be short and other priorities may dominate, particularly in economic and political areas. It is also a question of whether disaster management issues can be maintained as priorities when government budgets are likely to be under increasing pressure.

#### 7.2 Lessons from the community survey

The NGOs best placed to carry out effective recovery programs were those already working in an area. If "new" international NGOs can establish relationships with agencies already active in an area, the likelihood of the interventions having a sustainable impact is much higher. Time should be taken in the recovery period to identify partners, establish relationships with the local authorities, and identify key capacity building needs. The laying of firm groundwork will pay dividends in terms of the quality of the intervention.

Opportunities for capacity building were missed both within communities and with local authorities. Agencies' output-driven agendas focused on the houses, the health center, or the wells. By not involving local authorities in budgetary and planning processes, many of the District Administrations emerged from the floods with little or no knowledge of how to face the next disaster. These issues need to be seriously addressed by agencies intervening in post-emergency situations and should become part of a standard package of interventions.

Although asset loss is recognized as one of the major problems faced by households post-emergency, there is still reluctance among agencies to replace capital items for individual households. Capital items were distributed to associations or groups of households but generally not to individuals. The one example where capital was replaced directly, e.g., cash distribution in Chokwe, the results were positive and households were able to restart businesses and repay loans. There needs to be further discussion about the barriers to asset replacement.

Recovery interventions should take into account the importance of social capital and explicitly work towards enhancing social capital in affected communities. Positive examples were seen during the field work; in the new resettlement areas of Marracuene where resident committees were beginning to organize the "new" communities; in the associations formed by Vukoxa to guarantee the care of the elderly within the community; and, in the farming associations formed in Nova Mambone to encourage innovation in farming practices. These measures may change and improve the social safety nets available to households, if they are sustained after the initial input from external agencies. The building of schools and health posts with recovery money also positively reinforces social capital in previously under-resourced areas.

The lack of transparency and sharing of information created a culture of passive acceptance and a climate of misinformation. During the 2000 floods this did not result in major conflicts, but could become an explosive situation in the future. Agencies involved in post-emergency interventions should explicitly recognize the need for improved communication with beneficiaries and take measure to promote a culture of openness.

Breaking the isolation of the rural communities through the provision of roads and bridges may be judged at a later date to be the single most important, long-term achievement of the post-emergency interventions. The importance of infrastructure construction and rehabilitation should not be underestimated when preparing contingency plans and developing a set of interventions to be considered post-emergency.

In isolated areas, the influx of new ideas introduced during a stressful period seems to have changed some of the social behavior patterns, due probably to increased exposure to other ideas and to the external agencies' insistence of specifically targeting women. New patterns have been generated. In rural areas exposure to outside ideas was seen as fundamental to change.

Although asset loss was a serious blow to households, the improvement in the houses of people displaced through the floods has had a lasting, positive psychological effect on the beneficiaries. Without fail people were appreciative of the improved living conditions.

In the recovery period there was more time to allow for consultation. Consultation improved the nature of the interventions in this period, but participation leading to empowerment was rare, mainly due to the lack of transparency and equity between negotiating bodies. Government and the agencies held the balance of power and were not willing to openly discuss development needs and the resources available to carry out the interventions.

### Recommendations

- 1. Arising from the experience of the 2000 and 2001 flood recovery programs, the INGC working with and through the Disaster Management Technical Council should develop good practice guidelines and codes for recovery work that can, in the future, inform contingency planning as well as disaster recovery work. These could include:
  - Good practice in terms of intensive labor-based infrastructure works for disaster mitigation
  - Where possible the use of local rather than international contractors in reconstruction programs
  - Developing good practice in gender equality approaches
  - Developing good practice in relation to the recovery of complex livelihoods
  - Appropriate seeds and tools policies
  - Cash compensation schemes, building on the experience of the USAID resettlement grant scheme
  - Land tenure issues in relation to resettlement
  - Standards for housing
- Broader use of independent reviews and evaluations of recovery work would be useful to promote increased levels of accountability and transparency. Future recovery programs after major national disasters should be the subject of systemwide evaluations, including donor performance, in order to learn lessons and increase accountability.
- 3. Increased evaluative work, as suggested above, should be used to strengthen civil society by enhancing Mozambican capacity for independent research and analysis.
- 4. Given the sensitivities and complexities associated with resettlement, it is important that a thorough and independent participatory evaluation is undertaken of the resettlement program so that lessons can be learned for the future.
- 5. Government, donors, and agencies should ensure that all major development programs include, as appropriate, disaster preparedness, mitigation, and contingency elements.
- 6. There should be an increased emphasis by government, donors, and agencies on building capacity for disaster management at the district level. This will involve more sharing of information on budgets and planning.
- 7. Donors should ensure that reallocations and reprogramming arrangements are tracked and evaluated.

## Mozambique Case Study Interviewees

#### **Government of Mozambique**

Miguel Arcanjo Senior Officer, Bank of Mozambique

Sergio Gouveia National Director of Agriculture, Ministry of Agriculture and Rural

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Silvano Langa National Director, INGC

Filipe Lucio National Director, National Institute of Meteorology

Dr. Angelina Mausse Director of International Cooperation, Ministry of Planning and Finance

Dr. Leonardo Simao Minister of Foreign Affairs and Cooperation H. E. Roberto White Minister of Public Works and Housing

#### **United Nations Agencies**

Alexander Aboagye Economic Advisor, UNDP Isa Gerster Emergency Advisor, WFP

Yohannes Giorgis Chief Technical Advisor, Institutional Capacity Building, UNDP / INGC

Birte Hald Emergency Liaison Officer, UN Emergency Unit at INGC
Henny Matos Senior Assistant Resident Representative, Governance and

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Louise Maule Emergency Project Officer, UNICEF

Carlos Mucapera Program Officer, Governance and Environment Unit, UNDP

Marie-Pierre Poirier Representative, UNICEF
Peter Vandor Representative, FAO
Angela Van Rynbach Representative, WFP

Nadia Vaz Program Officer, Disaster Management. WFP

#### **Donors and International Organizations**

Aniceto Bila Operations Officer, World Bank

Lars Carlsson Coordinator of Rural Development Programs, Swedish Embassy

Julia Compton Sustainable Livelihoods Adviser, DFID

Jenny Eklund Development Advisor, European Commission Mozambique Dipac Jaiantilal Senior Macroeconomist, Africa Region, World Bank

A. J. H. Negenman First Secretary, Royal Netherlands Embassy

Christine de Voest Acting Team Leader, Increased Rural Incomes Office, USAID

Nicolas Lamade Advisor Disaster Risk Management, GTZ

Michele McNabb Senior Technical Advisor & Coordinator, FEWS NET

Daniel Liborio da Cruz e Sousa Agricultural Services Specialist, World Bank

#### Non-Governmental Organizations, the Red Cross, and Others

Alvaro Casimiro Coordinator, LINK NGO Forum

Carina Ismael Food Security Officer, Save the Children UK

Karen Johnson Community Development Officer, Save the Children UK

Dr. Joseph Hanlon Researcher and journalist Marc de Lamotte Country Director, CARE

Titus Macie Head of Emergency, Christian Council of Mozambique Rev. Dinis Matsolo General Secretary, Christian Council of Mozambique

Martha Newsome National Director, World Vision
Anthea Spinks Program Development, World Vision

Matt Pickard Mozambique Country Representative, Christian Aid

Fernando Pililao Emergency Program Coordinator and Water Adviser, CARE

Jim Robertson Head of Delegation, International Federation of Red Cross and Red

Crescent Societies

Fernanda de V. Teixeira General Secretary, Mozambique Red Cross

### Annex B.

# Major Natural Disasters in Mozambique, 1976 - 1999

### 1976 – 1989

Disaster	Date	Killed	Affected
Floods	1976 – 78	350	400,000+
Drought	1980 - 85	100,000	5,000,000
Flood	1981	unknown	500,000
Famine	1989	5,200	unknown

Source: Christie & Hanlon 2001; OFDA/CRED International Disaster Database.

#### 1990 - 1999

Disaster	Location	Туре	Date	Consequences
Floods	Pungue River, Sofala Province	Floods	1990	12,000 people displaced
Drought	Whole country	Severe drought	1992 – 1993	1.5 million people lacking food, 30,000 cases of cholera, reduced production, water shortages in cities and rural areas
Pest	Guro, Macossa, Manica Province	Rats	1993, 1994	
Cyclone	Nampula Province East coast of Mozambique	Cyclone Nadia	March 1994	52 people dead, 900,000 affected, massive destruction of infrastructure: roads, bridges, power lines, water systems, schools, health centers, houses, harbors, infrastructure, reduced agricultural production, epidemics
Drought	Central and Southern Mozambique	Drought	1994 – 1995	150 dead, 1,500,000 affected
Cyclone	Cabo Delgado and Nampula Provinces	Cyclone Bonita	January 1996	11 dead, 200,000 people affected, 170,000 ha of crops destroyed, houses, roads and railways destroyed
Landslide	Milange, Monte Tumbine, Zambezia Province	Landslide	January 1996	200 dead, 4,000 people affected
Pest	Buzi, Nhamatanda, Dondo, Sofala Province	Red Locust	1996 – 1997	
Cyclone	Sofala, Tete, Manica and Zambezia Provinces	Tropical storm Lisette and floods	January 1997	87 people dead, 300,000 affected, 17,000 houses destroyed
Cyclone	Gaza, Inhambane, Maputo	Tropical storm Grettelle	February 1997	2,759 houses, 5 schools, and 1 health center destroyed
Floods	Vilanculos, Machanga, Govuro, Inhambane Province	Floods	February 1999	15 people dead, 404,000 people affected. 50,000 ha of cultivated land flooded, roads and gas pipeline, water treatment plants damaged

Source: WFP in United Nations System Common Country Assessment, 2000.

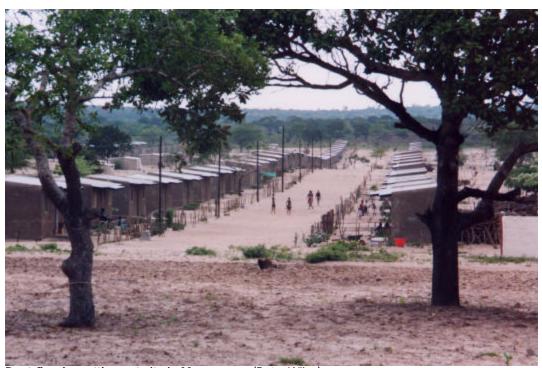
# EVOLUTION OF DONOR'S RESPONSE TO GOVERNMENT APPEAL ON POST FLOOD RECONSTRUCTION PROGRAMME

28-Aug-01 (in US\$ million)

Donor/Grants	Pledged in Rome	Confirmed Post-Rome to Date*	Committed through Agreement	Disbursed or under execution
African Development Bank	0.500	0.500	0.500	0.500
Austria	1.000	1.000	1.000	0.700
Belgium	8.000	16.000	15.000	
Canada	0.000	5.780	5.780	4.420
Cyprus	0.000	0.016	0.016	0.016
Denmark	12.500	12.921	11.743	4.883
Engen		0.150	0.150	
European Union	60.400	55.300	55.300	36.600
Finland	4.000	4.000	1.070	0.430
France / AFD	5.400	13.900	9.500	1.250
France / MCF		3.780	2.110	1.140
Germany / GTZ		2.820	2.820	2.388
Germany/KFW	15.500	18.500	11.780	11.780
(celand	0.500	0.600	0.500	
treland	5.300	5,300	5,300	5,300
Itary	22,000	20,000	20,000	15,000
Japan	30.000	28,000	28,000	15,000
Moroego	0.100	0.100		
Netherlands	45,000	45.000	45,800	18,000
New Zealand	0,100	0.093	0.093	0.093
Norway	8.000		6.824	4,235
Portugal	18.000	18,000	18,000	18,000
Sweden	-20.000	18.000	18,000	16.000
Swizerland	7.800	6.093	4.745	3.152
United Kingdom	44.800	41.920	41.920	\$2.800
United States/USAID	131.000	132.000	132.000	132.000
SilbTotales (#250) Loans 2	<b>1.11 (3.11.11.11.11.11.11.11.11.11.11.11.11.11</b>			
World Benk		30.000	36.328	28.738
Spain	15,000	15,000	15,000	8,000

Refers to pleages confirmed post frome and changes due to adjustments resulting from consultations with individual denors thereafter.

# **Photographs**



Post-flood resettlement site in Marracuene (Peter Wiles)



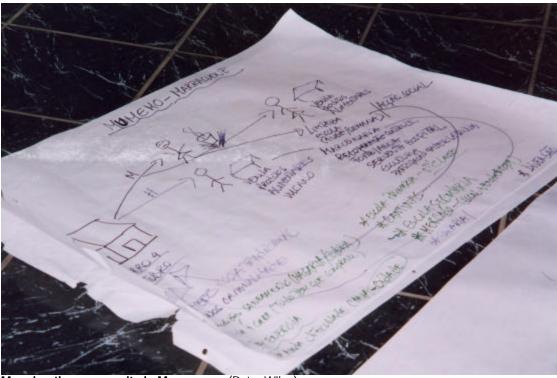
House in Marracuene (Peter Wiles)



Marracuene resettlement site (Peter Wiles)



Community survey focus group at Marracuene (Peter Wiles)



Mapping the community in Marracuene (Peter Wiles)