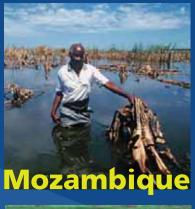
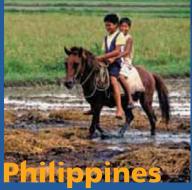
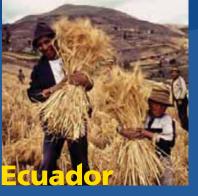
Land tenure and natural disasters

ADDRESSING LAND TENURE IN COUNTRIES PRONE TO NATURAL DISASTERS

















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ADDRESSING LAND TENURE IN COUNTRIES PRONE TO NATURAL DISASTERS

> Adriana Herrera Garibay Paul de Wit Luis Eleazar Fausto Jordán Bucheli Simon Norfolk Raúl Sánchez Mena Salma A. Shafi

> > ROME, 2010



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Introduction

The impacts of natural disasters such as hurricanes, floods, earthquakes and tsunamis have been increasing steadily since the 1950's, particularly for developing countries. According to a World Bank external evaluation report "natural disasters destroyed US\$652 billion in property worldwide in the 1990s alone – an amount 15 times higher in real terms compared to the 1950s. Approximately 2.6 billion people were affected by natural disasters over the past ten years, compared to 1.6 billion in the previous decade. Developing countries have borne the brunt of these catastrophes, accounting for over 95 percent of all casualties" (IEG, 2006). Asia has been the most affected region with 79 per cent of deaths from natural disasters during the period 2000-2007¹; while *Small Island Developing States* (SIDS) are among the most vulnerable. This trend is not likely to change. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2007) has confirmed that frequency and intensity of extreme weather events such as heat waves, tropical cyclones, floods and droughts are likely to increase with climate change.

In addition to loss of life and the severe impacts on national economies, some of the most drastic effects of natural disasters on peoples' livelihoods, relate to disruption of land tenure systems and property loss. Access to land and security of tenure are very often damaged as a result of natural disasters, leaving people unable to access their land either for production or for housing purposes. The effects can result from destruction of land tenure records like land titles, cadastre maps, land registry records, identity cards, and insurance claims. They can involve the total or partial destruction of physical evidence of property boundaries; the disappearance or death of people who have the memory of property boundaries; the emergence or intensification of conflicts over land tenure that were already present but deteriorated as a result of the disaster, such as conflicts over inheritance of land rights. In case of the need for resettlement, there can be difficulties involved in addressing land rights in resettlement areas, especially if there is lack of proper legislation to facilitate access to land to those who have lost it. Where property rights are unclear and people have left their land as a result of a natural disaster, land grabbing and abusive building practices can happen where there are not suitable norms to avoid it. All these effects can severely impact peoples' livelihoods if the security of the use and property of the land is affected.

International and development agencies working with disaster management and mitigation have confirmed the importance of land tenure security and access for the long-term reconstruction of communities' livelihoods. They consider that building up communities'

¹ Centre for Research on the Epidemiology on Disasters (CRED), 2008 Disasters in Numbers. Department of Public Health, Université catholique de Louvain, Belgium; and ISDR: Brussels.

resilience involves recovering and protecting property rights to land, which in turn will lay down a solid basis for reconstruction, physical planning, compensation and economic growth.

Despite growing awareness of the importance of land tenure and property related issues to disaster risk reduction and the efficiency and effectiveness of post-disaster responses, the international humanitarian community currently possesses limited understanding of the precise nature of these linkages on the one hand, and their implications for relief, early recovery and rehabilitation programmes on the other. In addition, there has been very limited awareness of the practical tools and approaches that could be used to incorporate land tenure issues into future responses and programmes to enhance mitigation and preparedness, as well as favour good disaster response operations. This has been in part, the result of a lack of clear overall understanding of the importance of land tenure issues in the disaster context. There has been also a commonly-held perception that land issues were either too "complex" or too politically sensitive to merit consideration in emergency settings.

In 2007 the Inter-Agency Standing Committee (IASC), the main mechanism for inter-agency coordination for humanitarian assistance², agreed on the need to coordinate efforts on land tenure issues addressed after natural disasters. Accordingly UN-HABITAT, FAO and the IASC Early Recovery Cluster developed a set of guidelines for the support of national and international efforts on land tenure issues in natural disasters³. Within this same initiative FAO and UN-HABITAT have published several country briefs (Philippines, Indonesia, Honduras, Mozambique, Madagascar, Bangladesh and Ecuador) on land tenure and land administration issues in natural disasters emergency settings. The briefs are addressed to UN staff and nationals working on the coordination and execution of emergency activities to make them aware of the importance of dealing with land tenure rights and property issues for both disaster risk reduction including preparedness and mitigation measures, and the efficiency and effectiveness of post-disaster responses.⁴

As part of this inter-agency awareness creation, FAO has selected four of the country case studies that were carried out for the preparation of the briefs, in order to publish them in their complete version. These case studies address land tenure in natural disasters in Mozambique, Bangladesh, Philippines and Ecuador. There is very limited literature and data that examines the direct impacts and effects of natural hazards on tenure at national and local

² The IASC is formed by 9 UN Agencies which are full members of IASC and 9 international agencies working on emergency operations and human rights, which are standing invitees. See: http://www.humanitarianinfo.org/iasc/

³ UN-HABITAT, FAO, IASC Early Recovery Cluster, Global Land Tool Network. Land and Natural Disasters. Guidance for Practitioners. UN-HABITAT, Geneva, June 2010.

⁴ FAO, UN-HABITAT, Land Tool Network. On Solid Ground. Addressing land tenure issues following natural disasters. FAO, Rome, January,2010

levels. Land tenure is usually identified in the disasters and poverty analysis, but it is not dealt with in depth as an issue. The analysis carried out in this publication will help to improve understanding of land tenure in the context of natural disasters, and to foster more analysis and data collection to better assess the relationships between natural disasters and land tenure at national and local levels, especially in those countries that are prone to natural hazards.

The Mozambique case study identifies important lessons from the analysis of the impact that floods have had on land tenure in the Limpopo (2000) and the Zambesi valleys (2001 and 2007). The authors, Paul De Witt and Simon Norfolk, consider that the approach undertaken into national and legal frameworks helped to minimise the effects of the floods. This comprised the national policy on Disaster Management passed in October 1999, the legal framework for land including the Land Law (1997), the accompanying Regulations (1998), and the technical Annex on Community Delimitation (2000). While the Disaster Management policy marked an important shift from a reactive to a proactive approach towards disaster management and prevention, the land tenure legal framework promotes the involvement of local-level institutions in land access and management, with a focus on identifying and securing local land rights. The combination of both has been very useful in the way Mozambicans have addressed the main land tenure security issues that emerged after the floods.

The Bangladesh paper deals with the difficulties that Bangladesh, with long experience in the development of national and local mechanisms to respond to natural disasters, has had in addressing impacts on land tenure issues within such mechanisms. The author Salma Shafi, analyses how Bangladesh addresses the impacts of natural disasters in one of the most disaster-prone countries in the world, with a high population density and more than 45 percent of people living below the national poverty line. In Bangladesh the government developed several programs and mechanisms to respond effectively to the effects of natural disasters; these have included programmes at national and local level, with measures that enhance the capacity of the communities to deal with disaster risk reduction. Through the description of the current land tenure system characteristics and the related institutional setup, the author analyses the difficulties that such disaster management mechanisms have in the development of adequate measures to deal with the effects of natural disasters on land

tenure issues, including the political constraints. The author examines the 2007 Sidr cyclone to illustrate those difficulties. The study finally argues that more attention should be paid to land tenure and land use in national policy frameworks as well as in the specific land tenure, land use and disaster management programmes, concluding that failure to consider these issues effectively can be a key factor increasing poor peoples' vulnerability to disasters.

In the Philippines case study the author, Luis Eleazar analyses the consequences of the major natural disasters that have hit the Philippines from 1990 to 2006, including the consequences on land tenure issues. The Philippines, consisting of over 7000 islands, has experienced 520 disasters from various types and intensities during this period. The author identifies three factors that played an important role in increasing or decreasing the severity of the consequences of these disasters: whether the affected people had secure or insecure tenure rights; whether the disaster caused lasting damage to the property; and finally whether the affected people had the capacity to recover their lost property, or to restore their tenure security. In the Philippines according to the author, this capacity is mainly defined by socioeconomic status. Important obstacles dealing with disasters include: the absence of a complete cadastre and the presence of incorrect cadastral surveys; the existence of incomplete and outdated land records; the cumbersome legal procedures for title records reconstitution or recuperation of title copies⁵. When analysing the impacts of natural disasters on land tenure within a framework of disaster risk management, the author mentions four major issues that land tenure emergency work should address for prevention and mitigation: (i) the formalization of land rights or the issuance of titles in areas considered highly vulnerable to disasters, (ii) the lack of an appropriate land use and development policy; (iii) the existence of dense human settlements in vulnerable areas, (iv)properties located in recently identified high-risk zones. In relation to the emergency response phase, the author underlines the need to give importance to the development of good assessments on property damage and the tenure rights situation of affected people, especially those who have been displaced as a result of the effects of the natural hazard. For the recovery and preparedness phase the author argues for the importance of support for land tenure issues related to the poor, vulnerable and food insecure households affected by the natural disasters. Finally, the author analyses the capacity and situation of the institutional set-up supporting land tenure and related natural resources access, both at national and local levels.

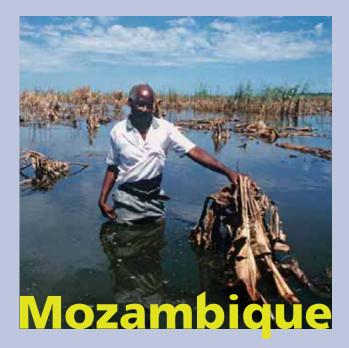
⁵ Some of these difficulties are already being addressed by technical assistance projects funded by international donors working in the field of land administration.

Fausto Jordán and Raúl Sánchez analyse the reactive response approach that government institutions in Ecuador had towards natural disasters during the period 1997-2008 and the new initiatives that the government of Ecuador has undertaken since 2008. In line with the process of adopting a new approach and developing a national disaster risk management system, the 2008 national Constitution includes the concepts of prevention and mitigation for natural disasters risk management, as well as the need to deal with the management of risks on a decentralised basis. The Constitution states the need to establish a national system for the prevention and management of natural disasters. Since May 2008 a new government agency has been created to deal with risk management. This institution includes land tenure access and security responsibilities. The analysis draws on the impacts of several types of natural hazards like volcanic eruptions, floods, and landslides that have not been covered in the other country studies. The importance of the collaboration between public and private sector in a decentralised manner, is also highlighted in the analysis as a very important part of the national disaster risk management system in Ecuador.

This publication was prepared by Adriana Herrera Garibay, Land Tenure Officer from the Land Tenure Team in the FAO Climate, Energy and Tenure Division, with the help of the authors, Paul De Witt and Simon Norfolk, Salma Shafi, Luis Eleazar, Fausto Jordán and Raúl Sánchez; with the support of the editors, Nicoliene Oudwater and Damian Bohle; and with the close collaboration of Claudia Tonini, responsible for the layout of the publication. The country case studies papers received valuable comments from UN-HABITAT and the Emergency Unit in FAO.

Rome, September 2010

Paul Munro-Faure Principal Officer Climate, Energy and Tenure Division Food and Agriculture Organization of the United Nations



Mozambique

by Paul De Wit and Simon Norfolk*

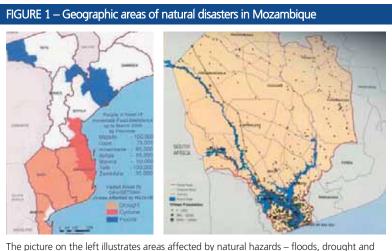
■ 1. MOZAMBIQUE – RECURRENT FLOODS, CYCLONES AND DROUGHT ■

Mozambique's geographic location makes it susceptible to natural disasters of a varying nature. It includes the lower parts of two major southern African watersheds, the Limpopo and the Zambezi. Water collected in the four Limpopo river basin countries (South Africa, Zimbabwe, Botswana and Mozambique) drains through the Gaza province of southern Mozambique before

Mozambique Mozambique Mozambique Mozambique

reaching the town of Xai–Xai and the Indian Ocean. The Zambezi watershed is the fourth-largest river basin in Africa, and waters from Tanzania, Malawi, Zambia, Angola, Namibia, Botswana, Zimbabwe and Mozambique all flow through the lower Zambezi valley in the provinces of Sofala and Zambézia. This situation provides Mozambique with a series of excellent economic opportunities – such as harbours, hydro-electric power plants, fertile valley land, highly-valued tourist sites, and specific ecologic settings such as mangroves – but also exposes rural people to frequent floods.

Throughout its history Mozambique has had to cope with a succession of cyclones and related floods, which have had a devastating impact on the country. Between 1970 and 1998, Mozambique experienced 11 flood events and more than 16 drought events. In the 11 flood events, it is estimated that more than 1585 people died. Apart from the immediate threat to human life, such natural disasters seriously impede economic growth. In August 2007,



The picture on the left illustrates areas affected by natural hazards – floods, drought and cyclones – as identified by historic data and the floods of 2008 (GAC/SETSAN on **www.alertnet.org/thenews/newsdesk/FEWS/52674e740d15acf800ac87f 591341527.htm**). It is clear that the southern part of Mozambique is very susceptible to regular droughts, whereas floods are a major hazard in the centre, especially in the Zambezi valley. The occurrence of regular lower-Limpopo floods are indicated in the right-hand picture (Atlas for Disaster Preparedness, 2003). The latter considers a flood scenario on the basis of a slightly reduced flood as compared with the unprecedented 2000 floods.

for example, Mozambique's National Institute for Disaster Management (INGC) announced that the joint effects of drought, cyclone 'Favio' and the floods that hit the country in the first quarter of 2007, had reduced agricultural production by 30 percent in the central and southern regions of Mozambique.

A significant part of the country is also susceptible to drought. Most of the Mozambican Limpopo valley lands have annual rainfall that rarely exceeds 800 mm, with most areas receiving less than 600 mm. The irregular and erratic distribution pattern of this rainfall turns the lower Limpopo valley into a drought-prone area, with the river itself being the spine of rural survival. The state and the local populations have adapted

^{*} Mr. De Wit is a senior land policy and land administration expert with wide experience in African countries. He has been collaborating with FAO, UN-HABITAT, World Bank, European Union, among others, in land tenure policy and legal framework project formulation, as well as research, particularly in Mozambique, Sudan, Burkina Faso, Liberia, Botswana and Bosnia Herzegovina.

^{*} Mr. Norfolk is a land tenure and administration expert in Mozambique. He has been collaborating in the formulation and implementation of land tenure projects and research papers in Mozambique with national and international institutions such as FAO, Millennium Challenge Corporation, World Bank and others.

their strategies to these extreme climatic conditions: over the years the state has developed major irrigation schemes (in Chokwe and Xai–Xai districts), while local populations explore the fertile lowlands whenever they can.

Of Mozambique's 138 districts, 20 are 'highly prone to drought', 30 to flooding, and another 7 to both risks (Rohrbach *et al*, 2001, page 39). Overall, 48.2 percent of the population suffers one, the other, or both risks.

In addition, the 2500 km of Mozambican coastline is directly exposed to the very active tropical cyclone belt of the southwest Indian Ocean basin, which accounts for 10 percent of the entire world's cyclones. Tropical cyclones hit the Mozambican coast line on average once a year (most risk prone areas are located between Pemba and Beira), with minor events occurring some three to four times a year. Climate change is likely to increase the frequency of these events. Cyclones bring direct destruction of infrastructure, but also highintensity rainfall in extreme volumes, which often results in flash floods and adds to the downstream water floods from upper catchment areas.

Population densities in coastal flood-prone areas seem to be higher than in a number of neighbouring, mainly inland, districts (Quelimane, Chinde and Caia along the Zambezi; Xai–Xai, Chibuto and Chokwe along the Limpopo).

The recurrent nature of the floods in Mozambique creates a significant financial burden on the government. It is estimated that the total costs of the 2000 floods was equal to almost 20 percent of GDP, and slowed down the economic growth rate by 2.1 percent. However, dry estimates of costs and recovery needs do not necessarily capture the hardship and long-lasting effects of natural disasters on the livelihoods of ordinary rural people. The massive loss of livestock in Gaza province in the year 2000, for instance, undermined the livelihood strategies of an important part of the population and left rural communities much more vulnerable than they were before the floods. Similar impacts can be observed with the fishing communities along the river in the Zambezi valley. Immediate emergency and relief operations - which among other measures generally include the distribution of seeds and tools, fishing nets, and the introduction of sweet potatoes – are of course essential, but do not necessarily address the structural losses, or help to replace the core assets needed for people to make a durable recovery.

FLOODING		Dro	DROUGHT		Cyclones	
Event	Імраст	Event	IMPACT	Event	IMPACT	
1978 – Limpopo	350 killed; 400 000+ affected	1980 South and central including Limpopo basin	5 million affected; 100 000 killed (partially in combination with war)	1984 Cyclone Domoina	350 000 affected; 109 killed	
1981 – Limpopo	500 000 affected	1981–83 South and central including Limpopo basin		1988 cyclone Filao	90 000 affected; 100 killed	
1985 – Southern Provinces	500 000 affected	1983–84 Limpopo basin		March 1994 Cyclone Nadia	900 000 affected; 52 killed	
1990 – Pungue-Sofala	12 000 displaced	1987 Inhambane	8000 affected	January 1996 Cyclone Bonita	200 000 affected; 11 killed	
1996 – Southern rivers and Zambezi	200 000 affected	1991–93 whole country	13 million affected	January 1997 Cyclone Lisette	80 000 affected; 87 killed	
1997 – Central rivers and Zambezi	300 000 affected; 78 killed	1994–95 South and central Mozambique including Limpopo	15 million affected	February 1997 Cyclone Gretelle	300 000 affected	
1999 – Inhambane and Sofala provinces	70 000 affected; 100 killed	1999	100 000 affected	February 2000 Cyclone Connie	See the of the impact 2000 floods	
2000 – Southern rivers including Limpopo basin	2 million affected; 700 killed	2002 South and central Mozambique including Limpopo	43 entire districts affected	February 2000 Cyclone Eline		
2001 – Zambezi	500 000 affected; 115 killed			March 2000 Cyclone Gloria		
2007 – Zambezi				January 2003 Cyclone Delfina	47 killed	
2008 – Zambezi				March 2003 Cyclone Japhet	23 000 affected	
				February 2007 Cyclone Favio	40 killed; 120 000 affected	



■ 2. RECENT NATURAL DISASTERS AND THEIR IMPACT ■

Three major flood events, those of the Limpopo valley in 2000 and those in the Zambezi valley in 2001 and 2007, are considered especially relevant to addressing and analysing land issues in post-disaster situations.

2.1 Flood events in the Limpopo valley, 2000

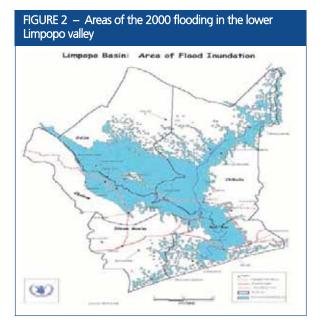
There is no doubt that the Limpopo valley floods of 2000 were the worst natural disaster in the history of modern Mozambique. It is estimated that up to 700 people died; some 500 000 to 650 000 people were displaced and temporarily sheltered in over 100 camps set up by the GoM; 27 percent of the total population were affected in one way or another. The towns of Xai–Xai, the provincial capital of the Gaza province, and Chokwe, a district capital, were hit hard. Xai–Xai had developed as a small inland harbour town, with most of its facilities (such as administration, commerce, food storage places) located in the lower part of the town, which was highly flood-prone. The surrounding dunes and other higher parts are considered to be an extension of the centre, populated mainly by new dwellers and returnees after the civil war. Chokwe is a town located in the centre of a wide flood plain, upstream of Xai-Xai, and known for its irrigation scheme. After the 1977

floods some 12 000 victims were resettled on government land within this irrigation scheme. The presence of the scheme in the valley illustrates well the dual challenge that rural people and the GoM face when dealing with natural disasters. On the one hand, irrigated agriculture is a mitigation measure against the recurrent periods of extreme drought in the region. On the other hand, promoting settlement in the valley can result in major consequences when extreme floods occur.

Damages in both urban areas were severe; thousands of houses were destroyed, as well as most of the infrastructure such as roads, bridges, railways, water and sanitation systems and electricity supplies¹. The main national North-South road linking a large part of Mozambique with the capital, Maputo, was blocked for several months, causing major problems for the transfer of goods across the country. The impact on the rural population in Chokwe (approximately 50 000 people affected; 247 casualties in total) was far greater than in Xai-Xai (1500 people affected; 38 casualties in total). This was largely due to settlement patterns (communal villages in the uplands of Xai–Xai, valley villages in Chokwe), and the distance to safe havens (a maximum of 3 km in Xai–Xai, but up to 30 km in Chokwe). Figure 2 illustrates clearly the different breadths of the flood inundations around Xai-Xai (south of the picture) and Chokwe (north of the picture)².

The floods decimated the agricultural sector which remains the major economic activity of most affected

¹ In an early assessment the World Bank estimated a direct cost of US\$ 270 million, and an indirect cost of US\$ 215 million. The reconstruction costs were estimated at US\$ 428 million. Some 11 000 houses were destroyed in Chokwe alone, and an estimated 36 160 all over the country. ² http://www.reliefweb.int/rw/RWB.NSF/db900LargeMaps/SKAR-64GC75?OpenDocument&emid=FL-2000-0012-MOZ&rc=1.



people. FAO³ estimated that due to the prolonged nature of the inundations some 140 000 hectares of crops (over five provinces, but with Gaza accounting for 41 percent or 57 000 hectares), mainly food crops such as maize and sorghum, were destroyed or seriously damaged, as well as major irrigation systems and pump installations in Xai–Xai (Magula, Ponela, Chimbonhanine), but even more so in Chokwe, which was once the pride of 'modern' agriculture in Mozambique. Later in the year, cereal production on receding and residual soil moisture proved to be extremely high.

The estimated loss of livestock varies considerably, from 30 000 (by the World Bank in the early stages) to 350 000 destroyed or seriously injured animals (estimates at the national level made by FAO at the end of March 2000; the March 2000 FAO Appeal). There is evidence that a significant number of cattle holders did not want to abandon their livestock, even when the floods reached high levels. Comments such as 'Cattle are our bank' reflect the value of livestock in the smallholder sector. Other comments such as 'When drifting under the tree tops towards the sea, animals were crying' indicate the close link between people and cattle.

Direct losses to the agricultural sector were estimated at US\$65.81 million, with the damages to the smallholder sector accounting for half of that amount. Artisan fishermen in the Limpopo basin, who had reported catching about 650 tonnes of fish in 1999 using mostly gill nets, saw their catch drop dramatically in 2000, down to about 200 tonnes, due to floodinduced equipment losses (Barnes *et al.* 2002). The population was exposed for some months to an increased risk of disease, especially cholera and malaria, but efficient public health services adequately dealt with these threats. Annex 3 gives details on the disaster-related costs covering all sectors (US\$488 million), as well as an assessment of the relief needs (US\$65 million) and reconstruction needs (US\$428 million).

2.2 The Zambezi valley floods of 2001 and 2007

In the Zambezi valley the patterns of flooding have changed considerably over the last 50 to 60 years. Before the construction of the Kariba Dam in 1959, there was usually an annual flood in February or March of each year. A second dam was built at Cahora Bassa in 1974, to further control the water levels. The new dams halted these annual floods, which encouraged many people to move into the lowlands around the Zambezi, where the soil is more fertile. However, while the dams can control the flooding in normal years, they do not have the spillway capacity to cope with the very large floods that occur on the river every five to ten years. At best, the dam operators can slow down the sudden rise in water levels by phasing the spillage of water over a period of a few days, which gives the people living downstream a little more time to evacuate their homes (Foley, 2007).

Estimates of the impact of the 2001 floods included 113 deaths, with over 230 000 people displaced and over 550 000 people affected around the Zambezi river valley and within rain affected areas of Zambézia province (Leira, 2001).

The economic impacts were widespread. In March 2001 the retail price of maize rose by 26 percent in Beira, the provincial capital of Sofala; in Chimoio, the capital of Manica, prices rose by 38 percent (maize) and 16 percent (beans and peanuts). By April 2001 it was reported that 42 000 hectares of food crops had been lost due to the flooding, although FewsNet later reported a figure of 79 000 hectares (FewsNet, 2001). First season production was said to have decreased by 40-80 percent, following two successive seasons of crop loss. In November 2001 maize prices were at a record level of 350 000 meticais per 70 kg sack. Data from the Banco de Moçambique indicated that the metical had depreciated against the dollar by 9 percent in the first three months of 2001, partly caused by the destruction of infrastructure as a result of the floods.

³ Revised 2000 Mozambique FAO Appeal. http://reliefweb.int/rw/rwb.nsf/db900sid/ACOS-64D3E8?OpenDocumentref.

THE FLOODS OF 2007

From the end of January 2007 the level of the Zambezi river again began to rise rapidly because of local heavy rain in the Zambezi valley, as well as discharges from the Kariba Dam upstream and the flow from the river's tributaries. By February it had burst it banks and flooding occurred throughout the lower reaches of the river. The situation was aggravated in Sofala province, affected by Cyclone Favio which struck in late February.

During the floods of 2007 over 400 000 people were said to have been affected by the combined severity of the flooding and the cyclone which struck Inhambane and Sofala provinces. The flooding caused 45 deaths, extensive crop damage, and the evacuation of around 163 000 people from low-lying areas.

A further 122 000 Mozambicans lost crops when their fields were flooded, although their homes and storehouses survived. Cyclone Favio devastated the town of Vilanculos, resulting in 10 deaths and 70 injured, and causing extensive damage to infrastructure and property. An estimated 150 000 people were affected in the districts of Vilanculos, Inhassoro, and Govouro, as well as along the Buzi river in southern Sofala province.

Estimates by the Ministry of Education indicated that the flooding in the provinces of Zambézia, Tete, Sofala and Manica prevented 130 000 pupils from attending school, just as the school year was beginning, in 392 schools in the four provinces.

Ministry of Health nutritional surveys conducted inside and outside accommodation centres in selected districts in Sofala, Tete, Zambézia and Manica found high levels of malnutrition among children under five years of age, ranging from 12.3 percent to 19.9 percent.

Box 1 shows the results of a survey by SCF–UK, conducted in October 2007, concerning the areas affected by the floods during February and March 2007 in Zambézia Province. One hundred and eighty one households were surveyed in 13 communities; seven in Mopeia district and six in Morrumbala district. Members of the households were interviewed from both inside and outside the resettlement areas.

■ 3. CRITICAL LAND ISSUES AFTER THE NATURAL DISASTERS ■

3.1 An enabling environment to prevent natural disaster related disputes

An examination of land rights and land issues in the postdisaster situations that Mozambique has faced reveals

BOX 1 – IMPACTS OF THE FLOODS IN MORRUMBALA

Livelihood and food security impacts of the 2007 floods included:

- The majority of the households in the flood-affected areas had managed to harvest cereals during the second cropping season, but on a lesser scale than previous years.
- The main food source for households in resettled areas was food aid, followed by household production (25 percent) and the purchase of food (20 percent).
- Outside the resettlement areas the main source of food was household production (44 percent) followed by the purchase of food (41 percent).
- The main sources of income for the households affected by floods are fisheries, seasonal work/piece jobs, informal trade, and sale of crop production.
- Fewer households in resettlement areas fish as a primary source of income, largely due to the loss of fishing equipment during the floods.
- 61 percent of the households in resettlement areas do not have any fishing equipment, compared with 60 percent of households with fishing equipment outside the resettlement areas.
- Ownership of livestock is very low, with 35 percent of the households in the surveyed zones owning no livestock, and 25 percent owning only one animal.
- Households in the resettlement areas have significantly less livestock than those outside of the resettlement areas.
- 99 percent of the households in resettlement areas have access to water from a well or a borehole with a pump, compared with only 35 percent outside of the resettlement areas.
- Overall 17.2 percent of households changed the location of their cultivated land since the last planting season, of which 73 percent stated that they had moved due to the floods (this was followed by 23 percent that moved due to infertility of the soil and 3.8 percent due to drought).
- All households confirmed that they planted more cereals during the second agricultural season in April 2007 due to the weak harvest of the first season crops; however, the overwhelming majority said that in total the production was less compared with the 2006 second season crop.

Source: SCF–UK, 2007.

a common thread: major disputes and conflicts are generally absent. This is true of the post-conflict period, as well as the post-flood events that form the focus of this paper. It is worthwhile examining some of the principle reasons for this, as they will provide some important lessons on efforts that may be required to prevent these disputes happening in the future.

• Resilience to disaster.

Over the past ten years, work on disasters has increasingly focused on the capacity of affected communities to recover with little or no external assistance. This requires a stronger emphasis on approaches to risk reduction and humanitarian and development work that put resilience, rather than just need or vulnerability, at the heart of the debate (IFRC, 2004). After independence from Portugal in 1975 Mozambique endured a 16-year civil war that was ended by the 1992 Peace Agreement. During this period, hardship was exacerbated by a number of natural disasters: the floods of 1977 and extreme droughts in the early and mid 1980s. It appears that the Mozambican people have established a high degree of resilience to the recurrent character of these disasters.

• Livelihood strategies to respond to the occurrence of disaster.

In the Gaza province and other dryland areas, strategies to minimize risks of economic hardship have been developed over time. These include a diversification of agricultural production in time and space, having access to different types of lands and soils, and making alliances with neighbours to secure this access. Losing one or two parcels due to the occurrence of a disaster is compensated for by arranging access to parcels in different locations.

• Solidarity and social networks.

Strong forms of solidarity remain part of Mozambican society. In rural Gaza, the *Changanas* (dominant regional social group) have developed solidarity systems such as *Kofunana* and *Tsima*. Similar traditional mutual help systems exist in the Zambezi valley, such as *Macuti* and *Cufuisa*.

Absence of major ethnic, social and political differences.

Mozambique is a multi-cultural society but has remained largely immune to confrontations or conflicts defined along ethnic lines.

• Land availability.

Post-disaster situations are not, as yet, being used by groups or individuals to gain access to land or natural resources, and in general there remains a relative abundance of land for agricultural development. Private land concessions are an established practice in the Limpopo valley and seem to meet the consent of local populations. Larger concession holders are not yet massively encroaching upon smallholders or communal land (although more recent reports indicate an increasing interest from the agro-fuel sector). In the Morrumbala and Mopeia districts of Zambézia the threats to land access have so far manifested themselves through the marginalisation and exclusion of some communities from the hardwood timber forest areas, rather than from the arable or pasture land in the low-lying valley areas. Land remains in reasonable abundance in both Mopeia and Morrumbala and the limits to land production tend to be related to the availability of family labour. However, it is possible that this situation will begin to change as stocking levels of livestock begin to recover, a process that has only happened slowly to date. The history of the river margins in Mopeia and Morrumbala is one of extensive use of pasture land, and local community elders still remember the days when vast herds of cattle belonging to colonial companies were corralled all along the banks of the Zambezi river. There are already some localised conflictive incidents, largely as a result of the stocking of water buffalo, which are allowed to graze un-herded and cause significant damage to local machambas.

• Informal but strongly legitimate land rights and local institutions.

Decision-making on land management, including dispute resolution, continues to be dealt with primarily via informal but mostly legitimate institutions at the local level. Both displaced people as well as those who receive the disaster victims often use these same institutions to take care of their problems and challenges. The strength of the institutions' legitimacy is recognized by the Land Law: customary land rights exist and are recognized as such. They do not need to be prescribed. Local people also accept these rights, which are based on the occupation of and use of the land. This offers major advantages in that formal documentation is absent. It also empowers oral testimony in case this is required, and local solutions to problems.

3.2 Land issues for the displaced

In the Limpopo valley floods of 2000, the temporary settlement of up to 650 000 people was an operation that went ahead without any significant preparatory efforts. There is evidence that some of the selected sites coincided with locations that were used after the 1977 floods. However, most of the sites were identified on the spot, sometimes in places where rescuers dropped off flood victims from helicopters or rubber boats.

The distance between the places of origin and the accommodation camps varied according to the morphology of the valley and the presence of safe havens

on high ground. The accommodation camp of Xai–Xai 2000, also called *Ndambine* ('floods' in the Xangana language), which turned into a permanent and to some extent 'example' resettlement village, is situated in the outskirts of Xai–Xai town, less than 10 km from the flooded centre, just outside the municipal boundary⁴. One of the biggest resettlement camps in Chokwe district, Chiaquelane (accommodating up to 60 000 displaced people at one stage) is, however, located at a distance of 30 km from the flooded centre. Another refuge town, Macia, is some 60 km from Chokwe town. All three centres have developed from places of temporary shelter into permanent resettlement sites.

Similarly, in Zambézia in 2001, and to a lesser extent in 2007, local populations either fled themselves, by canoe, or were evacuated to areas of safe higher ground which were easiest to access. Thus in 2001 and 2007 the community of Cocorico, which occupies an island within the river system, was forced to head for the Sofala bank instead of to Mopeia on the Zambézia side, an area where they felt more 'at home' from a cultural and administrative perspective. In 2008 the regulo and his people managed instead to reach Mopeia, which is closer to their area of origin, and where there have been attempts since the 2001 floods to establish permanent resettlement areas. In Morrumbala, the situation is different: here, most of those displaced in 2007 and 2008 were able to return to land that they had already been allocated in the higher areas during the 2001 floods.

STRENGTHENING TENURE ARRANGEMENTS THROUGH VISIBLE OCCUPATION

Upon arrival, flood victims were registered by relief agencies or the state authorities, making them eligible for emergency assistance. It was also on this basis that plots of land were allocated in the resettlement villages. In the majority of cases, this registration, supplemented by an index map where each plot number corresponds with the name of a resettled person or family, is the only documentation that secures any tenure over the land and property. None of the communities interviewed in Zambézia had any documentation relating to their newly allocated parcels of land and, although they were aware that a general map of the residential area had been compiled by the provincial services of MICOA, a copy of this was not available locally, even at district level.

Maintaining secure access to productive assets such as land in the area of origin, but also to employment, is a core livelihood strategy that flood victims have adapted as part of a post disaster response. Permanent occupation of land, or the exercising of highly-visible land use, is an accepted way of establishing strong rights over land. This is part of the customary heritage of all social groups. Successive post-independence governments have also embraced this policy, on the basis that 'land belongs to those who use and cultivate it'. Resettled flood victims have used this strategy to strengthen their tenure security. They have tried to occupy both the lands that they had to leave and the newly-allocated lands. When distances between the two sites become too important, families tend to split up, and establish some form of presence on each plot.

The use of customary embedded practices by resettled people to acquire stronger rights over their allocated land continues to be used widely. The planting of fruit trees is very popular in resettlement villages. The presence of fruit trees on land (cashew, mango, papaya, etc.) establishes strong rights over that land. It is proof that the land belongs to someone, and, when occupied by an outsider, it may be reclaimed. Some NGOs have been promoting fruit tree planting as part of resettlement efforts. There are also efforts in some flood-susceptible locations to plant trees along the parcel boundaries.

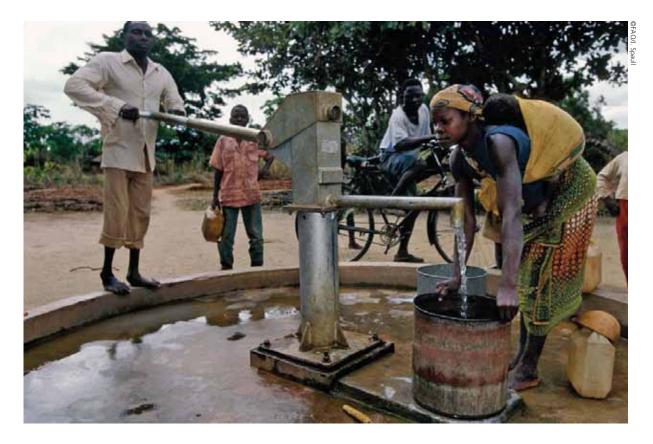
The 'removal' of fruit trees that are found standing on an allocated plot in a resettlement village is a common strategy to erase proof and support a potential future claim over the land. These claims do sometimes occur and are lodged by living members of the host community, who still use the land. It is by decision of the state that they are excluded from land use on their own land. This practice creates common disputes.

The integration into existing structures of host communities, and acquiring land through local customary authorities, is a method used by a number of resettled households that want to have secure access to additional land in the neighbourhood of resettlement sites. However, upland is much easier to access in this way than more valuable lowlands.

RESETTLEMENT ON COMMUNITY LAND

Resettlement programmes are organized by the local authorities (often district administrations), or local (municipal) and provincial governments. For a number of resettlement places in the vicinity of towns, some sort of outdated town plan usually exists. These plans have no provisions for emergency resettlement. In the best cases, areas earmarked as possible extension sites for town development could have been used for the

⁴ This is important as municipalities have a different land administration system from rural areas that are located outside municipality boundaries.



resettlement of flood victims. In practice this did not happen, mainly because local governments did not want to see their future prime land being occupied permanently by displaced people.

Most people are actually resettled on community lands in rural areas. This is a laudable policy, as it may offer at least the minimum conditions necessary to engage in economic activities that will support local livelihoods. Local communities have established rights over these lands through long-term occupation, according to local rules and customs. Community land rights are recognized by the Land Law, and can be made visible by the community land delimitation processes. Local land management institutions, as well as a significant part of the community members, often have a clear idea of the position and extent of the community boundaries. The land policy and law embrace negotiations and community consultations as mechanisms for outsiders to obtain access to community land. The community, represented by a local land management body, agrees or disagrees with the request for access to land and the use of this land under certain conditions. The latter may refer to the duration of the right to use the land, but also to the benefits that this temporary transfer entails for the community.

Resettlement locations on community land are identified by the local government authorities or district administrations, with the involvement of local community representatives. There is evidence that community representatives are not necessarily the same people as those identified in the Technical Annex to the Land Law. i.e. the so-called G9⁵. They correspond more with local political leaders, who have established privileged relations with the state (in Gaza), or local traditional leaders, who have greater legitimacy within the local context than the state or state-recognized leaders (in Zambézia). The consultation process that identifies suitable resettlement spots is more likely to correspond with a decision taken after some 'superficial consultation', rather than a decision based on negotiation. This fast action appears to be justified by urgency, but may result in friction and problems later on between the resettled peoples and the host community.

Consequently, public institutions such as the former INPF (now integrated in MICOA), the Provincial delegations of Public Works and the SPGC, initiate a process of surveying and parcelling plots. Surveying appears to have presented major challenges in the past. There is a weak capacity to deliver services, a lack

⁵ A G9 is a (s)elected representation of a rural community, between 3 and 9 people, who are responsible for officially exercising functions and signing a number of forms to delimit the community land rights, according to the Technical Annex.

of coordination between different agencies, and a lack of norms and standards. As part of recent resettlement efforts in Zambezia, MICOA and other partners seem to rely now on the training of locally-selected youngsters to provide basic surveying services. Young volunteers from local communities who have acquired a minimum threshold of school education are trained on-the-job in basic surveying techniques, and in the production of simple parcel layout plans. Once a certain level of expertise is reached, these 'basic parcelling technicians' are considered to be trainers for other small teams in neighbouring areas⁶.

TRUST IN THE STATE TO GUARANTEE LAND AND PROPERTY RIGHTS

The only security of tenure that resettled flood victims acquire over their land and home is based on trust in the local administrative state structures. They are not issued any kind of certificate or DUAT for the acquired plot; neither do they obtain a building licence for the shelter or home. The state is still very much respected, at least in the southern parts of Mozambigue, and this trust may provide certain levels of perceived tenure security. But, in most of the cases in Gaza and in at least one area in Zambézia, the state did not in fact acquire the land for resettlement through an 'official legal' agreement from the host community. The host community could, in principle, question at any moment the validity of the resettlement site. In this context the question arises as to why the state does not sign a legally-binding agreement with the host community, such as an official community land delimitation, followed by a genuine negotiation of access to community land according to the Land Law. The lack of any preventive action, combined with the urgency to act when a disaster occurs, is probably the major reason why a negotiated agreement is substituted by a more imposed form of agreement.

On the other hand, the state has access to other mechanisms to secure land for resettlement; for instance, by using expropriation for a public purpose, as happens in urban areas. This is a much stronger and less negotiated form of accessing community land, but also guarantees, when implemented well, that the host communities will receive adequate compensation. It also strengthens the position of the state, or local authorities, in providing sufficient tenure security for the resettled flood victims, at least when there is a desire to do so.



GRADUAL STRENGTHENING OF WEAK TENURE ARRANGEMENTS

Initial trust in the state to secure tenure for resettled flood victims appears to fade away when the victims are confronted by host community members who reclaim their land, sometimes with outsiders who spontaneously settle on the outskirts of resettlement villages (to take advantage of new opportunities created), or with local state authorities themselves. There are cases where the infrastructure allocated as part of resettlement schemes has been re-allocated to outsiders by the local authorities. There is also anecdotal evidence of some plots being traded by local authorities, or of the multiple allocation of plots to different beneficiaries. All of these situations undermine good faith in the state as a guarantor of tenure security.

After several years, when initial gratitude has given way to real-life challenges, plot beneficiaries realize that they require a more direct form of tenure security. For instance, in Xai–Xai 2000, individual households are applying now for (i) the registration of their plot as a formal DUAT, to secure the plot, and (ii) a (post-factum) building licence to secure the infrastructure on the plot. This pro-active registration process originates in the resettled community itself, as a response to a perceived

⁶ Interview with DjeDje Arlindo, Director DNPOT, MICOA.

feeling of tenure insecurity. The public cadastral services (SPGC) understand well that people want to secure their tenure, but consider this to be an on-demand process, and deal with it exclusively on an individual client/publicservice-provider basis. This approach brings with it many hurdles involving logistics, costs and other considerations, especially against a background of poorly-staffed institutions. Generating income for these services may be one of the driving forces for maintaining this ondemand approach. There is, however, no doubt that a more systematic campaign approach would drastically reduce costs, and be more in line with existing service provision capacities.

There are also calls for subsidization of the costs to secure land-use rights and obtain building and construction licences in resettlement villages. This could be achieved by a campaign approach. It is also conceivable that a set of simplified procedures could be considered, to reduce real costs. In the case of a resettlement village, for instance, a local consultation process for each individual application does not seem appropriate. Another common opinion is that the most vulnerable groups, especially female-headed households and single women, should be able to secure legally their rights at no cost.

These concerns – essentially, upgrading tenure security through official means – were much more observable in the peri-urban context around the city of Xai-Xai in Gaza than in the deep rural settings of Mopeia and Morrumbala in Zambézia. There are several reasons for this. Firstly, the vast majority of people are not aware of the formal mechanisms for securing rights, and consider that the legitimacy of their occupation flows from their membership of the community (more on this below). Secondly, and closely linked to this, most of the resettled, although they have moved from the baixa areas, are still now occupying land that remains within the traditional boundaries of their particular community. They therefore consider themselves to have as much right as anyone else to occupy it. Thirdly, the supply side of the equation is much less in evidence: whereas in Xai–Xai 2000, the district administration appeared to have been actively soliciting the residents to upgrade their occupation (and therefore increase the local revenue stream for the district coffers), the authorities in Mopeia and Morrumbala in Zambézia do not have the mechanisms or the authority to provide such services. Whether, in fact, the district authorities in Gaza have any legal authority to register the land rights for the people of Xai–Xai 2000 is questionable.

SECURING LAND RIGHTS AS A GROUP

Acquiring land for displaced people as a group is another option being tested. For example, a Muslim church in Macia requested a piece of land from the district administration, which was subsequently issued in the church's name and sub-divided into 50 plots. These were then allocated to flood victims who remained in Macia after the rescue operations. The beneficiaries themselves have never received any documentary proof that establishes a direct and unconditional right over their plot. The church apparently initiated a process to obtain a DUAT, but after some years there is still no trace of this request at the offices of the provincial cadastre. This specific case demonstrates again that the first right-holder (the church) did not necessarily acquire the land according to the prevailing legislation. It also points out, yet again, the weak position of the beneficiaries in that they need to rely on the good faith of intermediaries. Some beneficiaries, and especially their children, are taking the initiative now to secure their plots using legal provisions, i.e. they are attempting to acquire individual DUATs.

A LACK OF INFORMATION

Information on the nature and costs of the legal procedures required to secure tenure appears to constitute a major hurdle for displaced people. Very few are informed about the possibilities that the Land Law offers them in initiating a land registration process. Since their resettlement, Xai-Xai 2000 residents have not been exposed to any kind of organized events for the dissemination of information. None of the communities interviewed in Zambézia were aware of the Land Law or its provisions. Meanwhile, new financing possibilities for securing tenure are put into place, such as the ITC fund. In Gaza, the provincial fund management does not seem to be aware of the need for flood victims to secure their allocated plots; neither are the beneficiaries of resettlement areas aware of the existence of such a fund. The NGOs and other civil society groups do not seem to take up this challenge, either. It appears that the involvement of NGOs and others in emergency work is limited to providing relief immediately after a disaster, including the building of shelter. Securing the land on which this shelter is built seems to be less of a concern: as one interviewee from an NGO in Zambézia stated, 'tenure is not part of the equation'.

EMERGENCE OF PARALLEL MECHANISMS FOR SECURING LAND

In the absence of an organized response from the appropriate public sector institutions, new mechanisms



to secure tenure seem to emerge, parallel to the existing legal procedures. A significant number of people rely on local authorities (at the administrative post level, or even lower) to obtain some sort of written declaration stating their ownership of land or infrastructure. The local authorities charge a fee for these services. The documents and the process of registration are all handled at district level. Given that the only legally-recognized cadastre, outside of the municipality areas, is at the provincial level, and that land rights must be authorized by the provincial government, these procedures do not seem to have any legal backing. They do, however, appear to be legitimate for the incumbent and to the local authorities.

Similar declarations from local leaders state the good faith and capacity of the incumbent to engage successfully in a project. These declarations are accepted by some commercial banks as a guarantee for access to credit. This is an interesting evolution, which departs from the deeplyrooted liberal wisdom that a legal individual landownership title is required as collateral, in that it relies more on local evidence of legitimacy.

3.3 Land issues for the returnees

THE IMPERATIVE FOR TENURE SECURITY IN FLOOD-SUSCEPTIBLE AREAS

Resettlement often only gives flood victims an opportunity to acquire a residential plot in a safe haven. An overwhelming number of resettled people continue to be engaged in agricultural activities; in the rural Mozambican setting, alternative opportunities are rare. Resettlement, as a permanent option, is not generally conducive to the establishment of a new livelihood; it does not provide the access to land assets on which livelihoods can be built in this agrarian society. This remains a strong 'push factor', moving people away from resettlement areas and back to their areas of origin, where people encounter better conditions and established social networks to rebuild their livelihoods. Rural people are thus extremely aware of the need to maintain their access to the lowlands and the grazing lands from which they were evacuated. In the case of the resettlement of livestock producers, it is clear that their cattle will mainly remain in their areas of origin.

Some examples of this were evidenced in the wake of the 2000 floods. After the flooding, DFID provided finance, through a Knowledge and Research project, for the development of sustainable flood mitigation strategies for three communities in the Limpopo valley. Information on sustainable flood mitigation strategies were collated in a 'Source Book' and then applied to these communities (Carre, Languene and Matidze). The implementation work was carried out by HR Wallingford Ltd, in collaboration with the Eduardo Mondlane University, the Department of Health, the Department of Agriculture and the local district administrations.

These planning processes led to the identification of a series of flood mitigation measures in each of the areas. Two of the most important measures, common to all areas, were the provision of drinking water during floods and pest-resistant seed, both of which were subsequently implemented with external support and funding.

However, in relation to resettlement initiatives, the villages expressed a very clear preference for remaining in their areas of origin, rather than moving to the resettlement areas. In Languene, it was reported that:

'The Government has provided a re-settlement area. Houses have been built using local materials and there is a concrete school. However, there are few jobs and people have returned to the floodplain.

... little Government support is provided. It is however noted that the Government provided re-settlement areas and a school. It appears to be Government policy to resettle people outside flood risk areas, but the people have no source of income in these areas. They therefore return to the floodplain in spite of the risk. The issue of employment and livelihoods for people in resettlement areas should be discussed between the Community and the District Administration.' (HR Wallingford, 2005)

Similarly in Carre:

'The people want a school in the village. The Government will not build one because of the flood risk. A school could provide a valuable safe haven during floods if designed for this purpose, although the Government may not wish to consider a school in the Community now that one has already been built in the evacuation area.' (HR Wallingford, 2005a)

This study has identified different interaction scenarios between residential resettlement areas and the flood-prone lands of origin. In Xai–Xai and some areas in Zambézia, the relocation areas are close to the flooded areas, and people tend to move between the two locations on a regular basis, sometimes daily, sometimes weekly. During the cropping season, small farmers may erect some form of temporary shelter close to their fields and remain there for extended periods. Others, mainly young family members, graze cattle in the wide Limpopo plains. In Chokwe, however, there is more of a tendency to maintain permanent shelter structures in both the resettlement area and the area of origin, mainly because the distances between the two are more significant. In both cases, resettlement and host areas generally fall under different local land management structures (or different communities).

In Zambézia province, the distances between the areas tend to be greater. Over time and after the flood waters have receded, the temporary visits to the *machambas* in the *baixa* become longer, more family members begin to make the journey to tend the fields, and eventually there is fairly permanent relocation back to the flood-prone area. Here, both the areas of origin and the areas of resettlement usually form part of a single community territory. In other cases, the two areas fall under the jurisdiction of different communities, which may have customary leaderships that are more politicized and sometimes more polarized than in the southern provinces.

Overall, the bottom line is that displaced people want to continue having access to the lands they left when taking up residence in a resettlement site. For them, the establishment of strong rights over land that may only be temporarily inhabited at best (or that is not necessarily permanently or highly-visibly used) and which needs to be evacuated with regular frequency, is essential. Where there is a perceived risk that people may eventually lose access to these lands, they will not be encouraged to leave the areas when the floods arrive. Providing secure tenure to their lands of origin, whilst also securing access to a residential plot in a safe haven, is therefore key to any successful flood mitigation policy. A failure to achieve the two challenges simultaneously will result either in poverty and destitution or in continuous exposure to the dangers of recurrent floods.

The role of local institutions in providing security of tenure

People who return to exercise a permanent occupation of their land have not, in general, encountered any problems in re-establishing their rights. This applies to both urban and rural land. In residential town areas, the return after the floods has not resulted in illegal secondary occupation. Infrastructure was badly damaged, but not wiped out completely, leaving clearlyvisible indications of previous occupation. The local leadership, neighbourhood secretaries and other local dignitaries have played an important role in confirming previous occupation and ownership when required. It does not appear that the loss of documentation – in urban areas, mainly building permits – has negatively impacted on the re-occupation of property.

In rural areas, such as in the irrigation scheme of Chokwe, some parcel boundary markers such as trees and even shrubs, were still in place when flood waters receded. In Zambézia, none of those interviewed (all of whom had been displaced and had returned twice to their areas of origin in the last 10 years), reported any problems in relation to re-occupying either residential or agricultural plots that they had been forced to abandon. Some minor boundary disputes occurred in Chokwe, but were successfully addressed by local leaders. Generally speaking, there is a high level of respect among small- and mediumsized farmers for land belonging to others, especially their immediate neighbours. The concept of occupation in good faith is a reality in Mozambican society, at least among people who stand on the same level of the societal ladder.

It is essential to highlight the existence of 'the living cadastre', a local institution of mainly elder people who maintain mostly memorised records of local land use and ownership. These institutions will also often witness informal local land transactions. The living cadastre plays an essential role in the normalisation of post-disaster land occupation. Legitimacy and reliance on local structures takes on an important dimension when most land was allocated in an informal way, even by the state, and never documented.

The concept of the local community and its role in land management is also essential to secure land rights for returnees. Members of a local community gain access to the use of land and natural resources by virtue of their membership. This membership is lasting and does not expire when a community member is absent for some time. Of course, local dynamics will play here, but in principle community members do not lose their right to secure land access when they are displaced.

WINNERS AND LOSERS

The largely successful reconfirmation of legitimate rights in both urban and rural areas upon return does not mean that some returnees haven't been prejudiced in the process. The municipality of Chokwe grasped the 2000 floods as an opportunity to re-plan some of the urban areas within its jurisdiction. Plots within certain parts of the town had previously consisted of 30 lots of 40-metre parcels, and generally included a small agricultural field used as a home garden. The municipal authorities have now decided to reduce these plot sizes and prohibit the plot owners from undertaking any agricultural activity. Compensation for lost property (such as fruit trees or land itself) is not considered, although most plot owners feel that such compensation is due to them.

There is a perception that the payment of compensation by the authorities is directly related to the legal registration of the land and property. Most town plots have a record at the municipal services (a property rights registration or *registo de propriedade*), but legal registration of the property is rare. Plot owners argue that registration is only for the 'rich', although in practice the costs of registration are low and well within the budget of an average plot-holder. It appears once again that the lack of information (on procedures to be followed and on the costs involved) is an obstacle to the registration of land and property. It must also be remembered that the registration of land and property is not compulsory in Mozambique.

The post-flood period has also created some new dynamics in the transfer of land. The 2000 floods have resulted in a reduction of the population of the Chokwe municipality from 63 000 in 1997 to 54 000 in 2007, although the district as a whole has seen an 8 percent increase over this period. Emigration out of Chokwe municipality has made available a number of urban plots, with a significant number being exchanged and occupied by family members, as part of the diversification strategy (having access to different urban plots in flood prone and flood safe areas). Other plots have been sold by their owners, which, strictly speaking, is unlawful in Mozambique. Nevertheless this again proves that land markets are an integral part of the system. Other parcels were re-allocated by the administration (municipal and local), a process that was sometimes associated with corruption and nepotism.

3.4 Land issues for the host communities

RECOGNITION OF HOST COMMUNITY NEEDS AND CONTRIBUTIONS VIS-À-VIS NEWCOMERS

Land issues and the tenure rights of host communities should also be addressed in the context of resettlement within their areas. Resettlement mainly occurs on community land, most of which is neither delimited nor registered. Compared with earlier post-disaster resettlement efforts (in the late 1970s), the GoM has embraced other land policies and legislation. Whereas in the late 1970s the state, under a socialist-inspired regime, was the sole owner and manager of land, the present land law recognizes strong rights of communities over land. The underlying philosophy is that land can be alienated from community land, and can be used by outsiders under certain conditions, and on the basis of negotiation. This is a mechanism to attract investment in rural areas, and involve noncommunity members in the development of rural areas. The mechanism can, or rather should, also be used for identifying areas to resettle victims of natural disasters. The land law, especially the TA, provides mechanisms to handle the local consultation process. Negotiation is of course only possible when it is known (i) over which area the rights of a certain community extend, and (ii) who represents the community as a negotiation partner. The community land delimitation process achieves both of these pre-conditions and makes the community land rights visible to outsiders, including the state.

The common practice now is that resettlement occurs via local government or district authorities alienating a part of the host community lands without following the necessary procedures as described by the law. Consequently, this land is re-distributed to flood victims, who, after some time, will procure some form of individual tenure security for the plots that were allocated by the state. This results in resettled people acquiring rights over land that may be perceived as stronger than the rights of their hosts. This is, of course, exacerbated when the latter community land rights are not delimited and registered.

In general, principles of solidarity are used and accepted by host communities in giving refuge to their 'brothers and sisters' when these are the victims of a natural disaster. When this solidarity turns into unconditional alienation of their own land, undermining their own rights, pressuring their own natural resource base (and not necessarily with their full consent), and without bringing any benefits, it is understandable that conflicts may arise. This is certainly exacerbated by the emergency and recovery aid channelled to resettled victims, of which the host community members are mostly deprived.

The case of Xai–Xai 2000 exhibits some of the elements of such a scenario. The municipal and provincial authorities identified a site for resettlement, together with local leaders of the host community, the communal village of Fidel Castro. Fidel Castro village itself is the result of the response to the 1977 floods, when it emerged as a resettlement site. At that time, community members were concentrated in a very rudimentary village structure, without many services and amenities. The community members continued to cultivate their scattered parcels in the highlands, planting cashew and mango trees on these plots. It is on this agricultural land that the new site of Xai–Xai 2000 was constructed. New residents are strengthening their tenure over this land, whilst the remnants of any previous occupation are being systematically removed. Some compensation is agreed through sharing the production of the fruit trees between former and new holders of land-use rights. At the time of 'negotiation' between the authorities and the host community, it appears that more serious promises of compensation

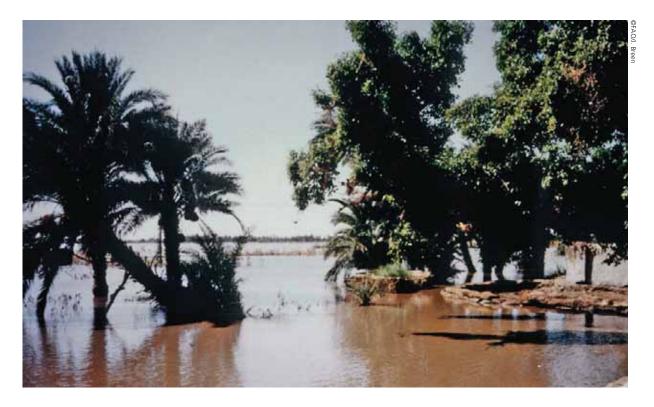
and sharing of benefits were made by the former. These promises (or outcomes of a rather superficial negotiation deal) faded away over time and leave the host community feeling a degree of simmering resentment. Seven years after the fact, these could potentially turn into conflicts at local level.

Similar situations were encountered in Zambézia, generally centring on the provision of improved housing for the re-settled. In the resettlement areas of Braz and Noere, for example, people from Nhangoma in Tete province have come to be resettled in an area that forms part of a different community. The state policy of providing access to zinc roofing sheets and assistance in the construction of brick houses, has lead to a situation in which the resettled second-tier traditional leaders (*sapandas*) from Nhangoma have better housing than the first-tier paramount chief (*regulo*) of the host community. This fact was remarked upon by several community members as being unfair, not recognising sufficiently the *regulo's* contribution in hosting the displaced community.

In a different area, Mponha, the state was more alert to this issue and the local third-tier traditional leader (*fumo*) of the host community was given the same access to materials and assistance as the flood-affected displaced; the population here claimed that only the *fumo* was given this privilege and that there was no jealousy within the community about this, because it was the *fumo* that had to sacrifice his time in the fields in order to attend to resettlement business.

UNNECESSARY STATE INTERVENTIONS

In Zambézia there is evidence that some of the government's initiatives in securing land for the displaced have caused unnecessary confusion and have actually been at odds with a correct application of the land law and with local land management issues. Although it has not been possible to identify exactly from where these initiatives have arisen, it appears that through the intervention of the provincial government in Zambézia, post-2007, a number of areas have been demarcated in the cadastral atlas for agricultural use by displaced groups. According to the provincial SPGC, the intention behind these initiatives is laudable: they are driven by a perceived need to protect these areas from encroachment by private interests, and ensure that there is sufficient land access to meet the agricultural needs of the displaced. The manner in which they have been implemented, however, has been legally suspect, largely disempowering the local communities (both the displaced and the host groups) and, at least



in one case, leading to the halting of a communitydriven process to identify and register its local land rights through a delimitation process.

It is important to note that all these cases involve flood victims that are being resettled from valley land to higher grounds, but within the same rural community. From interviews conducted in 2008 within local traditional structures, it was apparent that the identification of resettlement areas and the areas available for cultivation had already been handled very well at a local level. The intervention of the provincial government in demarcating other areas, largely through the SPGC, was considered to have been unnecessary and confusing to some people. However, in most areas, even the *regulos* appeared to know little about it.

From a legal perspective, the following issues arise:

- The demarcations are done without the corresponding DUAT being awarded. The areas are merely marked in the cadastral atlas and there are no procedural mechanisms to approve the land rights or identify its status.
- The SPGC claim that the areas demarcated in this way are registered on the cadastral atlas in the 'name of the community'. However, without following the Technical Annex of the Land Law it is not legally possible to identify a 'local community'. The provincial office of MICOA had a different explanation and claimed that the areas had been declared 'reservas do estado' (areas reserved to the state).

From a process perspective, it would appear that the demarcations only served to undermine the local land management institutions:

- The demarcations were done by outsiders, technicians from the provincial level, who appear to have had little or no contact with the local traditional structures or to have consulted anyone other than the district administrations.
- There are no local maps of these demarcations in the area, not even within the district administrations, and none of the *regulos* in the areas visited in 2008 were aware of the maps or the areas that they demarcated.
- In one case, the community of Nhacatundo was, with the help of a local NGO, ORAM, already undertaking a delimitation of their customarily-acquired land rights when the process was halted under instructions of the SPGC, ostensibly because SPGC wanted to complete the separate process of demarcating these agricultural areas for the displaced. This was done even though the affected people were from the same area, and would therefore be co-title holders with the same rights to the land as anyone else from the community. The area demarcated by the SPGC is considerably smaller than the area that would have been secured through the delimitation process; it would also have been legally awarded instead.

There is little doubt that when rural communities register their land rights through a legally-sanctioned delimitation process, and prepare, as part of this, a simple land-use plan for the area, they are more likely to (i) accommodate victims of natural disasters (ii) be more actively involved in encountering local and acceptable solutions for managing the resettlement and (iii) benefit from recovery efforts. An enabling environment of local land management accountability is more likely to prevent disputes between hosts and newcomers than an imposed intervention from state authorities.

3.5 The loss of formal records

The loss of formal land and property records was a major land-related issue highlighted in the early assessment missions in 2000. This is not surprising considering that most administration buildings in Xai–Xai and Chokwe were flooded for weeks, offices were abandoned for some two months, and upon return the documentation was buried under a layer of mud. Records that were destroyed included:

- Cadastral records of the SPGC–Gaza, located at the Provincial Directorate of Agriculture in Xai–Xai; of some 1322 records, two thirds were unique documents without copies available at the central level.
- Property records of the municipality of Chokwe (*Tombo geral da propriedade*), located at the municipal administration; an estimated 70 percent were damaged.
- Provincial registry information of the Gaza province (*Conservatório do Registo*), located in the Ministry of Justice in Xai–Xai; 22 volumes of the register were destroyed or partially destroyed.

Notary documentation was also lost. ORAM, a leading national NGO on land issues, lost a number of processes relating to the registration of farmers' associations, which are time-consuming and costly processes; the registration process of the associations had to be restarted from scratch.

There is a strong belief that most of the damages done to land, property, civil data and registers could have been avoided. The arbitrary response to the alerts given through the public early-warning system is considered a major reason for the loss of documentation. The floods were well predicted, but in fact the dimension of the third flood, beginning at the end of February, took Chokwe by surprise. Notwithstanding the timely alerts, there was widespread disbelief that the height of the flood would exceed 1977 levels. The Xai–Xai population, however, including the civil services, were alerted at least two days in advance that the flood levels would reach the town, but very little precautionary action was taken. The SPGC staff removed their computers from the ground floor offices to the first floor, but all hard-copy documentation remained in the filing cabinets on the ground floor, as well as all the surveying equipment.

Within the context of the existing land administration environment of Mozambique, the most pertinent questions concern whether the destruction and damage to official land and property records has had any significant negative impact on the daily life of land and property holders, and whether, as a consequence, it has created any land and property-related disputes. The answer to both questions is probably 'no', at least in respect of rural land rights.

Firstly, an overwhelming part of the existing land rights in rural areas have not yet been subject to any cadastral surveying, and these rights are thus not documented as official cadastral records. Of a population of 1 116 000 for the Gaza province (with some 100 000 urban-based people registered in Xai–Xai town – Census, 1997) only around 1300 rural land parcels were issued, or in the process of being issued, at the time of the floods. The loss of these records, in the grand scheme of things, was therefore not catastrophic.

Secondly, all documented DUATs that were approved after 1998 have, in principle, been subject to a process of consultation with local leaders and authorities, as part of the legally-approved procedures to acquire a DUAT⁷. This local consultation process always leaves traces that can be tracked down when needed. When documents are destroyed, there is always a local reference able to confirm whether a person or entity has been through a process of acquiring a DUAT.

Recording property rights in urban areas has been more widespread. The inclusion of a property right in the municipal *Tombo de Propriedade* (the register of the infrastructure on the land, not the land itself) is written proof that a person has erected a construction on a plot according to the legal procedures. Again, there are strong social-control measures as regards land occupation within urban areas, exercised by local authorities such as *chefes de quarteirão* and *chefes de bairo*. This is a remnant of the social-control system instigated by the socialist regime in the 1970s, and comes in handy when there is a need for oral testimony to confirm land and property rights.

⁷ Land-use rights approved before 1998 have also been, again in principle, subject to a validation process to bring them in line with the provisions of the new land law regulations passed that year.

The loss of formal records has had little impact on people's lives in the aftermath of the disaster. This does not, however, imply that lost documentation does not need to be restored, or land rights do not require documentation. When community land rights are not made visible through delimitation and recording, it is difficult for community structures and members to exercise their rights. Undocumented community land rights are easily encroached upon by outsiders who may acquire incompatible overlapping rights in bad faith. Documented individual DUATs are needed for a number of situations, such as accessing credit, securing investment, and avoiding overlapping land rights.

The response of the government in addressing the recuperation of lost documentation, and preventing similar situations from occurring in the future, has been tentative. No special campaign was set up to rapidly retrieve or restore lost documentation. Each service or department was responsible for handling its own business, according to procedures that were not well defined. Efforts on recovery and restoration of documentation were normally part of the regular programme of the service. There was no recruitment of extra staff, although there was some occasional help from headquarters-based staff. There is no sign that specific measures were taken, or specific procedures approved.

It must also be noted that the recovery and restoration efforts have not directly induced a systemic change. The lost or damaged records were restored as best they could be, but the recording system itself was not improved. The data of the Property Register (*Registo Predial*) is transcribed, once again by hand, in new books, a process that is still ongoing a full eight years after the events. According to the registrar in Xai–Xai, the introduction of a digitised Property Register is one of the lowest priorities among the ongoing modernisation efforts in the Ministry of Justice.

A number of simple measures to prevent a similar impact on formal records were identified by national staff of different departments, including:

 A better and more organized response to early warnings is essential. Flood alerts need to be taken seriously and decision-making on safeguarding public goods and documentation should not depend on personal interpretations of such alerts. Although earlywarning systems are better and more reliable than they were in 2000, people need to acquire more confidence in the early-warning institutions. These also need to become more legitimate for the ordinary citizen. The way alerts are given is not always accessible: clear messages need to be conveyed, such as a description of the present colour coding system, rather than abstract information on expected water levels delivered in meteorological language.

- Keeping official records in safer places is an obvious response to avoid future 'paper disasters'. The cadastral records at the SPGC are now kept on the first floor – although the peak water levels of 2000 floods easily reached this height. The Xai–Xai municipality is gradually locating new administrative infrastructure in the higher flood-free parts of town. This is part of a new town plan that appears to consider flood risk as an important planning parameter.
- The information flux between the different cadastre levels, provincial and national, has improved. Processed data at the provincial level are transferred to the national level on a monthly basis. Efforts to digitise the cadastral records at the provincial level are ongoing. The new information system is not fully functional, and still has major flaws. There is no online connection with the central system, and the system itself is susceptible to virus attacks. In principle, regular backups are made, but it is not clear whether standard procedures exist to do this, nor that the backups are held off-site in safer areas. The existence of a fully-operational digitised system would be a significant improvement.
- A number of logistical weaknesses have been identified, but not all are addressed in a coordinated fashion, according to adopted standard procedures. These include: proper filing systems in closed filing cabinets (existing filing cabinets are not waterproof); the use of waterproof ink for handwritten documentation and registers; keeping multiple copies of cadastral maps and other documentation; barred windows and doors in offices (the SPGC offices in Xai–Xai had bars, preventing records being washed outside the building by the flood waters).

The recovery and restoration of cadastral data has left a number of pertinent questions that still need to be addressed. One set of legal uncertainties refers to the legality of reconstructed data. Most of the damaged documents with original signatures have been copied, and there is a doubt as to whether copied signatures have the same legal value as the originals. There is no knowledge about any legal measures that eventually dealt with this issue.

There remains a lack of clarity on how to proceed with DUAT and community land delimitation processes that were not finalised at the moment of destruction or damage. The processing and approval of a DUAT is subject to a number of local authorisations, a local consultation process, and further authorisations at provincial or national level, depending on the size of the requested area. Doubts arise as to whether processes that were in the pipeline for approval should restart all the legal procedures, or whether these processes can be finalised by adding the missing additional information and authorisations. Of course, this is only the case when some existing but damaged documentation was retrieved. This is often difficult, because DUAT requests that were still being processed were not filed, but simply kept in piles on staff desks. These files suffered most from the floodwaters. There also remains a question regarding the additional costs and whether these should be charged to the client (for example, if it is necessary to repeat some steps of the process).

■ 4. LESSONS LEARNED FOR ADDRESSING LAND ISSUES ■

4.1 The enduring role of 'traditional' institutions

One of the clearest lessons from the post-flood experiences in Mozambique is that the 'traditional' institutions of land management in rural areas of the country remain the most important, enduring and flexible mechanisms for the majority of people in securing access to land and resolving conflicts. Given the lasting weaknesses of the formal land administration system, especially at district level and below, the vast majority of the population rely on traditional authority structures and their overseeing role in respect of land access. In matters related to resettlement in residential areas, accessing new land for cultivation in the higher areas, and in the event of conflict when people return to their areas of origin, it is these institutions that play the most important role by far. The hierarchy of traditional chiefs in the rural areas represent a repository of information regarding land allocations, boundaries and entitlements; in effect they are a 'living cadastre', the point of reference to which everybody turns.

The GoM has adopted formal policies in the land and natural resource sectors that recognize this important role, and has enacted laws to provide mechanisms for their integration. Despite this favourable policy environment, the day-to-day state administration of land access, land allocation and conflict resolution still exhibits many past characteristics and has yet to make full use of the tools available. This is also evident in the planning and implementation of disaster response activities, as we have shown in this paper.

4.2 The need for better pre-emptive planning

RESETTLEMENT AS A DISASTER MITIGATION POLICY

There is no doubt that resettlement is at the core of the GoM's flood disaster mitigation strategy. Resettlement, though, has a long history, and has developed astrong negative connotation among rural communities in Mozambique. During the colonial period, these communities were pushed away from productive land, ironically often flood-prone valley lands in Zambézia and Gaza. They were settled in villages on marginal land, and used as a work force in the estates (see O'Laughlin, 2001). The post-independence FRELIMO leadership turned these private estates into national enterprises, where rural communities were again considered as merely one of a number of production factors. The 'communal villages' arose partly as a response to flood disasters, at least in Gaza, but more so in order to implement a collective form of agriculture, whereby the ruling party and government were able to exercise a strong degree of social control. The villages were not accepted by local people: they were detested and the strong living memory of hardship clearly remains present today.

Recently, the main opposition party has been using these old realities to rhetorically disagree with and contest the present disaster mitigation policies, centring on the provision of housing materials and the encouragement given to the displaced to settle in established upland village areas. In late 2007, between two major floods events in the Zambezi valley, several RENAMO deputies claimed the government was trying to recreate the communal villages (Panapress, 16 November 2007). This accusation was repeated by the leader of RENAMO, Afonso Dhlakama, after the latest flood events of 2008, when he stated that the resettlement programme was just a plot by the ruling FRELIMO Party 'to recover ground lost to RENAMO during the war of destabilisation'. According to Dhlakama, 'The FRELIMO government has understood that every year the people return to their original homes after critical flood periods or after receiving food ... so it has found a way of keeping them in these new places. To stop them from returning, the government shares in house-building by providing zinc sheeting and cement, and thus obliges people to stay there.' (AIM, 5 March 2008).

In 2000 and 2001, resettlement was implemented as a reactive emergency planning response to the floods. Resettlement villages were erected rapidly, on the spot, often in locations where victims happened to be dropped off after being rescued. There was simply no time to plan. Decisions were made quickly; any obstacles that may have been encountered when implementing these decisions were ignored, massaged with promises, or coercively removed. In times of crises, state interference may be overly-inflated and decision-making may take on illegal forms. There is evidence to suggest that the response in 2007 was much improved, and that considerably more and more genuine consultation was undertaken with the local leadership of affected host and displaced communities.

It is clear that the quick remedial approach to resettlement was the major cause of land and property uncertainties, where these exist. This applies to the flood victims who were resettled, but even more so to the communities on whose land this occurs. Sometimes this problem does not arise, i.e. when people are resettled on land belonging to their own community, as has happened in most of the Zambezi valley areas.

Resettlement on community land is probably the only solution for future flood victims. Land registered in the name of the government is becoming scarce after the privatization efforts. Remaining government land, such as parts of the Chokwe irrigation system, is mainly situated in flood-prone areas. The more marginal community lands now become the preferred safe havens for flood victims. The challenge is to turn resettlement, initially a first-response mitigation strategy for natural disasters, into something that responds to the needs of the potential victims. It is a voluntary process; to make it attractive and successful an enabling environment needs to be created.

Where people continue to live in vulnerable floodprone areas, coping strategies must be discussed with them and their rehabilitation needs must be understood. The concerns of both men and women need to be incorporated into rehabilitation and resettlement strategies. Settlement plans need to be made in discussion and negotiation with local communities. There is a need to understand how land use and land tenure systems affect settlement patterns, and whether changes in these could be used to encourage people to move to safer areas.

PRE-EMPTIVE ACTION

There are a number of reasons to propagate a preemptive approach to the planning of resettlement, rather than maintaining an emergency reactive approach. It appears that most of the tools for resettlement planning are available, such as the long-awaited territorial planning policy and law, the existing land policy and law, and the housing policy, among others. These tools all adhere to the same set of basic principles, which include participation and inclusiveness in decision-making, local consultation, seeking consensus, possibilities for appeal, and giving public notice before finalising decisions. However, it is just not possible to adhere to all of these principles in an emergency response mode. And by failing to do so, the outcomes are often neither legal nor legitimate, as shown throughout this study, and become a source of conflict later.

On the other hand, there are no reasons to believe that resettlement planning and voluntary resettlement itself cannot be considered a pre-emptive exercise. The recurrent character of floods is a reality, especially in the lower Zambezi watershed. Early-warning systems in Mozambique are now well-developed; national and international institutions have established tools that make it easy to identify districts that are susceptible to recurrent flooding (CENACARTA, University of Eduardo Mondlane, INGC, INIA, MICOA, FEWS NET). Most of the steps that need to be taken in such a pre-emptive planning exercise are part of the overall government programme. It is a question of prioritizing, and making pre-emptive action even more a part of the government programme.

SUSTAINABLE RESETTLEMENT - AN ACTION PACKAGE

Sustainable resettlement does not amount simply to addressing the basic needs and services in resettlement sites, but must also encompass action in the areas of origin that are subject to flooding. Providing tenure security in these areas is even more important than in the victims' new homes. The permanent occupation of the latter provides reasonably strong forms of tenure security; in the areas of origin, where land occupation is not necessarily permanent any longer, the risk of losing access to land and natural resources is more pronounced. This may result in people staying for prolonged periods in these areas, even when flood risks are high, merely because their permanent and visible occupancy is a good measure against the potential loss of access to the land, on which their livelihoods depend.

Sustainable resettlement therefore encompasses actions that are taken simultaneously both in the area of resettlement and the area of origin. There are a cluster of activities that need to be considered, as part of a holistic package, in order to promote sustainable resettlement efforts.

Securing land and property tenure for host communities

Resettlement brings stress to those who play host to the displaced. In Mozambique this situation is still reasonably under control, mainly because of a number of favourable social factors which have been identified in this paper. In most areas of Zambézia, as attested to by the traditional leaders who were interviewed, there is also still plenty of land available in areas that can be accessed by those with the energy and means to put it into production. However, in other areas, a significant part of the 1097 resettled households, amounting to some 6000 people, need to share the same resource base with a host community that has a considerably lower population. Inevitably, this results in pressure on the natural resource base (data from Xai–Xai 2000 village).

The disastrous environmental impact of resettlement camps on host communities throughout the world has been documented and televised. This paper also demonstrates the fact that the present resettlement approaches on communal land can result in the permanent alienation of host community land. Why should a rural community host a significant number of people, if they know that this will result in a loss of assets? In this context, it is essential that tenure security is established over the land and natural resources of the host community, and that access to it is then negotiated through formal and legal processes. It corresponds with establishing a safety net for the host community, to ensure that they do not lose access to land and natural resources through the unilateral decision-making of others.

Land use planning on host community's territory

In line with international standards and best practices, Mozambique supports participatory methods of territorial and land planning, and these constitute an integral part of the policy and legal framework. Decisions on future development and land use within a community should to a large extent be made by the community itself. This is not necessarily the case in emergency planning, where the state, together with some notable or local political figures, makes quick decisions. A community planning exercise is the only legal and legitimate approach to decide on a number of issues. These include the location of resettlement villages, compensation for the customary landowners, conditions for the flood victims to access other land and natural resources, and the need and possibility for development of the resource base (e.g. new small irrigation schemes, development of new *machongo* areas). In fact, a major outcome of a community plan would be a development or recovery portfolio, which would include development actions for the host community, but also recovery and development actions for the newcomers. This is an excellent instrument to create synergies between hosts and newcomers⁸.

Securing individual tenure for newcomers in resettlement villages

Field evidence presented in this paper makes it clear that many resettled people, particularly in peri-urban areas, want to acquire strong forms of tenure security over their allocated plot, and over the infrastructure that is built on it. There is a fear that the state may reclaim what it has given to flood victims, sometime in the future. Local community members who lost their lands to flood victims also continue to reclaim their lost access and productive assets (mainly fruit trees), albeit in a peaceful and low-key way.

Individual security appears to be essential for a number of reasons: (i) the populations of resettlement villages are not necessarily socially coherent and homogeneous, and a strong organizational structure to manage common property well may be absent (ii) collective ownership in resettlement villages has a legacy of failure and nonacceptance (iii) it weighs heavily on a number of fundamental principles such as inheritance and the transferability of land and property (iv) common property models in peri-urban resettlement situations, such as in Macia, do not necessarily provide tenure security for individual families.

Provision of basic services in resettlement villages

If basic services are not made available within the shortest possible time, flood victims tend to return to their areas of origin. This fact is supported not only by historical evidence, but also by more recent events. The promotion of self-help programmes for construction and the provision of other services appears to constitute a good tool for (i) providing newcomers with some new skills and the possibility of developing a new livelihood, and (ii) the hosts to have access to new markets.

⁸ As a practical example of a synergy, one can cite the *machongo* development of the Fidel Castro community, which hosts the 6000 flood victims from Xai–Xai 2000 village. Until recently, this community did not have access to a developed *machongo*. The wetlands close to the village were covered with reeds. This area has now been cleared of natural vegetation, a drainage system has been put into place, and the area has been parcelled into small plots. The investment was costed by an outsider. The condition for development was that the number of parcels made available for production would be divided among members of the host community and the resettlement village. This win–win situation is the result of a holistic vision on development and resettlement planning, fully integrated in the government programme.

Securing tenure in flood prone areas for resettled people

Securing tenure over land and natural resources in the regularly-flooded areas of origin is essential, as evidenced throughout this paper. A failure to do so puts the livelihoods of the flood victims or the people themselves at a high risk. Tenure insecurity in the areas of origin is a push factor away from resettlement areas. Securing these lands as community land appears to be the way forward. These displaced communities have strong structures, with functional local management institutions which are capable of regulating land use and land management in these areas.

Provision of minimum physical protection against floods

The protection of regularly-flooded areas seems to remain a challenge. Destroyed protection dykes are not always rehabilitated, while the construction of additional dykes does not appear to be high on the agenda of the GoM and its partners. These lowlands are among the most productive in the country, and require more protection. There is probably a need to search for viable partnerships with the private sector, which of course has an interest in reducing damage by floods to its infrastructure and agricultural production capacity.

LINKING SUSTAINABLE RESETTLEMENT AND DISTRICT PLANNING

The planning of sustainable resettlement clearly needs to take place at the community level. Here, decisions can be made on the location of resettlement villages. Similarly, the mechanisms and conditions of access to land can be decided upon by people who have a direct stake in the challenges ahead. The 'local community' has been formerly recognized in the Land Law as a unit of land management and decision-making on land allocation and land use.

Community land-use plans could propose negotiated development or recovery portfolios, to meet the needs of host communities and resettlement villages. Some good examples of this kind of planning exist, such as the reports produced by HR Wallingford with DFID support after the 2000 floods. These portfolios need to be marketed, however. The necessary financial resources to implement the proposed actions must be found and service providers need to be identified⁹.



There are a number of obstacles that make community planning inefficient when it comes to the implementation phase. The distance between the communities and most of the budget-holders, who often remain at the provincial or even the national level, can be vast. The capacity of most communities to develop and market a portfolio remains weak. The community is not recognized as a planning unit in the newly-approved territorial planning policy and law, and the Local Government Bodies Law has not really delivered on community planning. A Ministerial Decree (MAE, 2003) recognizes the importance of community participation in planning (it proposes local and community development committees), but does not institutionalize community planning.

Territorial planning under MICOA, decentralised development planning under MPD and local governance under MAE, all recognize the district as the lowest level of formal planning. It is the clear link between the rural populations and the provincial and national government. Reconstruction, recovery and development portfolios, negotiated at the community level, can however be

⁹ In the present policy environment, recovery and development actions are financed by a number of actors. Several donors have joined the GoM to promote a budget support development model, while other donors continue to provide direct support via projects, as well as through INGOs and NGOs. Other funding modalities exist, such as the multi-donor ITC, which is specifically conceived to respond to needs for securing tenure, land-use planning and management.

integrated into the district development plans. This makes the activities identified by those communities eligible, in a structured way, for the disbursement of public funds from provincial and national budgets. Districts, as well as municipalities, are better armed to promote the portfolios and generate interest from the private sector and from NGOs, to respond to and invest in disaster mitigation needs.

$\label{eq:streamline} \begin{array}{l} \text{Streamline the } GoM \text{ programme with disaster} \\ \text{Mitigation activities} \end{array}$

The major financial contributor to resettlement activities is likely to remain public funds, even more so because of the budget-supported aid from several donors. If disaster mitigation activities are seriously part of the GoM agenda, its programme should target specifically those areas that need support. This will probably occur on the basis of identifying 'priority districts'. There exist rough estimates that some 30–35 districts, out of a total of 128, should be targeted as priority districts for flood mitigation activities. A more correct picture can be drawn on the basis of existing early warning tools.

Mechanisms through which the GoM can streamline its programme to meet the urgent needs of disaster mitigation include:

- The Five-Year Government Programme, which sets out broad strategic and longer-term goals, and which places particular emphasis on poverty alleviation.
- The Three-Year Public Investment Plan (PTIP), a 3-year rolling investment programme, executed both by line ministries and provincial administrations, and one of the main instruments for implementing the strategic priorities of the Government Programme. The PTIP has recently been renamed the PIP (Programme of Public Investment) as part of its insertion into the new Medium Term Expenditure Framework (MTEF).
- The Economic and Social Plan (PES), which at the national level defines the principal annual social and economic objectives of government, and the operational plans and resources required to meet them. The PES provides the justification for securing parliamentary approval of the annual state budget.

In practice, the streamlining of the GoM programme with the priorities of disaster mitigation imply that the identified districts are considered as priorities for public investment by the different line ministries: education, health, water sanitation, housing, public works, agriculture. It is worth noting that the Disaster Management Policy¹⁰ includes the following general objectives:

- the incorporation of disaster prevention in the global process of national development;
- the guaranteeing of effective coordination with, and participation of, the public and private sectors in the management of disasters.

It also has a specific objective related to the harmonisation of development and emergency initiatives and the following strategies:

- the involvement of civil society in the design of programmes and plans of action related to prevention, assistance and rehabilitation;
- the integration of preventative actions sectorially, and within development programmes.

CREATE INCENTIVES FOR DISTRICT PLANNING

It is not clear how provincial and national budget allocations are decided for districts, but it appears that population numbers, size and location are the probable parameters. The securing of budget allocations exclusively on the basis of static parameters does not create initiative. Best practice experience indicates that the provision of incentives to districts that pro-actively engage in planning and plan implementation is a far better strategy for getting things done. Under such a scenario, all districts would have access to a minimum budget, but increments to this would be 'gained' on the basis of initiative. Further incentives could include the provision of a district planning budget, available on the basis of progress already made in developing plans. It may be argued that this could create local imbalances, but this is not necessarily the case if all the priority districts are given the same line-up: a minimum threshold of capacity-building to enable them to engage in planning exercises. After that, progress mainly depends on action and creativity.

In practice, priority districts would be eligible to access complementary funds to finance actions that directly respond to a disaster mitigation plan. The existence of such a plan could well constitute the minimum threshold to access the fund. This proposed approach is actually in contrast to the current thinking of some policy-makers, who have adopted a '*pelo negativo*' approach that would see the withholding of any funds from districts that make no progress in planning.

Potential synergies between a district planning land fund and the already existing Community Land Initiative (ICT) fund are clear. Activities that directly support

¹⁰ Resolução n. 18/99 de 10 de Junho.

challenges of land tenure formalisation, community planning and management (in resettlement villages and the areas of origin), and which are identified locally but integrated in a district plan, could be financed by the ICT.

4.3 The need for actions that strengthen local institutions

We have seen throughout this report that there is a strong imperative for the proper involvement of locallevel institutions in mitigating the impact of the floods generally, and particularly so in the area of land access and management. The Land Policy, the Land Law and the accompanying Regulations and Technical Annex provide the rationale, the legal basis and the necessary tools for achieving this involvement, but it is still more common to find central or provincial state-driven approaches that tend to marginalize both the affected communities and the host communities..

An argument often advanced to explain this state of affairs is the lack of capacity at a local level. This therefore seems good evidence of the need for a concentrated and sustained effort to build this capacity (within local government generally, and particularly within land administration institutions, both at district level and within communities), rather than the adoption of processes which serve merely to perpetuate the situation.

Some steps in this direction have been taken. MICOA's approach, which involves the formation of groups from within affected communities to assist in the demarcation and allocation of residential plots, is one example. However, these have tended to be ad hoc and limited. Evidence from 2008 fieldwork points to a breakdown in this system, largely because the MICOA has not put in place a longer-term institutional strategy for sustaining these approaches. There is no evidence that the state has made any moves to encourage a more central and high-level involvement of the regulos, for example, in which they are brought together to form consultative fora with a mandate to discuss land-related issues in a post-flood context. As the central institution in local-level land conflict management, both in fact and de jure, the absence of a coordinating mechanism, supported by the state, among the traditional structures is notable. It is these institutions that constitute the 'living cadastre' of land rights and allocations in the rural areas.

In some areas, the emergence of local-level solutions, that have a greater level of legitimacy compared with other state initiatives, has also been noted. This includes the 'invention' in Xai–Xai 2000 of a district cadastre, where residential land rights are recorded, despite the fact that it has no legal basis. The advent of such a system is the result, as much as anything else, of the failure of the provincial land administration services to offer an affordable and accessible system. It is even seen in the commercial sector, where bank loans for agricultural purposes are beginning to appear on the basis of local declarations, rather than the existence of any formal collateral. Mozambique has been moving along the path of greater participation and consultation, at least at the level of policy intentions. What remains is for this kind of approach to become more broadly and deeply embedded across the range of state interventions in the post-disaster context. It is particularly important when addressing land issues and should, if necessary, involve sustained and ongoing initiatives to build sufficient capacity at this level.

One notable issue is that the state does not seem to have captured existing capacities through the involvement of local NGOs with specialist knowledge of land and natural resource management issues. NGOs, such as the CCM, are used for relief initiatives, but there was very little evidence, for example, of any cooperation between the state and ORAM, despite the long years of experience that this NGO possesses in implementation of the land law and dealing with community-level land management and land planning processes. The same can be said of the ITC, which, despite the fact that it represents a flexible mechanism for funding some of the local land-use planning processes, does not appear to have been asked to play a role here.

One obvious area that would have a strengthening impact would be to provide more information to local institutions, both state and non-state. Despite the fact that the Land Law has now been on the statute books for over 10 years, it is notable that there is still a relative dearth of information, regarding both the conceptual approach that it adopts to land rights, and the concrete possibilities it offers for dealing with some of the problems arising in the post-flood context. This is true mostly within the rural community groups, but also affects local government administrations and even, at times, the provincial authorities. These sometimes remain rather stuck in the rhetoric and concepts of the old socialist era Land Law, such as the reference by MICOA in Zambézia to 'land reserved for the state', a category of land holding which was abolished by the 'new' Land Law of 1997. Much could be achieved through a strengthening of state support for the broad dissemination of information about the law; this has generally been weak over the last few years. NGOs that have been involved in communicating the contents of the law, using separate donor funding, would be well-placed to deliver such services.

4.4 Adopt better and more efficient systems

THE CADASTRE

One of the harshest lessons learned from the Limpopo floods in Xai–Xai was the need to improve both the organization and the protection of the cadastre. A generalized lack of capacity throughout the system, and an uneven understanding of how the administration of the cadastre fits within broader land administration systems, left it vulnerable to the loss of valuable information, and led to ambiguous situations such as the demarcations completed in Zambézi.

Much effort and state and donor funding has been expended over the last few years in attempts to place the cadastral system on a firmer technical footing and make it more efficient and transparent. Unfortunately, the implementation of these initiatives has had little positive impact to date. Three areas have not received sufficient attention in the planning of these interventions: the accuracy of the system, the affordability of the system to its users, and its sustainability. Perhaps the greatest constraint to sustainable development of the land administration system, though, is the fact that there is no overall development strategy. The development of the cadastre, as a result, has been sporadic.

Once there is a more appropriate conceptual basis for the cadastral system, within a broader strategy for land administration, the issues that have arisen in the post-flood context can be better addressed. The technical development of the system will only be sustainable once these foundations are in place. The focus would then need to move towards the systematic building of capacity within the land administration system. The failures to date – such as the lack of backups, the failure to copy information to a central level, the absence of a proper tracking system, and the irregular maintenance of systems are all fundamentally related to the extremely thin capacity within the relevant services. These are as much management capacity failings as technical ones, and need to be addressed as such.

Systems for land registration and systematic land titling in disaster hotspots /resettlement areas

The permanent resettlement of people in peri-urban areas requires a more comprehensive land tenure approach than at present. As noted in the Xai–Xai 2000 settlement, and in other areas such as Macia, people are increasingly searching for ways to formalise their access to new residential plots through the awarding of secure and formal tenures. It is in the peri-urban context that the traditional institutions, which provide security in rural areas, have less influence, and where residential land, acquired through a state-sponsored process of resettlement, needs to be accompanied by the state's recognition of formal tenure in respect of that land.

As we have noted in this report, a process of awarding formal land rights has started in Xai–Xai 2000. But this is driven by the revenue-raising imperatives of the local district administration, and has an ambiguous legal status as a result of not being integrated formally into the national cadastre. Completing this through an ad hoc demand-driven process also offers no economies of scale. It would seem appropriate in these situations to adopt a simplified and systematic titling process that would compensate, if necessary, any interest- or rightsholders from the area, and award secure tenure to the resettled population as part of a single campaign. It would also be possible to offer free or subsidised land registration for vulnerable groups.

■ 5. TOOLS AND LOCAL SERVICE PROVISION CAPACITY ■

This section gives a succinct overview of a number of tools that can be used to address underlying land tenure challenges in a natural disaster context. Most of these tools are available in Mozambique; some of these have even been developed in the country itself. There is no doubt that the present policy and legal framework for addressing land tenure and land use, which we might simply call territorial planning, is by far the strongest tool. The land and territorial planning tools were developed over a period of ten years, in an inclusive and participatory fashion.

The section also provides some insight into the national capacity available to use the tools. In general this capacity remains weak, despite serious efforts on training and institution building over the last years. The de-concentration of efficient public services, such as the cadastre and also district planning, continues to cause problems. CSOs and NGOs tend to focus more on providing emergency assistance after natural disasters than on efforts to mitigate their outcomes. The NGOs' capacity to delimit community land, for instance, has probably not increased over the last five years. Hence building the capacity of all actors remains essential. Categorizing tools and service provision according to the different phases of post-disaster situations is rather artificial. Most if not all of the measures that require specific attention can be considered as part of a preparedness phase, which coincides with the normal path of development. The advantage in Mozambique is that all the actions can indeed be implemented before natural disasters strike. All action can be turned into reality within an existing legal framework and the development vision of the country.

5.1 Identification of natural disaster hotspots

The identification of disaster-prone hotspots is a core element of any disaster mitigation strategy. The mapping and zoning of fragile areas, mainly lands that are susceptible to frequent flooding, is important. If district planning is to be used as a framework to plan and programme disaster mitigation measures, the identification of these districts is essential for the GoM and its partners in streamlining their interventions.

Of course, reliable and effective early-warning tools remain essential. There is no doubt that considerable progress has been made on the latter since the floods of 2000. The Mozambican institutions have developed, over time, a series of information tools to identify with some degree of confidence the areas that are susceptible to natural disasters (including flooding and drought) and to forecast upcoming events. These include:

THE FAMINE EARLY WARNING SYSTEMS NETWORK – FEWS¹¹

The Famine Early Warning Systems Network (FEWS NET) is a USAID-funded initiative that collaborates with international, regional and national partners to provide timely and rigorous early-warning and vulnerability information on emerging and evolving food security issues. In Mozambique, FEWS NET works closely together with the INGC, the University of Eduardo Mondlane and INIA. They monitor and analyse relevant data and information to identify potential threats to food security. The parameters of this monitoring include disaster alerts, assessment of the impact of weather hazards, assessment of the progress of the rainy seasons, and drought predictions (using a number of specific tools such as rainfall estimates, vegetation indices, and water requirement satisfaction indices). The impacts of these factors on livelihoods and markets are assessed. FEWS NET also focuses its efforts on strengthening early warning and food security networks. Activities in this area include developing capacity, building and strengthening networks, developing policy-useful information, and building consensus around food security problems and solutions.

CENACARTA¹²

The National Center of Mapping and Teledetection (CENACARTA) is an institution subordinate to the Ministry of the Agriculture, created by decree n° 38/90, of 27 December. CENACARTA coordinates and executes geo-cartographic tele-detection activities, and disseminates information to public and private users, including images and geo-cartographic data.

As part of a partnership with IUCN and Gartner Lee Ltd (under the project 'Application of Teledetection and the GIS in the Integrated Management of Watersheds – Vulnerability Evaluation and the Formulation of Adaptation Strategies in the Limpopo River Basin'), it has developed a cartographic decision-making tool to identify, mitigate and handle natural disasters.

DTA – IIAM

Since the mid 1980s, the Land and Water Department (DTA) of IIAM has developed a comprehensive database on land and water information within the national territory. This database includes a national agro-ecological zoning map, a national soil database, and various detailed soil survey data sets (especially in areas of high agricultural potential such as the Limpopo and Zambezi valleys), a climatic database, a landscapes database (SOTER – Global Soil and Terrain database), and specific drought-related information. DTA has also developed several land-use plans at different scales (provincial, district, local), as well as specific studies looking into aspects of disaster mitigation and relief.

The DTA data probably deserve much wider use than they actually enjoy at the moment. Provincial and more detailed soil maps, in combination with physiographic information, can be used as a tool to identify regularlyflooded areas (hydromorphic soils). The DTA has also developed approaches to zoning land for different purposes, including drought hazards. The DTA information, in combination with similar datasets available in neighbouring countries, has been used to compile the study ' *Drought impact mitigation and prevention in the Limpopo river Basin*' prepared by the FAO Sub-Regional Office for Southern and East Africa (FAO, 2004).

^{11 (}http://www.fews.net).

^{12 (}http://www.cenacarta.com).

5.2 Community rights mapping and registration: the Technical Annex as a legal tool

Securing land rights for communities that are exposed to frequent natural disasters, as well as for those that can be identified as safe havens where displaced communities can resettle on a temporary or permanent basis, is considered a central element of the disaster mitigation strategy. Mozambique has a strong tool to implement this strategy: the Land Law (1997), the accompanying Regulations (1998) and the Technical Annex on Community Land Delimitation (2000).

The Technical Annex provides the legallyprescribed tool for undertaking delimitation. It involves a participatory approach, and when applied in different places and cultural contexts, results in a 'local community' that reflects the specific livelihood strategies, ecology and socio-cultural conditions of the community in question. Thus a 'local community' in the south might look very different to one in the north, but both are 'local communities' in terms of the law.

It is extremely important to follow the prescribed methodology correctly – if not, the validity of a delimitation, and therefore of the rights it proves and protects, could be called into question. Article 5 of the Technical Annex identifies the different steps involved:

- awareness raising;
- Participatory Rural Appraisal (PRA);
- topographic sketch map (*esboço*) and descriptive memory, including geo-referencing;
- devolution of information;
- registration in the national cadastre.

The adopted methodology clearly identifies the need for specific services:

• sensibilisation and dissemination of information;

- participatory facilitation services;
- surveying and mapping;
- registration and information management.

Community land delimitation is generally implemented by a partnership of service providers: a civil society group leading the process (information dissemination and PRA work) and the SPGC supporting the surveying work. The SPGC is then responsible for registering the data in an information management system and issuing the certificate.

No single state agency is adequately trained or equipped to carry out the procedure on its own. With the exception of the 21 trial cases implemented by the Land Commission to test and develop the methodology, virtually *all* delimitations done so far have been carried out with NGO technical and material support. As far as can be determined, there are presently no private sector providers or others operating in this market.

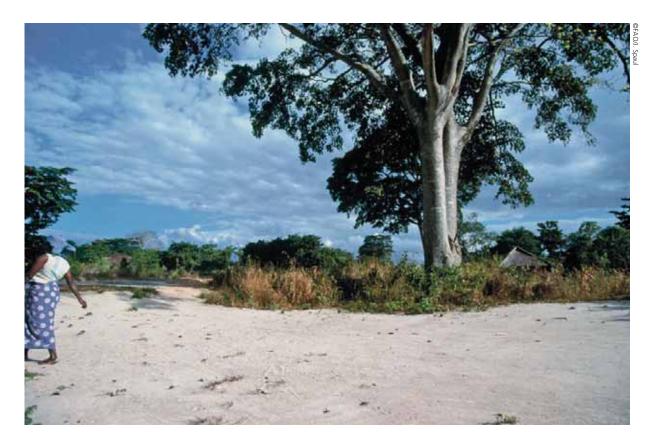
An assessment on service provision (CTC, 2003), has identified the following NGOs as potential service providers (see table 3).

There is no doubt that further training of present and potential service providers is essential. Between 1998 and 2000, as part of the process of developing the methodology and drafting the Technical Annex, a comprehensive training manual for technicians was produced by the Land Commission with FAO/ Netherlands support. Over a period of 4 years, some 124 field staff (52 public sector staff and 72 NGO staff) were trained in the methodology of community land delimitation. Evaluation reports, mid-term reviews and other appraisal reports all conclude, however, that even experienced NGOs such as ORAM still need to improve the quality of their service provision¹³.

TABLE 3 – Potential Service Providers (CTC, 2003)					
Experienced and potential service providers by province					
Province	EXPERIENCED SERVICE PROVIDER	POTENTIAL SERVICE PROVIDER			
Niassa	Accord	UCA, OPORTUN			
Cabo Delgado	Helvetas, Omukazi	UACC, Un Catolica, PROSA, Com. ACILAMICA			
Nampula	ORAM, Diocese, Kulima	PAN, ADCIC			
Zambezia	ORAM	World Vision			
Tete		LWF, World Vision			
Manica	ORAM, Kwaedza Simukai, Caritas, SPFFB	UCAMA, CIES			
Sofala	ORAM	UPCES, LWF, Amai Apa Bana			
Inhambane	ORAM				
Gaza	ORAM, Helvetas	UNAC			
Maputo	Helvetas, ORAM	UNAC, APOJ			

TABLE 3 – Potential Service Providers (CTC 2003)

¹³ See, for example, Bias et al (2001) and Pijnenburg (2003).



Problems that have been observed include:

- preconceived ideas about the community concept

 the community is often not really allowed the space to auto-identify itself, resulting in a number of conflicts;
- PRA methods are used in a mechanistic and extractive way, with blueprint approaches being more common than creativity. As stated on one occasion 'the PRA is perceived as a necessary bureaucratic step in the process of delimitation';
- limited knowledge on survey techniques and limited use of remote imagery even when this is available.

5.3 Community land use planning: Participatory Negotiated Territorial Development

Community land-use planning is part of a holistic mitigation strategy to arrive at negotiated agreements between host and resettled communities after a natural disaster. The resettlement of the victims of the natural disaster may take place in several distinct ways. In Gaza province, flood victims and hosts often belong to different communities, whereas in Zambézia victims are mostly resettled within their own community territory. In both cases it is essential to:

• identify, on a consensual basis, the resettlement or possible accommodation areas;

- determine the conditions for providing access to this land and its natural resources;
- come to an agreement on compensation for the hosts, among other things.

In the Mozambican context, community land-use planning is organically interwoven with community land delimitation. The National Land Policy is very clear on this when it states that the overall objective is:

'To secure the rights of the Mozambican people over land and other natural resources, as well as promoting investment and the sustainable and equitable use of these resources.'

The land policy statement clearly identifies that the major objective of securing land rights for the Mozambican people is to use these to promote sustainable and equitable development. It requires, however, that outsiders are permitted to arrive and use community land in some way, on the basis of agreements and contracts, with the state ultimately taking a facilitating and monitoring role. This approach is summed up in the 'open border development model' that can be described as integrationist, in which the community and other land users exist side by side, in an extensive area managed by the community in collaboration with recognized state institutions. The community can approve or disapprove requests for the allocation of land and natural resources to outsiders on the grounds that the land is required for future community needs, or that it has some communal or socially-important use attached to it. Alternatively, the community can approve requests for access to land and natural resources for others: provided that this agreement is achieved by consensus, with benefits for the development of the community.

Practical implementation and use of the methodology is not yet widely established. A number of initial pilot schemes have been implemented in Zambézia and Manica provinces¹⁴, with the participation of NGOs (ORAM, Kwaedza Simukai, Caritas), public services (SPGC, SPFFB, DPADR). The different steps of the tool can be identified as follows:

- preparation of a good inventory to analyse the potential of the area;
- identification of land that is available for allocation through negotiation;
- identification of current and potential partnerships between the community and the outsiders (in particular, existing new land-rights holders);
- identifying the need for and possibilities of self-help action, to better manage land;
- identification of public investment needs: road rehabilitation, agrarian extension, marketing infrastructures;
- alternatives for the use and management of abandoned association and co-operative land with infrastructure;
- re-evaluation of some land concessions, leading to an eventual re-dimensioning and new agreements with local people;
- resolution of existing land conflicts between the community and new land-rights holders.

The use of this approach to community land-use planning is not without its problems. An important remaining obstacle is the present capacity of the communities themselves to engage fully in such a participatory process. Rural communities are heterogeneous and membership rules are fluid and diverse. Local power structures tend to be autocratic, ambiguous as to the reach of different authorities, and heavily patriarchal in most of the country. Few rural communities can lay claim to a local institution that represents diverse local interests. Rural women in particular are often marginalized from control over community land or even household land. It is difficult to see how they would be represented or how they would benefit directly when deals are made with outsiders who want to access and use local resources. This situation requires serious efforts to strengthen local community structures.

Community land-use planning approaches are implemented without solid and institutionalised forms of participation and representation. Community Land Committees, or 'G9s', may be selected during a delimitation, but then may fail to maintain a role for themselves once delimitation is complete, and they could soon disappear. The legal underpinning of community land-use planning is also doubtful. The new territorial planning law does not include specific provisions for community land-use planning, given that the lowest planning level is restricted to the district and municipality levels.

Experiences in Mozambique, Angola and Sudan (among others) in the use of this approach have resulted in the development of a consolidated methodology that is being promoted by FAO as the '*Participatory Negotiated Territorial Development*' approach. At the 2006 International Conference on Agrarian Reform and Rural Development in Porto Alegre, the approach was identified as a way forward in addressing land and natural resource management in an integrated and territorial way, through negotiation, dialogue and participation. A set of documents exists that can be used as a reference¹⁵. A specific two-week training manual was also developed¹⁶, as well as a distance-learning course (available on CD-ROM – 'Institutions for Rural Development: Digital Media No.4' – through NRLA–FAO, Rome).

The local service provision capacity for using the community land-use planning tool in Mozambique remains weak. In the first instance, it is essential that the targeted communities are organized, requiring support to local land management institutions.

Different elements of community land-use planning are being implemented by various service providers from the public and private sectors. Under its support project to the former Inter-Ministerial Land Commission, FAO has taken a lead in the early 21st century, together with the NGO ORAM and SPGC in Zambézia. A number of field training exercises were organized in Nicoadala district (Zambézia province); meanwhile other on-thejob training schemes targeted two other NGOs (Kwaedza Simukai and Caritas), together with DPADR staff in Manica province (Manica district).

¹⁴ Under the 'International Technical Assistance for the Implementation of the National Land Programme' project (UTF/MOZ/070/MOZ), FAO and partners tested the development and use of local land-use planning as part of a strategy to devise options for the implementation of the National Land Policy. ¹⁵ http://www.icarrd.org/en/icard_doc_down/TD1.pdf.

¹⁶ 'Territorial Facilitation: a two-week training course', FAO 2007; available on CD Rom.

Perhaps the principal national agency in land-use planning, though more at district and provincial level than community level, is the Soil and Water Department (DTA) of the former National Institute for Agronomic Research (IIAM). Other Mozambique-based service providers that may be directly involved in soil and land inventory work include consulting companies that specialise in environmental and related issues, and others that hire expertise as needed by their clients. The main players in these categories are Impacto Lda, FEED, RuralConsult, Austral–COWI, Bioconsult, Holt Ltd and Bergman–Ingerop. National universities are also becoming more involved in service provision, with the Faculty of Agronomy and GRMB of UEM figuring prominently.

The Centre for Sustainable Development of the Ministry for Environmental Coordination (MICOA) is an autonomous agency responsible for strategic planning programmes on a regional or specific-area basis. The CDS in Xai-Xai, for example, has helped to develop coastal-zone management plans in several parts of the country. The CDS centre in Xai-Xai is therefore well-equipped and staffed for zoning and land-use planning activities. It has demonstrated its capacity in important areas that are also ecologicallyand socially-sensitive, such as the Tofo, Barra, Tofinho and Rocha coastal areas of Inhambane Province. A similar centre in Chimoio, the Centre for Rural Development, is operating with Finnish support, and intends to develop a capacity for land and natural resource planning and management.

Since 1995, several institutions have acquired similar experiences and skills through the implementation of approximately 50 community-based natural resource management projects (CBNRM) that have been launched in Mozambique. These initiatives have generated a wealth of information and experience for developing new approaches to rural development using the Land Law, land rights registration, and community-based planning and management, as cornerstones of any strategy. Initially projects were linked to wildlife management (Tchuma Tchato, Chipanje Chetu). With the support of a Netherlands-financed FAO project however, the National Directorate for Forestry and Wildlife (DNFFB) started several new community-based forest management projects from 1997 onwards.

There is no doubt that major training efforts are required to support present and future service providers. It appears that these efforts should be channelled through MICOA, but should also target a wider public, including some NGOs such as ORAM.

5.4 District planning

PUBLIC INVESTMENT PLANNING: MAE AND MPD

District planning has a long history in the ministries of Territorial Administration (MAE) and Planning and Development (MPD). Since the phasing out of socialistinspired planning, new tools were developed from the early 1990s onwards for improving community access to basic infrastructure and public services. In order to achieve this objective the planning programme promotes, among other things, the development of long-term strategic and multi-sectoral district plans. Initial guidelines published in 1998 were followed by a more comprehensive package consisting of the following three distinct tools, all published in 2002 by the Ministries of Planning and Finance, Territorial Administration, and Public Works & Housing:

- Planificação Distrital Manual No 1 O Plano Distrital de Desenvolvimento;
- Planificação Distrital Manual No 2 Ciclo Anual da planificação;
- Planificação Distrital Manual No 3 Dialogo com a Sociedade Civil.

When compared with methodologies for participatory land-use planning, community land delimitation and land use/natural resources management, it appears that district development planning adheres to the same principles and uses similar instruments. All of these also have a strong local capacity-building component, and contribute to strengthen local accountability and governance. During the different processes, technical teams are trained and acquire the experience necessary for replicating the experiences later.

A major difference, however, is the outcome of the process, with district planning mainly considering public investment in social infrastructure, in contrast to the land and natural resource emphasis of the other processes. District planning is strongly oriented towards interest groups, while land-use planning is mainly area-based with strong territorial aspects. There is also a tendency for district planning to emphasise public sector investment, while land and natural resource development strongly considers the private sector as a privileged target group for promoting local development.

The challenge now is to bring the different processes together and to produce mutual benefits that will respond more directly to the overall objective of poverty reduction in rural areas.

Overall capacity of municipal governments and district administrations to implement district planning activities is weak. District planning was given a new impulse recently by the extension of the UNCDF programme to Cabo Delgado, and a World Bank proposal for district planning activities in the four central provinces (Zambézia, Tete, Sofala and Manica), covering a total of 64 districts. The latter will adopt strategies and methodologies that are derived from previous experiences but that include a number of new elements that are extremely interesting. The programme includes activities designed to strengthen institutions.

ENVIRONMENTAL PLANNING: MICOA

MICOA has been the driving force behind the new Territorial Planning Policy and Law. District planning remains a central issue in this new legal framework. MICOA has not yet developed a consolidated tool to approach this from an environmental perspective, but is relying more on existing methodologies that were tested elsewhere, among others by IIAM (see below). On a number of occasions, MICOA has solicited technical assistance from FAO to develop such a methodology, but this has not been realised so far. There appears to be a need to turn a somewhat linear and vertical structure of nested national, regional, provincial and district plans (as indicated in the present planning law) into something that stands closer to the reality of rural populations and districts.

The CDS approach identifies different economic areas and management areas. It is accompanied by a Strategic Environmental Assessment (SEA) that makes decisionmaking more transparent, through the consultation and participation of all stakeholders. SEA is a systematic decision support procedure that evaluates potentially significant environmental effects of development options, throughout the process of formulating policies, plans or programmes. It brings together communities and the private and public sectors around a negotiated and consensual approach to resource allocation and management. There are many points at which the approach echoes the methodology of the Land Law Technical Annex, including participatory work with communities, which are encouraged to identify their resources and think about how best to use them.

Over the last few years, the National Directorate of Territorial Planning (DNPOT) appears to have established itself as a privileged partner of INGC in the handling of resettlement planning in post-disaster situations. It seems that these efforts mainly focus on the layout and surveying of resettlement sites, and less so on communal or district planning. The capacity of DNPOT and its provincial delegations to take on these new challenges is extremely weak, and even more so for district planning as a more comprehensive exercise.

RURAL LAND USE PLANNING: DTA

The Land and Water Department (DTA) of the IIAM is the institution responsible for putting participatory land-use planning on the map in Mozambique. Since 1993 it has implemented pilot schemes in Gaza, Manica and Zambézia, and on this basis has produced a manual that is still used as a guideline (Nyamuno et al, 1995). During the period 1994–1995 as part of the Pre-Programme, a land-use plan for the district of Xai-Xai was prepared and discussed with the involvement of provincial and district authorities and services, the communities and their leaders, and the private sector (Nyamuno et al, 1995a). Key elements for its elaboration were: in-depth knowledge of the realities in the field (the permanent presence of a team for two years); continuous interaction with and a proactive role for the communities and local leaders; appropriate technical mechanisms to assess land use and management options; dialogue and negotiation.

Specific tools used for the plan's elaboration are:

- rural appraisal, with emphasis on agrarian systems;
- soil surveying and land evaluation, including evaluation of land suitability, generated by farmers;
- land management zoning;
- social surveying with identification of community territories and their leaders;
- consultation and dialogue at grass roots level;
- appreciation of indigenous knowledge and the views of the community on long-term development;
- community negotiation of technical proposals.

At the time of the 2000 floods, the provincial and district administrations, as well as all the relief organizations and institutions, did not consider this plan as a tool for the eventual tailoring of recovery and rehabilitation interventions. The Xai–Xai land-use plan was never adopted by law as a development tool.

The Pre–Programme experiences of district and local land-use planning were subsequently refined in other parts of the country (Nicoadala district in Zambézia) and some other countries where FAO was promoting land-use planning activities (Ghana, Bosnia and Herzegovina). Ultimately these activities resulted in a consolidated manual, 'Participatory Land Use Development', which gives guidance for municipal and district level land-use planning¹⁷.

¹⁷ Participatory Land Use Development in the municipalities of Bosnia and Herzegovina; Project GCP/BiH/002/ITA; http://www.plud.ba/.

Institutions that deal with district planning are mentioned in the sections above: Ministries of Planning and Finance, Territorial Administration, Public Works and Housing, Environmental Coordination, Agriculture (through DTA). There is no doubt that all services need institutional strengthening.

A number of NGOs are providing support to the GoM in handling district planning. SNV is taking on a leading role in Nampula province. It provides services and capacity-building to Local and Community Development Commissions (CDL, CDC) as well as to District Consultative Councils (CCD). There is no doubt that these local bodies will require specific attention for taking up their role in future district and local level planning. Both CDL/CDC and CCD are institutions that were formalised as a follow up to new laws for local government bodies.

5.5 Land Information Management System – LIMS

The DNTF has for some time been developing a new web-based information system, the Land Information Management System (LIMS). The LIMS, when fully operational, will provide a framework for the storage and manipulation of a variety of landbased information. Eventually it could include the incorporation of all spatial data from a variety of government departments, including the cadastre, mining rights, land and soil resources, potential hazards, environmental information, and tourism and wildlife concessions.

The LIMS has various components:

- an Oracle database for housing data (both attribute data and spatial data): this database is centralised and thus eliminates the need for replication and maintenance of local databases in each province;
- a web application which allows user access to various components of the LIMS via the Internet or intranet (Govnet);
- enterprise Geographic Information System (GIS) components to support the spatial aspect of land information. The GIS is tightly integrated with the attribute data. Components used are sourced from ESRI (the industry standard in enterprise GIS). Included is an Internet map server (ArcIMS), a spatial database engine (ArcSDE) residing in the central Oracle database, various custom GIS components specific to LIMS, and desktop GIS (ArcGIS) in support of the capture and manipulation of spatial data.

The aim of the LIMS is to serve as a portal; that is, it will be the single point of entry to all land-based information in the country. This information should be accessible via the Internet using a normal browser (implementation will therefore be fully compliant with Internet protocols). Once the necessary policies of data protection and privacy are in place, there will probably be much broader public access to this information.

The heart of the LIMS is, at present, the cadastral, parcel-based information regarding land rights; that is, the DUATs that have been awarded or those that have been acquired and registered. An important step towards the implementation of an effective and modernized cadastral system will be the digitization of the national land cadastre information as it presently stands. In Mozambique, this implies the acquisition of backlog data (manual digitization) into the system, i.e. approximately 30 000 paper folders. Each folder – related to a land parcel – contains a 'summary' of two to three pages, blueprints, maps, deeds and other documents (for a total page count ranging from 60 to 100). Although this is a considerable task, it will mean that important information will be safeguarded from the kind of disastrous losses that occurred in Xai-Xai in 2000.

A previous initiative, the Land Licensing and Planning System for Beira City, shows the potential that this kind of tool holds for increasing the efficiency and transparency of land allocations. In 2003 the Beira Executive Council (the local government authority for the city of Beira in Mozambigue) initiated development of a decision support system, with a simple geographic information system interface. Operationally the computerised application was intended to speed up decision-making, by automating the processing of the majority of licence requests and revocations, leaving the Planning Department to concentrate on the few that warranted detailed consideration and negotiation. The application triggered warning letters and licence withdrawal notices where legislation and regulations were not being applied. For strategic land-use planning, the application provided planners in Beira with information on land-use and trends, enabling them to better predict the future and match developers with suitable plots. It is not difficult to envisage how a similar tool could assist planners in rural areas and provide the spatial element needed for existing decentralised development and disaster mitigation planning initiatives.

Previously, the Land Registry had consisted of an incomplete and inconsistent paper-based collection of dusty volumes detailing plot usage dating back over a century, much like in the majority of the SPGC offices. No definitive map existed; some showed groups of plots with duplicate or non-contiguous numbering systems, and plots overlaying others shown on different maps. Linking plots on the maps with the information in the Registry was sometimes difficult, providing insufficient information both for routine licences and long-term strategic planning. Digitising the maps and computerising the Registry is an effective way of updating the system, speeding it up and providing better quality information.

Potential uses of the LIMS include:

- the completion of internal land administration and land management responsibilities within the national directorate and its provincial offices, by cross-checking and validating all land rights registration applications;
- inter- and intra-governmental administration and management of land and other natural resources, through cross-checking and validating all concessions (land, forestry and wildlife, water resources, mineral resources, etc.);
- inter- and intra-governmental natural resources planning and management activities;
- provision of a consistent database regarding utilization of land and other natural resources for all users.

The staff of the newly-established DNTF, and especially all the staff from the 10 provinces, require training in the use and handling of the LIMS. It is also obvious that all potential public and private sector users mentioned above under potential uses will need some basic training on how data can be retrieved and used.

5.6 Simplified land registers and bringing these in line with existing legislation

Where registration in rural areas has been attempted using standard procedures according to the received colonial law, the process of registration is usually incomplete. In Sudan, which enacted a Land Registration and Settlement Act in 1925, most of the country is still unregistered. In Uganda, the Registration of Titles Act providing for land registration was passed in 1922, yet only about 12 percent of the land has so far been brought under the Act. In Kenya, where land adjudication and registration started in 1956, there have been programmes of adjudication and registration ever since, yet the process has still not covered more than 10 percent of the country. Many titles lie uncollected in the land offices because the owners are unable to pay the fees or travel costs involved. In such circumstances, the system breaks down because rights are transferred without the transactions being registered. The result is that listed owners in the register (the 'legal' owners) are not necessarily the real owners of the land.

In recent years, however, in response to increased pressure on land, many countries are pushing ahead with land registration to strengthen the land claims of poor people in rural and urban areas. A range of innovative, low-cost mechanisms are being developed to survey and document land rights and transactions. The International Institute for Environment and Development (IIED, 2005) has recently published studies of such work in rural and urban areas in Mozambique, Ethiopia and Ghana. The conclusion from one of these reports is given in Box 2.

The recent experience of Tanzania in the registration of rural land is relevant to Mozambique, as are the experiences of an MCC-supported project in Madagascar and the DfID Land Tenure Reform project in Rwanda. However, every country and possibly every district, is likely to be a special case and it will be necessary to adapt systems to meet the needs and capacities of local people when implementing the first registration of informal rights. It is clear that, if the systematic recording of land rights in rural

BOX 2 - MODELS OF REGISTRATION AND INSTITUTIONAL STRENGTHENING

There are limitations to] those approaches that assume that 'legal empowerment of the poor' may be promoted simply by providing land titles. In reality, different models of land registration exist, local contexts may vary substantially, and overlapping rights on the same piece of land may coexist. Therefore the real issue is not embracing readily-available solutions based on Western models, but learning how to design land registration systems that secure the land rights of poorer marginalised groups in specific geographic and historical contexts. In addition, whether land titles or other registration documents improve land tenure security of local land users depends on the existence of strong local institutions that are able to uphold and defend the rights embodied in those documents. Building the capacity of local institutions over time is therefore a key challenge.

Source: IIED Research Report 1: *Can Land Registration Serve Poor and Marginalised Groups*, November 2005, p.27.

Mozambique is to be viable, the process must be simple, inexpensive and capable of being delivered by local government structures.

Clear principles are evident from these conclusions:

- The procedures leading up to the recording of land rights (e.g. adjudication of rights) must be carried out by local people.
- The land records must be stored locally.
- The survey and mapping procedures that enable the land rights to be recorded must also be simple.
- The content of the land rights, including overlapping rights, should not fundamentally change as a result of recording.

Factors that will determine whether the process of rural registration is equitable include:

- whether the registration process is be carried out systematically and witnessed by the community;
- whether the fee (the premium and/or rent levied on registration) is nominal and affordable;
- whether assistance is provided so that the poorest can access and participate in the system;
- whether the rights of family members, secondary right-holders, vulnerable groups etc., are recognized and recorded.

In a step towards meeting the requirements of a modern cadastre, it may be necessary for the government to survey broad boundaries using GPS equipment (perhaps at the level of a 'local community' as defined in the law), thus creating a series of 'outer figures' within which individual land rights could be recorded using 'uncontrolled' survey methods.

5.7 Alternative conflict management – integrating training, capacity building and legal reform

The GoM has established an Inter-Ministerial Commission for Legal Reform (CIREL), whose mandate includes a revision of the judicial system in the country. The resulting policy and legal framework for the judiciary – including local courts – should be a genuinely Mozambican response to a reality where 'justice' for most citizens is delivered mainly through informal local systems, with formal courts playing a role in relatively few cases.

The tool of building a strong link to local level conflict resolution mechanisms and ensuring that there is a clear 'interface' with the formal system is an effective one in the Mozambican context, which has a history of community courts. These Courts were established in 1978 and were originally formally integrated into the overall national court structure. In 1990, with the emergence of an independent judiciary as part of new post-war constitutional arrangements, they were separated from the 'formal' and newly professional judicial system and judges. They continued to function, but without detailed regulations concerning, for example, who should serve on them and what weight their decisions had in the wider legal and judicial arena.

Measures to consolidate and expand the Community Courts constitute one of the principal activities that are foreseen in the area of justice. Moreover, 'environment' is identified as an important governance issue, while secure



land rights for the poor are also featured among conditions for combating poverty. The effective implementation of legislation related to land, natural resources and the environment is therefore central to the GoM poverty reduction strategy; this requires effective mechanisms at local level as well as higher up in the formal judicial system. Having legitimate and adequately-trained community judges and other local conflict resolution specialists is an essential part of the overall implementation package for land and natural resources legislation, and can play a significant role in assisting with any post-disaster conflicts. The Land Law, for example, already integrates customary and formal land access and management systems into a single, Mozambican law. Customary practices and local land management institutions are formally recognized and given due place in the law.

The Legal and Judicial Training Centre (CFJJ) has, over the last few years, been implementing a training programme (directed at a range of actors from state and non-state institutions) in paralegal and other skills related to land issues, conflicts and disputes. In addition to the inclusion of alternative dispute-resolution mechanisms in its core training programme for the members of the judiciary, the CFJJ holds seminars at district level for officers from different state institutions, including district administrators, police chiefs, prosecutors and other state officers. These seminars also involve a focus on alternative dispute resolution, with an emphasis on how people at this level can work together to resolve conflict without resorting to the judicial system. In addition, the CFJJ has also been implementing a programme of local level seminars aimed more at paralegals, lower-level state officers, and traditional leaders and community members. These focus on land and natural resource legislation and also contain modules related to conflict resolution. The CFJJ is currently working on the production of two training manuals to accompany these courses; one is for the district officer seminars and the other is for the paralegal training course. These should be published and available for other training institutions to use within the next few months.

5.8 Information on land rights: the campaign approach

One of the effective tools used in Mozambique in the past was the Land Campaign, which was conceived during the debate preparing for the new Land Law during the late 1990s. In that period certain NGOs, churches and academics met on various occasions to discuss the drafts of the Law and to establish a common platform for Mozambican civil society. Once the new Land Law was approved by the Government in 1997, these organizations decided it was appropriate to mount a campaign to publicise the law throughout the country.

The resulting Land Campaign (*Campanha Terra*) had three main goals:

- to disseminate information about the new law;
- to promote justice and defend citizens' rights;
- to stimulate the links between 'family' or subsistence agriculture and commercial agriculture.

The main themes on land rights were identified as the 'delimitation' of the boundaries of community land, women and land, partnerships between the family and enterprise sectors, urban land legislation, and conflict resolution.

Donors such as the Swiss Agency for Development and Cooperation and MS (a Danish NGO) were particularly supportive in their roles. Dr. Jose Negrão of the University of Eduardo Mondlane was contracted to coordinate the initiative. What was initially thought of as a 'dissemination campaign' became, under his leadership, the 'biggest civic movement' in the recent history of Mozambique (Compete, 2000). The Land Campaign was particularly broad-based, bringing together about 200 organizations working at different levels - national, provincial and community - and with different political, religious and social affiliations. It extended to all provinces of the country. A National Committee was created, composed of 22 NGOs and international partners (Box 3). This structure allowed

BOX 3 – MEMBERS OF THE NATIONAL COMMITTEE OF THE LAND CAMPAIGN	
Action Aid	DANIDA
AMRU – Association of Rural Women	Netherlands Embassy
Association for Progress	FDC – Foundation for Community Development
CAA – Oxfam Australia	Helvetas
CCM – Christian Council of Mozambique	KEPA – Centre for Services of Cooperation for Development
CEA – Centre for African Studies	Kulima
CEP – Centre for Population Studies	MS – Danish Association for International Cooperation
Diocesan Commission for Justice and Peace	NET – Land Studies Nucleus
Swiss Cooperation	ORAM – Rural Association for Mutual Help
Oxfam Belgium	Oxfam's Joint Advocacy Programme
Trocaire	SNV – Dutch Organization for Development
UNAC – National Union of Peasants	

organizations to take part in decision-making through the National Committee, and to feel that the Campaign was theirs, although there may have been trade-offs between speed and effectiveness on the one hand, and wider participation in decision-making on the other.

Given the Mozambican illiteracy rate of around 70 percent, the Campaign did not rely only on written materials to disseminate its message, but also used cartoon strips, theatre and audio materials to reach as wide an audience as possible. The materials were produced in Portuguese and 20 different national languages. Box 4 gives a flavour of the law dissemination toolbox.

At the end of two years in operations, 114 of the 128 districts and 280 of the 385 administrative posts existing in the country had already been covered. Around 15 000 volunteers had been trained as activists in the Land Campaign – these included young people, priests, pastors, evangelists, teachers, extensionists and NGO workers, in a genuine movement for national unity (Negrão, 2000).

BOX 4 - TOOLS OF THE LAND CAMPAIGN

- 180 000 A3 posters: on the front a drawing representing the Land Campaign, and on the back a simple text explaining the topic and the drawing, plus extracts from articles about various laws related to the topic.
- 60 000 A1 posters displaying the six messages, printed in the Land Campaign's colour, used by the organizations in their publicity work.
- 60 000 A3 posters printed on one side only with a representative drawing of the message to be distributed by primary schools in coordination with the 'Zones of Pedagogic Influence'.
- 10 000 A3 posters with the Land Campaign designs, detailing instructions for teachers and children on how to set up a painting competition.
- 1000 small T-shirts printed with the Land Campaign logo and a montage of the posters; these were awarded to the children who won the competitions.
- 1000 medium and extra large T-shirts, printed with the Land Campaign logo and a montage of the posters; these were sold by the committees or provincial nuclei as a means of raising funds. This was the only Land Campaign product which could be sold.
- 3000 copies of an 8-page A5 brochure, titled Guide to Gender Awareness in the Practice of Civic Education.
- Six pages in the newspaper Noticias, highlighting the six messages for the second year, news about the Land Campaign, and a variety of information for the committees and provincial nuclei.

The Land Campaign was most active while the Technical Secretariat of the Inter-Ministerial Land Commission was revising the land regulations. These were approved in 1998 and the Technical Annex, which contains detailed instructions about the procedures to follow in the delimitation or demarcation process of community lands, was approved in 1999. ORAM and UNAC continue to carry out dissemination work at community level.

5.9 Government Civil Society Partnerships

The establishment of protocols between government on the one hand, and NGOs and CBOs on the other, to promote disaster mitigation planning and tenure formalisation, would help make concrete the elements of inclusiveness which are present within central government policy but still lacking in implementation. These could form the basis of a cooperative undertaking in which governmental, non-governmental and community organizations would play complementary roles, coordinating at all levels, planning, implementing, monitoring and evaluating the programmes, and recognising and reconciling differences. The protocols should seek a balance between public and individual interests and would have four main goals:

- to build and strengthen the social infrastructure of the recovery programme;
- to ensure the land tenure security of resettled persons, small farmers and urban dwellers, through their active participation;
- to develop and optimize the use of land in order to increase farmers' income and decrease future vulnerability to external shocks;
- to improve the land law and its implementing policies and guidelines through lessons extracted from field experience.

Such partnerships should be formally instituted in Mozambique with the adoption of a protocol and clear strategy. For the partnership to be successful, a commitment to ensure wider participation and openness in these processes is essential. A formal protocol would provide for a regular schedule of meetings, encompassing civil society organizations involved in the land reform sector and government representatives. The agenda for these meetings would allow some of the detailed issues relating to the implementation of both land and disaster response policy and law to be reviewed as and when they arise.



5.10 The Community Land Initiative

The Community Land Initiative (formerly known as the Community Land Fund) is a multi-donor funding mechanism that aims to make available discretionary and matching grants to communitybased clients (groups and individuals). These grants enable them to purchase the necessary services and cover the official transaction costs involved in registering their acquired rights to a range of land and natural resources, and utilise these for local economic development and poverty alleviation.

The four main categories of activities which are eligible for support under the Community Land Initiative are: resource planning and project development, information and training, conflict prevention and resolution, and registration of rights to land and natural resources. As such, a variety of the needs identified in this report could be satisfied by the application of this initiative in the affected areas. These include the systematic formalisation of individual tenure rights in peri-urban resettlement areas such as Xai–Xai 2000, as well as the securing of group tenure rights over lowland agricultural areas, the conducting of information dissemination campaigns, and local training initiatives.

The two phases of the project consist of a twoyear start-up phase (to 2008, which the subscribers will review), after which a decision will be made on future support and funding for the following three-year period. The programme works at provincial level and below, and complements rather than replaces public services. These services are important partners with a clear public role in essential areas such as the cadastre, and in providing up-to-date information (DfID, 2005, page



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2, paragraph (g)). Provincial Steering Committees (PSCs) – comprising representatives of provincial government and civil society, and with a strong bias towards district-level representation – exist to provide direction and oversight to the provincial fund manager in each province.

The fund is initially being made available to communities in three provinces (Gaza, Manica and Cabo Delgado) as part of a pilot phase leading to the up-scaling of the programme to national level coverage. The donor consortium subscribing to this initiative, presently led by DfID, also includes Sweden, Switzerland, Ireland, Holland and Denmark. The initiative is largely managed through an out-sourced fund management entity, which at present is KPMG Mozambique. The MCC, as part of a broader investment programme with Mozambique, will also start to contribute to the initiative from 2008 onwards; it will make grants available in a further three northern provinces.

The specific outputs through the availability of the fund are defined as:

- stronger and formally registered legal rights of communities to land and natural resources;
- increased knowledge and capacity of local community groups to utilise natural resources in a profitable and sustainable manner;
- reduced and better-managed conflicts concerning land rights and natural resources;
- improved land and natural resource planning and utilisation;
- increased and improved partnership and cooperation between local communities, local authorities and private sector operators for the development and implementation of economic and social enterprises for their mutual benefit¹⁸.

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Abbreviations and Acronyms

AIM	Mozambican Information Agency (Agencia de Informação de Moçambique)
CBNRM	Community- Based Natural Resource Management
CCD	District Consultative Councils (Conselhos Consultivos Distritais)
CCGC	Coordinating Council for Disaster Management (Conselho Coordenador de Gestão de Calamidades)
ССМ	Christian Council of Mozambique (Conselho Cristão de Moçambique)
CDL	Local Development Commissions (Comissões de Desenvolvimento Local)
CDS	Centre for Sustainable Development (Centro de Desenvolvimento Sustentável)
CENACARTA	National Centre of Mapping and Tele-Detection (Centro Nacional de Cartografia e Tele–Detecção)
CFJJ	Legal and Judicial Training Centre (Centro de Formação Jurídica e Judiciário)
CTGC	Disaster Management Technical Council
DCU	Directorate of Construction and Urbanisation (Direcção de Construção e Urbanização)
DEC	Disasters Emergency Committee
DfID	Department for International Development
DINAGECA	National Directorate of Geography and Cadastre (Direcção Nacional de Geografia e Cadastro)
DINAT	National Directorate of Land (Direcção Nacional de Terras)
DNFFB	National Directorate for Forestry and Wildlife (Direcção Nacional de Florestas e Fauna Bravia)
DNPOT	National Directorate of Territorial Planning (Direcção Nacional de Planeamento e Ordenamento
	Territorial)
DNTF	National Directorate of Land and Forestry (Direcção Nacional de Terras e Florestas)
DPADR	Provincial Directorate of Agriculture and Rural Development (Direcção Provincial de Agricultura e
	Desenvolvimento Rural)
DPCCN	Department of Natural Disaster Prevention and Relief (Departamento de Prevenção de Calamidades Naturais)
DTA	Department of Land and Water (Departamento de Terras e Aguas)
DUAT	Right of Use and Benefit (Direito de Uso e Aproveitamento)
FAO	Food and Agriculture Organization of the United Nations
FRELIMO	Mozambican Liberation Front (Frente de Libertação de Moçambique)
G9	Group of Nine
GDP	Gross Domestic Product
GoM	Government of Mozambique
ICT	Community Land Initiative (Iniciativa de Terras Comunitárias)
IFRC	International Federation of Red Cross and Red Crescent Societies
IIAM	Mozambican Institute for Agronomic Research (Instituto de Investigação Agraria de Moçambique)
ILO	International Labour Organization
INE	National Statistics Institute (Instituto Nacional de Estatística)
INGC	National Institute for Disaster Management (Instituto Nacional de Gestão de Calamidades
INGO	International Non-Governmental Organization
INIA	National Institute of Agronomic Investigation (Instituto Nacional de Investigação Agraria)
INPF	National Institute of Physical Planning (Instituto Nacional de Planeamento Físico)
IUCN	International Union for the Conservation of Nature
LAHS	Land Application Handling System
LIMS	Land Information Management System
LINK	Mozambican Coordination Body of Civil Society Groups
MADER	Ministry of Agriculture and Rural Development (Ministério de Agricultura e Desenvolvimento Rural)

MAE	Ministry of State Administration (Ministério de Administração Estatal)
МСС	Millennium Challenge Corporation
MICOA	Ministry for Environmental Coordination (Ministério de Coordenação Ambiental)
MoA	Ministry of Agriculture (Ministério de Agricultura)
MPD	Ministry of Planning and Development (Ministério de Planificação e Desenvolvimento)
MPF	Ministry of Planning and Finance (Ministério de Planificação e Finanças)
MSF	Médecine Sem Frontières
MTEF	Medium Term Expenditure Framework
NGOs	Non-Government Organizations
NLC	National Land Commission
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
ORAM	Rural Association for Rural Mutual Assistance (Associação Rural de Ajuda Mutua)
PARPA	Action Plan for the Reduction of Absolute Poverty
PES	Economic and Social Plan (Plano Económico e Social)
PRA	Participatory Rural Appraisal
PROAGRI	Mozambique's Sectoral Reform Programme in Agriculture
PTIP	Three-Year Public Investment Plan
RENAMO	Mozambican National Resistance (Resistência Nacional de Moçambique)
SARCOF	Southern African Regional Climate Outlook Forum
SCF–UK	Save the Children UK
SEA	Strategic Environmental Assessment
SETSAN	Technical Secretariat for Food Security and Nutrition (Secretariado Técnico de Segurança
	Alimentar e Nutricional)
SIDA	Swedish International Development Cooperation Agency
SPFFB	Provincial Services of Forestry and Wildlife (Serviços Provinciais de Florestas e Fauna Bravia)
SPGC	Provincial Services of Geography and Cadastre (Serviços Provinciais de Geografia e Cadastro)
UNDAC	United Nations Disaster Assessment and Coordination
UNDMT	United Nations Disaster Management Team
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UN–Habitat	United Nations Human Settlement Programme
UNICEF	United Nations Children's Fund
UNRCO	UN Residence Coordination Office
USAID	United States Agency for International Development
WB	World Bank
WFP	World Food Programme
WVI	World Vision International