

CONTINUITIES IN CRISIS

**Everyday Practices of Disaster Response and
Climate Change Adaptation in Mozambique**

Luís Artur

Thesis committee

Thesis supervisor

Prof. dr. Ir. Dorothea Hilhorst
Professor of humanitarian aid and reconstruction
Disaster studies, Wageningen University

Other members

Prof. dr. Linden Vincent
Wageningen University

Prof. dr. Greg Bankoff
University of Hull, UK

Prof. dr. Ton Dietz
African Studies Centre, Leiden, The Netherlands

Dr. Maarten van Aalst
Center for Climate Change, International Federation of the Red Cross, The Hague,
The Netherlands

This research was conducted under the auspices of the Wageningen School of Social
Science

CONTINUITIES IN CRISIS

Everyday Practices of Disaster Response and Climate Change Adaptation in Mozambique

Luís Artur

Thesis

Submitted in fulfillment of the requirements for the degree of doctor
at the Wageningen University
by the authority of the Rector Magnificus
Prof. dr. M.J. Kropff,
in the presence of
the Thesis Committee appointed by the Academic Board
to be defended in public
on Tuesday 12 April 2011
at 11.00 AM in the aula

Luís Artur
**Continuities in Crisis. Everyday Practices of Disaster Response and Climate Change
Adaptation in Mozambique**

Thesis, Wageningen University, Wageningen, NL (2011)
With references, with summaries in Dutch, English and Portuguese
ISBN: 978-90-8585-926-0

LIST OF ACRONYMS

ADPC	Asia Disaster Preparedness Centre
CBDRM	Community Based Disaster Risk Management
CEA	Centro dos Estudos Africanos
CDM	Clean Development Mechanisms
CENOE	Centro Nacional Operativo de Emergencias
CVM	Cruz Vermelha de Moçambique
DNA	Direcção Nacional de Aguas
DPCCN	Departamento de Prevenção e Combate as Calamidades Naturais
DRC	Danish Red Cross
FRELIMO	Frente de Libertação de Moçambique
GACOR	Gabinete de Coordenação do Reassentamento
GDP	Gross Domestic Product
GoM	Government of Mozambique
GPZ	Gabinete do Plano do Zambeze
GTZ	German Technical Assistance
HCB	Hidroelectrica de Cahora Bassa
IASC	Inter-Agency Standing Committee
IFRC	International Federation of the Red Cross
IMF	International Monetary Fund
INE	Instituto Nacional de Estatística
INGC	Instituto Nacional de Gestão de Calamidades
IPCC	Intergovernmental Panel on Climate Change
MDG	Millennium Development Goals
MPF	Ministerio do Plano e Finanças
NAPA	National Action Plan for Adaptation
NGO	Non Governmental Organization
NWO	Netherlands Organization for Scientific Research
RENAMO	Resistência Nacional de Moçambique
SAP	Structural Adjustment Programme
SCF	Save the Children Fund
WFP	World Food Programme
UEM	Universidade Eduardo Mondlane
UNAPROC	Unidade de Protecção Civil
UNDP	United Nations Development Programme
UNHCR	United Nations High Commission for Refugees
USD	United States Dollar



Figure 1: Map of Mozambique

ACKNOWLEDGMENTS

This book is a collective endeavor. It would never have been accomplished without the support and cooperation of different people and organizations, at different levels. I am ever grateful to people on the Zambezi delta, their collaboration was critical to achieve this outcome. I owe my special gratitude to Inácio and his parents, Tomé Gole and António Marromo for their kind consent to my ethnography of their lifeworlds.

In Holland I am thankful to my supervisor, Professor Dr. Ir. Dorothea Hilhorst. Thea, your endless intellectual capacity intertwined with your personal commitment and caring abilities made this journey so interesting and lively. I also admire your sixth sense. You know when the student needs a push, needs a break, needs a mammy shoulder and above all you are able to coach students to discover their own potential. Thank you very much.

My wife Eliane and my daughters Elaine and Daniella deserve all the merits and my deepest gratitude. For four years of the PhD journey I had been an absent husband and father but their affection to me never vanished. Thanks for your endless love, support and understanding.

I also want to thank my friend and life mentor Bart Pijnenburg. Bart, you and your family made this possible. Without your endless support and encouragement the journey would have been very painful. Thank you.

My deepest thanks go to Disaster Study Group and Rural Development Sociology Department at the Wageningen University for the good working environment. Many thanks to a growing group of researchers especially to Maliana, Hilde, Annelies, Rens, Lucie, Mieke, Jos, Jeroen, Bram, Gemma, Georg, Peter for their moral and academic support.

In Holland I owe my deepest gratitude to NWO, the institution that funded my PhD programme. Without your financial commitment this work would never be possible. Thank you very much

In Mozambique my list is endless. In Mopeia district my acknowledgments go to the Mozambican Red Cross branch, especially to Mr. Melo, Mr. Ernesto and the local Red Cross volunteers. They were very good companions for long periods of time as well as valuable sources of information even when I was away. I also want to extend my thanks to the district Agricultural directorate, especially engineer Natalino, for their open-ended support. Also to the district Education and Health directorates for their cooperation. My acknowledgement also goes to Mr. Osvaldo from the World Food Program in Mopeia for our friendship and ooh, of course, our football team. Osvaldo, I honestly think that, as a goalkeeper, you are a complete disaster!

To the Save the Children organization, I want to thank dra. Sophie for our long discussions on how to break what she methodologically termed 'the emergency thinking'. I also extend my thanks to my friend Salomão who was working for the Save the Children while I was conducting my fieldwork. Salomão fed me, time to time, with field information when I was away.

In Caia, Mutarara, Marromeu districts, my thanks to the local Red Cross branches for their cooperation. I also thank engineer Dambiro and Mr. Lucas Renço both from the INGC and Carolina from the GTZ all in Caia.

At provincial levels, my special thanks to Mr. João Zamissa from the INGC in Zambezia province. Zamissa, there are no words to thank you and your team for your full cooperation in this research. I also thank the governor and his cabinet, who friendly opened their library for an entire week for my consultation. In Quelimane I also thank my friends Kilu and Nelia for their support. In Beira, Sofala province my thanks to the Red Cross and the INGC delegate, engineer Luís Pacheco, all for their support.

In Maputo I am grateful to the Mozambican Red Cross headquarters especially to the former secretarygeneral dr. Fernanda Teixeira, to dr. Eunice Mucache, dr. Respeito, dr. Rabeca Chalufu, dr. Jorge as well as dr. Ataibo. Very special thanks to dr. Ivete Dengo, ex- coordinator of the Community Based Disaster Preparedness project within the Mozambican Red Cross.

At the Eduardo Mondlane university in Maputo, my acknowledgements to Professor Roland Brouwer, Professor Almeida Siteo, Professor Boaventura Cuamba, Professor Rui Brito, Professor Glead M'lay and to my colleagues Nicia Givá and Eunice Cavane with whom I shared most of my worries and for giving me scientific and moral support to continue the journey. I also thank Professor Andrade Egas, Professor Mário Falcão and Professor Emilio Tostão for their full cooperation on my studies.

At the INGC headquarter in Maputo, my thanks to dr. Bonifácio António, dr. Higino Rodrigues, dra. Ana Cristina, and dra. Marta Manjate and to the ex- general director dr. Paulo Zucula for their encouragement and support.

At the National Water directorate I extend my thanks to dr. Chivambo and the library managers for their cooperation and patience. At the German organization INWENT my thanks to dr. Wegner, dr. Bene in addition to dr. Florian for our lively discussion on disaster management in Mozambique.

At the National Institute of Meteorology my thanks to dr. Benessene for his personal cooperation, interest and encouragement on the research topic.

In the Philippines, my thanks go to mammy Lorna Victoria from APC. Mammy, remember we are like ants! I also want to thank the Philippines's Red Cross for their technical support and advice. In Bangladesh I offer my thanks to Professor Atiq Rahman from the Bangladesh Center for Advanced Studies for his helpful insights. Professor, I also believe in a better world emerging from a development thinking embraced with disaster risk reduction thinking. In Thailand I extend my thanks to Dr. Babette Resurreccion and Professor Suvit Yodmani from the Asian Disaster Preparedness Center (ADPC). Thanks Professor Yodmani for letting me browse through your library and for taking your time to share your experiences on disaster management.

Last but not least, many thanks to my friends who shared my worries and successes: Bambissa, Gregório, Olivier, Nascimento, Mate, Perosa, Albert,

Arsénio, Paulo, Gessica and Professor Rui Maia. A special thanks to my friend Peter Hungwe for turning my 'Portu-English' into readable English.

To all who directly or indirectly contributed to this outcome but did not receive mention I say, MUITO OBRIGADO; many thanks; Brigado Maningue; Ndiku Pereka Takhuta Unkulu!

Luís Artur

LIST OF FIGURES, TABLES AND GRAPHS

List of Figures	page
Figure 1: Map of Mozambique	vi
Figure 2: A typical poster during the 1977 flooding	44
Figure 3.1: Districts along the delta Zambezi	64
Figure 3.2: National newspaper reporting lynching	73
Figure 3.3: Map of Mopeia district	76
Figure 4: Flood preparedness box	116
Figure 5.1: Helicopter with UN and WFP logos	136
Figure 5.2: The car with CVM goods in Caia	141
Figure 6.1: The granary and the main house	147
Figure 6.2: The hierarchical response	153
Figure 7. Antonio Marrommo crafting mattress	186
List of Tables	
Table 3.1: Investments priorities in Cocorico and Mopeia village	83
Table 3.2: Productive and non productive items	84
Table 4.1: Major information source regarding the 2007 flooding	118
Table 4.2: Radio used as the source of information	118
Table 5.1: Appeals by organizations	129
Table 5.2: Cluster roles and leaders	133
Table 6: Preferred mean of evacuation	157
List of Graphs	
Graph 2.1: Number of people affected by hazard type	37
Graph 2.2: Number of people killed by hazard type	37
Graph 2.3: International aid 1978-2007	47
Graph 3.1: Recorded water flows in the delta Zambezi	65
Graph 3.2: Household feeding period based on own production	79
Graph 6: Life, livelihoods and optimal moment for evacuation	163

In memory of my grandmother, Sungue Tomo

TABLE OF CONTENT

LIST OF ACRONYMS	v
ACKNOWLEDGMENTS	vii
LIST OF FIGURES, TABLES AND GRAPHS.....	x
CHAPTER 1: INTRODUCTION.....	1
DISASTER AND EVERYDAY PRACTICES	1
RESEARCH QUESTIONS	5
MOZAMBIQUE: AN OVERVIEW.....	6
EXPLORING THE EVERYDAY PRACTICES OF DISASTER RESPONSE. THE ANALYTICAL CONCEPTUALIZATION	11
DISASTER RE-ATTACHING EXCEPTIONALITY TO NORMALITY	11
ACTORS, ARENAS AND INTERFACES	12
ACTORS AND DOMAINS OF DISASTER RESPONSE	14
DISASTER INTERVENTIONS AND INTERFACES.....	16
CLIMATE CHANGE, VULNERABILITY TO DISASTERS AND ADAPTATION	17
LIVELIHOODS AND DISASTERS	20
THE RESEARCH METHODOLOGY.....	22
THE STRUCTURE OF THE THESIS.....	27
CHAPTER 2: MANAGING DISASTERS AND CLIMATE CHANGE IN MOZAMBIQUE	31
NATURAL HAZARDS AND DISASTERS IN MOZAMBIQUE: AN OVERVIEW.....	33
CONTINUITIES AND CHANGES IN THE OCCURRENCE OF NATURAL HAZARDS AND DISASTERS	36
DISASTER MANAGEMENT PRACTICES: A HISTORICAL PERSPECTIVE.....	38
THE 'KINGDOMINATION' OF DISASTERS: PRE-COLONIAL DISASTER MANAGEMENT PRACTICES.....	38
THE 'COLONIZATION' OF DISASTERS: DISASTER MANAGEMENT PRACTICES DURING THE COLONIAL PERIOD	40
1975-1979: THE 'SOCIALIZATION' OF DISASTERS.....	42
1980-1986: DISASTERS AND THE DISSOLUTION OF MARXISM.....	44
1987-1994: 'UN-NEUTRAL' AID. AID EMPOWERING FRELIMO	47
CREATING ROOM FOR MANOEUVRE: FRELIMO'S STRATEGIES IN DEALING WITH DONORS	48
1995-1999: AID WITHDRAWAL, RESTRUCTURATION AND CONFLICTS.....	53
2000-2004: FLOODS AND THE RE-EMERGING OF HUMANITARIAN AID	53
2005 ONWARD: STRENGTHENING OF THE NATIONAL CAPACITY ON DISASTER MANAGEMENT.....	54
GOVERNMENT RESPONSE TO CLIMATE CHANGE: BETWEEN ECONOMIC GROWTH AND ENVIRONMENTAL CONCERNS	56
ACTORS AND STAKES ON CLIMATE CHANGE IN MOZAMBIQUE: POWER STRUGGLES AND STRATEGIES.....	58
CONCLUSIONS.....	59

CHAPTER 3: LIVING ON THE FLOODPLAINS - ADAPTING TO FLOODING IN BUILDING LIVELIHOODS ON THE DELTA OF THE ZAMBEZI RIVER.....	61
ZAMBEZI DELTA AND FLOODING EVENTS	63
FLOODING AND THE ENSEMBLE OF INTERVENTIONS, DISCOURSES AND PRACTICES.....	66
ADAPTATION TO FLOODING IN THE DELTA ZAMBEZI.....	74
COCORICO 'COMMUNITY'	75
ADAPTING TO FLOODING IN BUILDING LIVELIHOODS IN COCORICO	78
CONCLUSIONS.....	91
CHAPTER 4: STRENGTHENING ADAPTIVE CAPACITY - THE CBDRM PROJECT IN COCORICO	93
CVM: CHANGES AND CONTINUITIES	96
CVM: ARENAS AND THE POLITICS OF SURVIVAL	98
DISASTERS AS AN OPPORTUNITY	105
THE EVERYDAY LIFE OF A CBDRM: CBDRM PROJECT IN COCORICO.....	106
DISPUTING PROJECT OWNERSHIP.....	107
THE POLITICS OF CHOOSING COMMUNITIES.....	108
THE PROJECT AT DISTRICT LEVEL: EXCLUSION AND THE MYTH OF LACK OF CAPACITY	109
THE PROJECT AT COCORICO LEVEL: THE UNBUNDLING OF COCORICO COMMUNITY.....	111
PROJECT CAPTURE BY THE LOCAL ELITE	112
CBDRM AND POWER POLITICS IN COCORICO.....	113
CONTESTATIONS AND PROJECT APPROPRIATION BY ORDINARY PEOPLE.....	115
THE PROJECT AND THE 2007 FLOODING.....	117
CONCLUSIONS.....	121
CHAPTER 5: THE 2007 FLOODING ON THE ZAMBEZI DELTA AND THE HUMANITARIAN ARENA.....	123
THE ARENA: THE 2007 FLOODING ON THE DELTA ZAMBEZI AND ACTORS INVOLVED	125
GOVERNMENT RESPONSE TO THE 2007 FLOODING: LEADERSHIP AS AN EMERGING PROPERTY	126
CVM RESPONSE: POWER, CONFLICTS AND NEGOTIATIONS.....	138
CONCLUSIONS.....	144
CHAPTER 6: SAVING LIVES AND LIVELIHOODS - THE LOCAL RESPONSE TO THE 2007 FLOODING	147
RESPONSE TO HAZARDS AND DISASTERS: A LITERATURE OVERVIEW.....	150
LOCAL RESPONSE: SAVING LIVES AND LIVELIHOODS.....	151
SECURING LIVELIHOODS THROUGH PREVIOUS EXPERIENCE.....	152
SEARCHING FOR TOGETHERNESS.....	154
SECURING ASSETS	155
KEEPING POWER AND CONTROL.....	156
NOT AGAINST OUTSIDERS BUT NEED FLEXIBILITY.....	156
BUILDING AND STRENGTHENING SOCIAL NETWORKS IN THE MIDST OF FLOODING	158
EXPECTATIONS AND GENDERED EVACUATIONS.....	159
BUILDING LIVELIHOODS THROUGH EMERGING OPPORTUNITIES.....	159
ANALYSIS: SAVING LIVES OR LIVELIHOODS?	161

CHAPTER 7 RESETTLING THE EVACUEES - IN SEARCH FOR SECURITIZATION AND DEVELOPMENT.....	165
RESETTLEMENT THINKING: THEORETICAL PERSPECTIVES.....	166
RESETTLEMENT IN MOZAMBIQUE: A HISTORICAL OVERVIEW	170
ACTORS' INTERFACES IN THE IMPLEMENTATION OF THE RESETTLEMENT PROGRAMME.....	171
INTERFACES AT REGISTRATION.....	172
INTERFACES IN THE BUILDING OF HOUSES	175
INTERFACES AT THE SEEDS AND TOOLS FAIRS.....	179
'AID WITHDRAWAL', CONTINUITIES AND DISCONTINUITIES	182
CONCLUSIONS.....	190
 CHAPTER 8: CONCLUSION - CONTINUITIES IN CRISIS	193
CONTINUITIES IN CRISIS: THE INTERNATIONAL DOMAIN OF DISASTER RESPONSE	195
CONTINUITIES IN CRISIS: THE DOMAIN OF DISASTER GOVERNANCE.....	196
CONTINUITIES IN CRISIS: THE LOCAL DOMAIN OF DISASTER RESPONSE.....	198
..... BACK TO RESEARCH QUESTIONS	199
 REFERENCES	203
SUMMARY	219
SUMÁRIO	223
SAMENVATTING	227
ANNEX 1: PEOPLE INTERVIEWED AND GROUP DISCUSSIONS.....	230
ANNEX 2: CHECKLIST AND QUESTIONNAIRE.....	234
ANNEX 3: BUDGET ALLOCATION DURING THE 2001 FLOODING	245
ANNEX 4: ACTORS DURING THE 2007 FLOODING	246
ABOUT THE AUTHOR.....	249
TRAINING AND SUPERVISION PLAN	250

CHAPTER 1

INTRODUCTION

DISASTER AND EVERYDAY PRACTICES

This thesis is about everyday practices of disaster response in Mozambique and analyzes how different actors, with particular focus on local people, deal with disaster hazards hitting the country. Mozambique is a disaster-prone country and over the past years, the frequency and intensity of climate-related disasters has increased steadily. The country experiences, on average, one disaster per year (INGC *et al.*, 2003:7) and ranks third on global weather-related damage following Bangladesh and Ethiopia (Buys *et al.*, 2007:38). For reasons discussed below, I will start the thesis by presenting the story of a local boy and how he experienced the floods of 2007.

Inácio is 11 years old and he is from Cocorico, a settlement of households along the Zambezi floodplains in Mopeia district, Mozambique. He is the second of four children (two brothers and two sisters). In 2007, Inácio was at school in grade three, *Terceira classe*, but he still had problems with elementary Portuguese. Writing, reading, speaking and counting are taught in the first two grades. He claimed that his limitations were, partly because he was in a composite class comprising grades one to three students using one classroom. This hampered the learning process since there was only one teacher lecturing from grade one up to grade five in two classrooms at the same time. This meant that the teacher kept moving from one classroom to the other leaving no room for meaningful student supervision and instruction. The teacher lived in Mopeia village about 30 kilometers away. He cycled on average about two to three times a week to Cocorico where he lectured from around 9 o'clock in the morning to about 2 o'clock in the afternoon. The teacher said there was no way that he could live in Cocorico. There was no potable water, no electricity, no market place, no hospital and the area was infested with mosquitoes. When the teacher did not show up, which happened frequently, Inácio went fishing with his friends and sold part of his catch to traders coming from outside Cocorico. In adult life, Inácio intended to become a big angler with a big boat and lots of fishing nets.

In the beginning of 2007 there was a 'slow on-set' flooding in Cocorico. Inácio's parents decided, at the beginning of the flooding, to harvest their agricultural products in the farms located on the local islands. They left Inácio and his elderly sister behind for a few days to look after the house and other assets. In the meantime they asked neighbors to look after the two of them during their absence. It was a local practice to help each other and Inácio's parents had looked after others in past flooding events.

On the second day of their absence, the floods had steadily set in. Military forces and Red Cross volunteers arrived in Cocorico to carry out a rescue mission. Inácio and his sister were among the evacuees. The volunteers pointed out that if

they had not shown up on time, Inácio and his sister would have perished. The military forces and the Red Cross volunteers condemned the parents's attitude of leaving the children 'alone'. Staff from the Save the Children Alliance that provided them with initial food, shelter, clothes and health care called it gross negligence.

When Inacio's parents came back in the afternoon of the second day, they were told by chief *Cocorico*- who hid from the rescue teams because he wanted to be the last to be evacuated- that Inácio and his sister were taken by the military forces to a safe place. One of the neighbours, Ernesto, who was rescued and brought to Mopeia village but had gone back to Cocorico to look for food he had left in his granary and to do fishing, informed Inácio's parents of the whereabouts of their children. He told them that Inácio and his sister were staying with António -another neighbour- at the 24 de Julho Resettlement centre in Mopeia village. Ernesto and chief Cocorico said that the flooding was not that serious to warrant evacuation but people in Cocorico, including Inácio and his sister, had been forcibly evacuated by the military. Notwithstanding, Ernesto said he and his household agreed to the evacuation mainly expecting that humanitarian aid would flow to where they would be temporarily placed. However this was taking some time, that is why he had come back to find food in Cocorico. Inácio's parents went to 24 de Julho resettlement centre and found Inácio and his sister staying with António's household. They settled at the 24 de Julho resettlement centre but by May 2007 waters had receded steadily and Inácio and his household returned to the flood-prone Cocorico. Inácio's mother said she returned mainly because she was not used to buying almost everything for her daily needs. What irked her most was buying vegetables that she used to produce in her own backyard. Inácio's father stated firmly that he could not leave behind the land of his ancestors and the burial grounds because this could bring along misfortunes.

My intention of presenting the story of Inácio is to offer an alternative representation of local response to natural hazards in Mozambique. I have been involved in humanitarian work since the year 2000 and ever since, I have seen conflicting realities of disaster responses in Mozambique. In 2000, Mozambique was hit by record floods that killed about 700 people and affected nearly one quarter of the population of the country. Due mainly to this flooding the national GDP sank from the expected 10 percent growth to just 2 percent. They were the worst floods to be recorded in 150 years. Media coverage, academic reports and everyday conversation at the time pictured widespread suffering and a disruption of people's lives. 'They have nothing' and 'they lost everything' were the central claims and most of those interviewed at national and international level went on to ask for any kind of support for the affected.

Moved by these claims I entered the humanitarian domain by donating a number of personal belongings to the Mozambican Red Cross and by running, with colleagues of mine, a humanitarian campaign within our university campus in Maputo. We were deeply moved by the idea that the affected people lost everything and were in need of any kind of support. A book by Christie and Hanlon depicted how the affected came to lose everything and how international and national compassion helped to save lives and reconstruct people's livelihoods. National government efforts and

third parties (donors, NGOs, private sector and individual external aid) have all been highlighted in saving lives and reconstructing the livelihoods of the affected (Christie and Hanlon, 2001).

The Inácio case shows a similar representation of the affected people during the 2007 flooding. Outsiders approached the village with this image of helplessness in mind. Helplessness is a representation that tends to be reproduced in every disaster situation in Mozambique and, likely, in many other countries affected by disasters. Statements such as 'due to the flooding people will lose everything'¹ or 'people have been displaced and no longer have shelter or equipment for cooking and cleaning'² are reproduced after disaster. This image of helplessness of victims is juxtaposed by a counter image of outsiders that have the competences and principled ethics to come to their assistance.

As I came to interact more with people affected by the floods, like Inácio, his parents and neighbours, I was stunned by their life experiences with floods. They revealed their strategies and struggle to deal, not only with the floods, but also with their ancestors, various government departments, various humanitarian organizations. Also, they had to deal with family members, fellow community members, the market, their past and future. NGOs providing humanitarian aid had to strategize, struggle and negotiate with donors, local government officers, the affected so that their response would make sense to the local government, the donors, to local people and to themselves. I came across different disagreements, conflicts and negotiations between and within local actors such as NGOs, donors and government. In everyday practices, intervention models and humanitarian principles were, in most of the cases, reinterpreted, transformed and continuously negotiated in the interactions between the different actors. This was very different from the often portrayed images of helpless victims and their competent saviours.

Increasingly I came to a realization that responses to disasters in Mozambique take place in contexts where actors with different worldviews, interests, and power relations meet and dispute or negotiate open-ended processes and outcomes. I came to recognize that the representation of disaster as a single event in time and space, framed in a single discourse marked by powerlessness, homogeneity and expected inputs and outcomes masks complex processes and tends to sideline many other representations and response practices. This thesis is about this other side of disasters that tends to pass unnoticed in Mozambique. It delves into the everyday practices of disaster response looking at how the different representations and responses to disasters in Mozambique conflict or complement each other and what emerges from the different actors' encounters.

It is my understanding that approaches that fail to analyze the agency and heterogeneity in disaster response tend to reduce, implicitly, the interests of all involved to a singular universally generalizable survival-utility. They assume that hazards and disasters tend to render 'normal' concerns for

¹ www.actionaid.org.uk/101129/mozambique accessed January 16, 2008

² www.dfid.gov.uk/news/files/pressreleases/mozambique-floods.asp accessed January 16, 2008

engagement in ongoing political and socio-cultural life-strategies virtually insignificant in shaping behaviour and practices. Consequently, they assume that the affected become only interested in saving their lives, willing therefore to give up 'freely' all their manifold interests and concerns. In this representation all this happens under the auspices of the aid providers that are guided only by humanitarian interests and work under humanitarian principles.

The present thesis claims that the way in which the affected are represented affects the ways in which external responses are shaped. If they are portrayed as weak, passive, irresponsible like Inácio and his parents were depicted, then the interventions will tend to take a top-down approach with little understanding of local capacities, knowledge and motivations to act in alternative ways. This process is not separated from politics and power relations. For the government and humanitarian organizations, people were powerless and evacuations appeared to be the best option. For the locals, evacuations or the timing of the evacuations were not the right ones. Sending military forces for rescue operations evidenced power relations and this was legitimated by playing the humanitarian politics of saving lives.

A second claim of the book is that a discursive focus on powerlessness allows resource flows and gains to many actors in the development and humanitarian sectors, and beyond. NGOs and governments have been depicted to act in ways that best suit their own interests in the first place rather than the interests of the affected (Harrell-Bond, 1986; De Waal, 1997). In the same vein, I see statements such as 'saving lives', 'rebuilding livelihoods', 'reducing disaster risk', 'lost everything' as strategic narratives used to mask the agendas of the actors. These involve strengthening their financial, political, economic, and socio-cultural and negotiation positions. These agendas tend to lead to the production and reproduction of a powerlessness discourse and the buffering of alternative discourses.

A third major claim of the book is that local actors in Mozambique are neither passive victims of disasters nor submissive recipients of disaster responses interventions by external actors. Within the limits of their knowledge and information local people tend to respond to hazards and interventions in ways that best suit their own interests. They tend to craft continuities in crisis, find the right moment for evacuations and participate in the rescue operations attempting, generally, to maintain or improve their financial, political, economic, socio-cultural and negotiation positions as well. To grasp these concerns and claims the thesis has set out to answer the following questions:

RESEARCH QUESTIONS

The main research question of the book is *how are disasters and adaptation to climate change programmes interpreted and acted upon by different actors in Mozambique*. More specifically, the research answers the following questions:

1. How do local people experience and interpret climate-related extreme weather events?
2. How do local people integrate disaster responses in their everyday livelihood practices?
3. How do local people, national government authorities, NGOs, donors interact in disaster response and what are the outcome(s) of their interactions?
4. How do intervening agencies (i.e. government and NGOs) translate, (inter) national policies and projects to make them suit their own needs and the needs of local people?
5. How do different actors at local level appropriate, integrate or transform project interventions on disaster risk reduction to suit their needs?

To answer the research questions posed above I decided to focus analytically and methodologically on local actors and on everyday practices as entry-points. I chose local actors for different reasons. First, the discourse of local powerlessness led to focus on government and third parties' responses to disasters overlooking local responses to disasters and the complexities involved when government, third parties and local actors meet. Second, as climate change takes place and climate related natural hazards increase in intensity and frequency (IPCC, 2007; IFRC, 2009) there is an increasing need for empirical cases on how local people respond to disasters, what limitations they face and what policy recommendations can be advised for mitigation and adaptation to climate change. Third, there is an emerging consensus as highlighted under Hyogo Framework for Action that community based disaster management offers major prospects for disaster reduction and local disaster response practices should be the ground for further interventions and research (Van Aalst *et al.*, 2008).

On the other hand, I decided to focus on the everyday practices as they allow exploring the processes of negotiation, (re)interpretation and transformation of interventions, of different worldviews and interests, which are hard to reveal by using different approaches. There have been a growing number of disaster studies but we still need to piece together fully the variety of ways in which disasters are shaped, modified amplified or attenuated within the social dynamics of day-to-day life (Wilkinson, 2010:60). Further disaster and humanitarian studies have hardly approached the thematic from a perspective where actors negotiate the process and the outcome in their everyday encounters (Hilhorst and Serrano, 2010: 183-184).

For this endeavour, the thesis uses an anthropological and sociological perspective for disaster studies. It is based on eighteen months of fieldwork in

Mozambique. During this period, I followed different actors and interactions between actors. Of particular relevance, I followed actors involved with the Mozambican Red Cross project on disaster risk reduction in Cocorico and actor's responses to the 2007 floods on the Zambezi delta. The 2007 flooding coincided with the starting of my fieldwork in Mozambique and became a major critical event to analyse actors' interfaces and everyday practice of disaster response. The 2007 flooding is used, mainly, to answer research questions 1, 2 and 3 while the Red Cross project is used, mostly, to answer research questions 3, 4 and 5. Out of the eighteen months of fieldwork, I spent twelve months living with local people along the Zambezi delta in Mopeia, Mutarara, Caia, Marromeu and Chinde districts. This aided me in getting in-depth data on local perspectives and responses to disasters, which is the core objective of the book. The remainder of the present chapter introduces shortly the Mozambican context, and then deals with the analytical concepts, the methodology of the study and finally the outline of the book.

MOZAMBIQUE: AN OVERVIEW

Mozambique (figure 1) is a former Portuguese colony located on the Eastern coast of the Southern African region between the latitudes 10° 27' and 26° 52' South and the longitudes 30° 12' and 40° 51' East. In the north, Mozambique borders Tanzania, first a German former colony and then a British former colony after the Second World War. In the west, Mozambique borders Malawi, Zambia and Zimbabwe all British ex-colonies. South Africa and Swaziland also British former colonies border Mozambique in the south. In the east Mozambique comprises 2,700 km of coastline along the Indian Ocean. The country covers a surface of 799, 380 km², and by 2007 had about 21 million inhabitants (INE, 2007).

To understand the occurrence of disasters and the ways in which actors respond to them in Mozambique we need to reflect upon the historical and contemporary, socio-economic and political contexts of which disasters are constructed. Mozambique is one of the poorest countries in the world. Although economic growth has been impressive over the past few years and the country managed to reduce absolute poverty by 15 percent over the period from 1997 to 2003 (MPF *et al.*, 2004), more than half of the country's population still lives under absolute poverty and the country ranks 172 out of 182 on the world Human Development Index (UNDP, 2009:183). Cocorico is illustrative of this prevailing poverty. Like Inácio in Cocorico, 58 percent of children live under absolute poverty (UNICEF, 2007:7) and nearly half of the children under the age of two years, in 2008, were suffering from chronic malnutrition (UNDP and GoM, 2008:10). More than half of the population of Mozambique has no access to potable water and hospital care (UNDP and GoM, 2008:12).

Due to the prevailing poverty Mozambique has been depending on external aid for more than 25 years. Mozambique is Africa's single biggest aid

receiver and the world's eighth most aid dependent country (Arndt *et al.*, 2006:3; Renzio and Hanlon, 2007:3). Natural hazards such as flooding occur in such a context and, as widely held, poverty, vulnerability and natural or man-made hazards is a perfect 'cocktail' for disasters (Blaikie *et al.*, 1994; Oliver-Smith, 1999; Bankoff *et al.*, 2004). This context may, to a large extent, explain why the powerlessness discourse on disasters prevails over alternative representations.

Poverty, vulnerability and disasters in Mozambique emerge from a multiple and complex interplay of factors. From a historical and economic perspective, Mozambique was colonized by Portugal, one of the poorest countries in Europe by the time of colonization. Up to the sixteenth century, Portuguese people's livelihoods and the overall Portuguese economy depended heavily on fishing and salt production (Newitt, 1995: 14). When agriculture, industry and services 'flourished' in Portugal by the eighteenth and mid-nineteenth century this was basically dominated by the English business class rather than by the Portuguese themselves (de Brito, 1980:24; Rita-Ferreira, 1999:19). This Portuguese context came to influence how Portugal colonized Mozambique.

The Portuguese arrived in Mozambique in 1489. An expedition commanded by Vasco da Gama was on its way to India searching for sources of the lucrative spice business. Pepper from India was a particularly good source of fortune in Europe by the fourteenth and fifteenth centuries and Portugal was very much interested to take the monopoly of the spice business (Newitt, 1995:17). On the way to India, Vasco da Gama stopped in Mozambique, on the shores of now Inhambane province and then at the Mozambique Island, to replenish stocks and explore the economic and geographical potential of the area. This marked the beginning of the Portuguese presence in Mozambique. By the time of the Berlin conference in 1884/5, Portugal had already been present in Mozambique for nearly 400 years.

Notwithstanding this, up to mid-nineteenth century, Portuguese authority throughout the country was very limited. Its physical presence was limited to a small number of forts and trading ports along the Mozambican seashores and the Zambezi River. The southern region of Mozambique was largely a labour pool for the mining industry in South Africa while large portions of land in the central and northern part of the country were granted to companies owned mainly by non-Portuguese (de Brito, 1980; Newitt, 1995). The companies took up the administrative role of these areas and the populations living in them. They were involved in large plantations of cash crops such as cotton, sugar cane, sisal using local population as cheap or non-paid labour force and in most cases applying physical violence. They were also heavily involved in selling the native labour force, from their granted areas, to the neighbouring British colonies (Wuyts, 1980:12-13).

When Portugal managed to extend its administration throughout the country over the 1930s, it did so in the most brutal way impinging killings, slavery, forced labour and coercive production of cash crops. Portuguese

administration to the native people was one of the most brutal amongst the colonizers (Vail and White, 1978; Isaacman, 1996; Rocha *et al.*, 1999). These colonial practices separated native families either temporarily or permanently and the local peasantry lived in fear of abuses of the Europeans and their African mercenaries (Vail and White, 1978). Local institutions and values were violated. In the economic sphere, the export of an appreciable part of the native labour force, and the coercive recruitment of labour force for the plantation companies intensified local workforce shortage. This led to a reduction in native production and a decline of the living standards of the natives (Isaacman, 1996). Although the context was not smooth and local, people actively or overtly rebelled against all forms of coercion and brutality (Isaacman and Isaacman, 1976; Isaacman, 1996; Rocha *et al.*, 1999) a more coordinated struggle for national liberation was organized and started by the FRELIMO party in 1964, and Mozambique became independent from Portugal in June 1975.

Portuguese investment in its colonies was very marginal because of Portugal's limited 'financial' capacities, the interest in improving its national economy and the fact that non-Portuguese owned most of the large companies. Compared to other colonizers the overall living standards of the populations on the ex-Portuguese colonies were very poor and traumatic (Chabal, 2002). By the time of Mozambican independence in 1975, about 95 percent of the native population- that lived mainly from agriculture- were illiterate and social services such as clean water, health care amongst others were extremely limited for the native people (Cravinho, 1995: 47). This was the legacy at independence, which tended to make people vulnerable to natural and man-made hazards.

After independence, FRELIMO adopted the Marxist-Leninist ideology and private property was abolished. The economy was centralized and collective models of production were introduced in the agricultural sector. To implement collective production and state farms, rural populations were forced to live in communal villages and resettlement programmes were undertaken in the late 1970s and early 1980s. Most of the Portuguese and foreign nationals left the country and the services they owned, controlled or provided were left abandoned, destroyed or expropriated by the state. These new developments had considerable negative impacts on the already weak Mozambican economy and low living standards of the population. By 1976, cash crops and national industrial production fell by two-thirds and the global national export volume fell by half compared to 1973 (Egero, 1992:77). The farming sector, which absorbed the majority of the population, was hit the most. By 1978, food shortage was widespread in the country to an extent that cereal imports had more than tripled compared to 1973 (Fitzpatrick, 1981:81). The national GDP started to fall by an average of 5 percent per year and by 1982 the country could no longer afford to pay its debt demands (Fitzpatrick, 1981: 80-81; Plank, 1993:410).

Beyond colonial heritage and failures of policies after independence, the deteriorating socio-economic and political contexts were also a by-product

of natural hazards and civil war. In 1977 and 1978, Mozambique was affected by two big floods. The 1977 flooding on the Limpopo basin claimed 300 lives and affected about 400 thousand people (Wisner, 1979: 296) while in 1978, floods on the Zambezi basin claimed 45 lives and affected about 450 thousand (Palmer and Tritton, 1979:89). From 1980, southern Mozambique started to face drought which became acute from 1983 to 1985 affecting more than 5 million and claiming lives of more than 100 thousand (GoM, 1988: 15). In the next chapter, I discuss in more detail the occurrence of natural hazards in Mozambique and its influence on the state formation process.

Civil war started in 1976 around the Mozambican border with Zimbabwe in Manica and Tete provinces but by 1986 it had spread all over the country (Weinstein and Francisco, 2005). A number of different sources both internally and internationally, fed the RENAMO guerrilla movement that fought FRELIMO during the civil war. The white minority administered both the Ian Smith government in Rhodesia, now Zimbabwe, and the apartheid regime in South Africa. They are overwhelmingly cited to have bred and fed RENAMO to destabilize Mozambique.

However, RENAMO's growth and strength over time should in fact be attributed to a more complex interplay of national and international forces. These include the cold war strategies, RENAMO's violence and coercion on local people, dissatisfaction with FRELIMO's policies, both internally and internationally, regionalism and the weakness of the state and economy by the independence in 1975 (Morgan, 1990; Weinstein and Francisco, 2005).

The civil war ended in 1992 but left behind widespread horrendous memories. It is estimated that almost 1 million people lost their lives while 2 million were forced to find refuge in neighboring countries and another 4 million were internally displaced (UNHCR, 1996). Virtually all infrastructures in the countryside were in shambles and many rural areas were deserted. The 16 years of civil war produced nationwide economic damages estimated at 15 billion US\$ and incalculable socio-cultural impacts (Middleton and O'Keefe, 1997: 82-97).

Facing increasing opposition and economic problems in the 1980s and 1990s, FRELIMO was obliged to reshape its national and international policies. It turned to the west and by 1984 adhered to the Bretton Woods institutions to access financial resources. Under the auspices of the World Bank and IMF economic reforms started in 1987, Marxism was abandoned and the first multiparty elections were held in 1994. Ever since, Mozambique has depended largely on international aid for its development and humanitarian needs. By 2009 about 54 percent of the national budget depended on aid from the international community.

This dependency on the international community has been relevant to the production and reproduction of the powerlessness discourse emphasized at the beginning of the present chapter. For many scholars, Mozambique's recurrent reliance on international donors and NGOs for humanitarian and development aid has eroded local capacity, created, and perpetuated a national dependency on the international community (Adam, 1990; Hanlon,

1991; Plank, 1993; Renzio and Hanlon, 2007; Hanlon and Smart, 2008). Both, ordinary people and the government, are said to have become accustomed to a 'beggar mentality' (Adam, 1990:19) and to 'cargo thinking' (Hanlon and Smart, 2008: 318). Hanlon and Smart went to an extreme to suggest that the international community is governing Mozambique. They claimed that 'international donors have taken the seat of the driver and the government of Mozambique and its people are hitch-hikers. Otherwise, if the government takes the driver's seat then, they appear to be like a taxi driver, expecting orders as where to go' (Hanlon and Smart, 2008:295).

In the next chapter I will claim that the focus on the role of the international actors - their strengths and power- limits in my view the understanding of everyday struggles and the creative ways devised by local actors to reshape this influence and its outcomes. While the international community has influenced disaster management, they have not, however, determined the outcomes. International response was concentrated mainly at the policy and programmes formulation and fund mobilization levels. At the implementation level the national government and local people became the major players and, to a large extent, reshaped the policies and programmes to suit their own interpretations of disaster problems and their own interests. In most of the cases local actors attempted to create and use a discourse from which a positive response from the international community could be expected. But, they also attempted to avoid that aid jeopardized their political and economic interests and those in power tried to use international aid to maintain them in power and, to some extent, strengthen their positions. Rather than eroding local capacity, international response allowed, largely, a greater room for manoeuvre to local actors, especially to the FRELIMO government.

Greg Bankoff has demonstrated how disasters and disaster response in the Philippines has been a formative element in shaping socio-economic relations and power positions in society (Bankoff, 2003). In a similar vein, I will analyze, in the next chapter, how the colonial powers and then the Mozambican government managed to use disaster response to strengthen their positions. This means that disaster response in Mozambique has to be approached as part of the state formation process.

EXPLORING THE EVERYDAY PRACTICES OF DISASTER RESPONSE. THE ANALYTICAL CONCEPTUALIZATION

The present thesis proposes the use of an actor-oriented approach for the understanding of disasters and disaster responses. In the following sections I elaborate on this and also discuss the concepts of vulnerability, adaptation and livelihoods as key concepts in attempting to understand local disaster responses. Before elaborating on these let's first look at how disasters have so far been approached, what limitations and challenges disaster studies are facing currently, which has led me to the use of an actor-oriented approach.

DISASTER RE-ATTACHING EXCEPTIONALITY TO NORMALITY

Disasters have always been characterized by their exceptionality and disruptive capacity. They represent a 'crisis situation that outstrips the capacity of a society to cope with' (Anderson and Woodrow, 1993: 133) or, as become more consensual and elaborated, 'it represents a serious disruption of the functioning of a community or society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources' (UN, 2009:9). In 1997 Al-Madhari and Keller went through different fields of knowledge to find out how they define disasters. They enumerated 27 definitions of disaster ranging from sociology, psychology, seismology, medicine, relief organizations, economics and government institutions all presenting similar characteristics. Frerks *et al.* (1999:7) identify the following characteristics found in disaster definitions:

- An extreme phenomenon;
- Of great intensity and limited endurance;
- Occurring at certain location;
- Involving a complex interplay between physical and human systems;
- Causing loss of lives and threats to public health, as well as physical damage and disruption of livelihoods systems and society;
- Outstripping local capacities and resources;
- Requiring outside assistance to cope with.

The characteristics outlined above tend to distinguish and, to a large extent, detach normality from exceptionality. In so doing, they tended, over time, to produce an academic and professional field of knowledge that specializes in exceptionalities and disruption- disaster studies and humanitarianism. They tend to detach themselves from the disciplines and professions focusing on people's everyday or 'normal' life. As they become highly specialized they become even more narrowed in terms of the type of disaster they look at (i.e. specialized in natural or man-made disasters; rapid or slow on-set disasters), disaster studies and humanitarianism come to be increasingly detached from everyday life.

This approach on disasters has been of little use for dealing with complex disasters (evolving from multiple sources that feed each other) and disasters that are only mildly disruptive, and in understanding the making and unmaking of disasters and disaster responses.

Climate change is also challenging the way scientists define and approach disasters nowadays. Given the complexity of climate (change) related disasters whose causes and effects stretch over large scales of time and space, and the diversity of actors and value systems involved, the disciplinary boundaries as well as boundaries between normality and exceptionality become very fluid and problematic. As climate change takes place, and the intensity and frequency of weather-related disasters increases, disaster responses come to be part of the everyday life through what is now globally labelled adaptation. Hence, climate change is, to a large extent, forcing scientists to re-attach exceptionality to normality. In doing so, disaster studies should de-encapsulate from the exceptionality and look at the everyday practices that bring about disasters and disaster responses. In this thesis, I argue that the best way to do this is by using an actor-oriented approach to disaster studies.

ACTORS, ARENAS AND INTERFACES

The definition and responses to disasters are social constructions embedded in different perceptions, interests and power relations. People living under disaster risk conditions and experiencing disaster situations in their everyday life might perceive and act upon disasters differently from how scientists and humanitarian organizations perceive and act upon them. Bruijn and Van Dijk, for example, have captured how insecurity and crisis are defined in pastoral contexts of Mali and how this differed from the scientific and humanitarian definition. While scientists and humanitarian organizations perceived limited grazing capacity as an exceptional problem requiring emergency intervention, locals saw it as part of their normal life and used their mobility and social networks to cope with the 'problem' (Bruijn and Van Dijk, 1999).

Since disasters are social constructions, there are wide differences on how *actors*, which may be individuals, but also formal and informal groups and organizations, define and act upon them; for some natural or man-made disasters are a simple fact of life, god's will, or even a window of opportunity (Frerks *et al.*, 1999:32). As there are multiple understandings and responses to disasters, the context of disaster response comes to best resemble an *arena* where *actors* with different and sometimes conflicting views, strategies and interests *interface* either face-to-face or virtually and shape the process and the outcomes. *Actors*, *arena* and *interfaces* are three major cornerstones of the actor-oriented approach.

The actor-oriented approach departs from the premise that actors have agency, that is, within the limits of their knowledge and other resources, their understanding and interests, individuals, groups or organizations respond

and shape events affecting their existence. From an actor-oriented perspective social life is complex, heterogeneous and actors' response to events are not preordained, static, single and intrinsic; they are always dynamic, contested, contingent and a result of social interactions (Arce and Long, 2000). Because responses are a result of social interactions, an actor-oriented approach focuses on *interface* analysis as a lens for understanding the diversity of interpretations, conflicts, strategies and negotiations taking place in the arenas. The concept of arena entails that practices are socially negotiated in interfaces between different actors. In the thesis the concept of arena is used to identify actors involved in particular disaster response and in mapping out the issues, resources and discourses entailed. Interfaces are defined as points of interception of different and often conflicting values, understandings and interests brought in by different actors in their social interactions and negotiations (Long, 2001:65). Social negotiation takes different forms, which may include coercive violence, gossiping, written statement, and formal and informal interactions (Hilhorst and Serrano, 2010:184).

The actor-oriented approach stresses that at the interfaces each actor attempts to enrol the other parties into its own agendas and understandings, and actor's actions are continuously reshaped according to their interpretations of actions of the others and the overall changes on the social and physical environment (Long, 1989:223). Hence, people and organizations are not passive recipients of events affecting their lives; they wittingly or unwittingly shape the events surrounding their everyday lives. That is not to suggest that actors are always conscious about their practices.

Discourse analysis is an integral part of the actor-oriented approach because discourses are shapers of the ways in which actors understand and respond to ideas, situations and actions. Discourses are more or less coherent sets of reference that frame the way we understand and act upon the world around us. Foucault (1995/ 1975, 1980) has paved the way for studying discourse as closely interweaving knowledge and power. The effect of discourse is that certain ways of understanding society, including its organization and the distribution of power, become excluded whereas others attain authority. In the writing of Foucault, discourse appeared as a structure that imposes itself on reality.

Discourse can indeed become dominant and operate as a mindset that informs policy and practices in unrecognised ways. However, Norman Long has pointed out that there are always multiple discourses at work. 'Since social life is never so unitary as to be built upon one single type of discourse, it follows that, however restricted their choice, actors always face some alternative ways of formulating their objectives, deploying modes of action and giving reasons for their behaviour ' (Long and Long, 1992:25). Hence, there is a duality of discourse: it has an ordering effect, yet actors can strategically pick, choose and use discourse in defining their policies and practices (Hilhorst, 2003). It is in this duality that we find the argument to study how discourses such as of powerlessness and disruption work in

practice, to review why and how they become important and how they order for instance disaster response practices (Artur and Hilhorst, 2010).

In this thesis, I explore how discourses on disasters are adopted and adapted by local actors, and how disaster response practices are consequently shaped. I also reflect on how power enters into these discourses, how alternative representations are excluded and others promoted and how particular discourses legitimize particular interventions.

Actor-oriented approaches form in essence an alternative approach to structuralism and rational choice theories. On one hand, actor-oriented approaches deny claims by structuralists that actor's actions are a product of external power and rules that give actors no way to act otherwise; rules and other externalities are viewed from an actor approach as a by-product of actors' practices; they evolve as actors make use and reproduce them over time (Barnes, 2000:26). Further, the mere fact that actions are in accordance with some external requirements or structures does not imply passivity. To act consistently with a rule is not the same thing as to act guided by a rule, still less as to act as a rule compels to act (Barnes, 2000:47)

On the other hand, the actor oriented approach steps away from the rational choice theory. The rational choice theory assumes that actors' actions are predictable, based on the individualist interests of maximizing or achieving her/his own benefits, goals and preferences; hence, the actors use rational calculation and choose the best actions to fulfil their objectives. Contrary to this understanding, the actor-oriented approach stresses that although actors are actively involved in shaping the process and the outcomes; a great deal of their behaviour is subject to unknown conditions or unintended consequences of their actions (Leeuwis, 1993:293).

ACTORS AND DOMAINS OF DISASTER RESPONSE

One of the main challenges in applying an actor-oriented approach is how one can follow in-depth the constellation of different actors, interests and discourses entailed, especially in disaster response where the number of actors goes far beyond that involved in 'normal' development interventions.

To facilitate the study of multiple discourses and responses to disasters from multiple actors, and not get lost in the challenge of studying every single actor, I use domains of response to risk and disasters (Hilhorst, 2004). Social domains can be defined as areas of social life that are organized by reference to a central cluster of values that are recognised as a locus of certain rules, norms and values implying a degree of social commitment (Long, 2001:59). Although these domains are diverse in themselves, they have a certain proximity, physical or discursive, in the ways in which people refer to disaster and risk. For example, the disaster discourse framed in terms of disruption, deaths, and weakness tends to create certain clusters such as of 'victims' who are to benefit from humanitarian aid and of 'humanitarian

NGOs' that are supposed to deliver the aid. This means that we can use these domains as entry-points or categories to study the arena of disaster response.

The three main domains of response to risk and disasters are the domain of science and disaster management, the domain of disaster governance and the domain of local responses (Hilhorst, 2004). They are the respective domains of scientists and development experts, bureaucrats and politicians, and local people.

The domain of science and disaster management involves the global understanding of disaster and disaster response. Like the development discourse, disaster response is increasingly based on the global perception that it can be appropriated and controlled through expert knowledge and modern administration. Disaster response from this domain tends to be based on global guidance of disaster management embedded in humanitarian charters, international treaties and codes of conduct promoted mainly by donors, UN agencies, researchers and international NGOs. Global principles, codes of conduct and practices are promoted and increasingly researchers, donors and humanitarian organizations tend to seek predictability, efficiency, calculability and control of disasters and disaster responses (Waters, 2001:35).

This domain is not neutral and exempted from power relations and politics. As disasters happen frequently in the developing countries and most of technological, expert and bureaucratic knowledge is based in the west, the domain of science and disaster management tends to shape North-South relations and to promote the transfer of western technology and knowledge to the developing countries (Bankoff, 2004). In these cases, this domain reproduces existing power relations and continuously undermines alternative and likely more efficient and context based forms of disaster response (Wilkinson, 2010: 84).

The second domain- the domain of disaster governance- represents the cluster of disaster response where the international domain or experts' domain is mediated and altered through national, political and bureaucratic governance practices and institutions. It represents the domain where international policy framework, regulations and treaties are downscaled and incorporated within the national frameworks and government practices. It is through this domain that national governments worldwide respond to disaster situations and based on their response a particular relationship between governments and citizens as well as with the international community develops. This requires in most of the times a balance of local interests and international agendas.

The third domain- the domain of local response or knowledge- represents the domain where local people through everyday practices and based on their capacities, resources including social networks respond to disasters. It has been noticed indeed that local response and knowledge is neither genuinely local nor homogeneous and equally shared. The process of production, dissemination and appropriation of the so-called local knowledge is diverse, conflictive and embedded in different politics and power relations. Further, the so-called local knowledge is not static; it constantly evolves

through interaction, social negotiations, accommodations, exchanges and power struggles within the domain and with other domains of disaster response (Hilhorst, 2004:63). Thus, the different domains are not necessarily detached from each other. Practices at local level are informed, in many cases, by national and international policies and interventions while, practices at local level are, in most of the cases, frames of references for national and global policies.

DISASTER INTERVENTIONS AND INTERFACES

Interventions are an integral part of disaster responses. In the introduction of the book I have illustrated that hazards and disasters tend to encourage interventions from different actors. Interventions are considered here as a set of activities carried out by actors (normally from the international and governance domains) in a particular place with or without the participation and legitimization from the local actors.

The disaster management cycle (UNDRO, 1991) provides different points of intervention before, during and after a disaster. Before disasters, actors, in the disaster field, are supposed to undertake risk assessment, mitigation/prevention and preparedness activities. During the disaster, actors are expected to undertake evacuation, give immediate assistance of food, water, medical care, and shelter. In post disaster times, there is a need to restore infrastructural services, rehabilitation, reconstruction, and economic and social recovery. Altogether, these interventions can help to reduce the frequency of exposure to and impacts of disaster events (Hilhorst and Warner, 2009:5).

Regardless of who plans the interventions and for what period of disaster response, the planning is, in most cases, based on assumptions of disruption, limited local capacity, and of turning these negatives into positives in a linear and 'blue print' fashion. In many cases the planners see themselves as the only ones possessing the right knowledge regarding the events and responses to it thus being well placed to determine inputs and outputs.

In everyday practice, however, interventions are made up of different encounters between different actors including planners and beneficiaries. These different actors perceive hazards, disasters and the interventions taking place from their own projects and cultural background. In most cases, interventions involves struggle for resources between different actors. They are therefore shaped by the different demands, politics and rivalries between and within organizations and communities. Based on that, the assumptions from the planners may be challenged and the planned interventions unpacked at the interfaces. In so doing, interventions may get different meanings and outcomes, sometimes far beyond the planned process (Hebinck, 1995; Hilhorst, 2003).

It is rather naive to assume that outcomes of interventions emerge from the goals, activities and strategies devised from the plans. The fact of the matter is that they are increasingly perceived as an emerging property of encounters, negotiations, enrolments and coalition building between the different actors from the different domains of disaster response discussed above. Under such contexts focus should be on the implementation and encounters between different actors rather than on the plans alone (Long and Van der Ploeg, 1995:71). As interventions are implemented they come to form part of the resources and constraints of many individuals and groups involved in shaping or reshaping continuities and changes both on the lives of the affected but also on the 'life' of the interventions (Long, 2001:72).

CLIMATE CHANGE, VULNERABILITY TO DISASTERS AND ADAPTATION

From the early 1990s, climate change has received increasing attention in disaster studies. Empirical scientific evidence has shown that the climate of the planet Earth is not the same as it used to be a hundred years ago and will not be the same in the coming century. Due mainly to anthropogenic influence (i.e. through greenhouse gas emissions into the atmosphere and deforestation), processes of climate change have been set into motion. Global average temperatures have been rising gradually over the last century and precipitation, sunlight patterns among other climate variables have shifted from their normal ranges (IPCC, 2007). Due to changes in climate variables, the planet has become hotter, glaciers have melted and sea levels have risen. The frequency, magnitude and timing of many weather-related phenomena such as droughts, floods and cyclones have deviated from their normal patterns.

The relationship between climate change and disasters is one that has been of concern for many actors especially in the domain of science and disaster management. There are overall claims that climate change has and will largely lead to increases in the frequency and intensity of extreme events. There are forecasts for more short term extreme precipitation resulting in more floods and landslides; further, that mid continental areas will become much drier increasing the risks of drought, and as oceans become hotter more energy is put into the cyclone formation increasing their frequency and intensity (Van Aalst, 2006: 8; IPCC, 2007:30). All this tends to lead to disasters especially in poor and vulnerable countries such as Mozambique. It is being argued that the Millennium Development Goals will not be achieved unless special attention and global policy interest is given to climate change and disasters (Schipper and Pelling, 2006).

Global policy interest in disasters and climate change took shape in the late 1980s and early 1990s. In 1988 the UN General Assembly approved, under their resolution 43/53 of 6 December, the creation of the Intergovernmental

Panel on Climate Change (IPCC) set up jointly by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP).

In 1989, the UN General Assembly designated, under the resolution 44/236 of 22 December, the 1990s as the International Decade for Natural Disaster Reduction (IDNDR); this was followed by the publication of the First Assessment Report by IPCC in 1990, that strengthened the importance of climate change and disasters as issues requiring political platform. In the same year (1990) the UN General Assembly decided to establish an International Negotiating Committee (INC) which started preparations for the United Nations Fund on Climate Change agreed during the 1992 Rio Summit on Environment and Development.

The Rio Summit produced three conventions - on climate change, biological diversity and desertification. The convention on climate change was strengthened in 1995 by the release of the Second Assessment Report by the IPCC, leading to the Kyoto protocol in 1997. The Kyoto protocol became the global tool for tackling climate change by proposing industrialized countries to reduce their greenhouse emissions and help developing countries to mitigate and adapt to climate change. The protocol entered into revision in 2009 at the Copenhagen Climate Change conference but the real impacts of the revision are still to be seen. In 2005, the United Nations produced the Hyogo Framework for Action (2005-2015) which presents measures for building disaster resilient nations and communities.

These global policies have led to various interventions in developing countries such as Mozambique, aiming to reduce climate-related disaster risks that are thought to be affected by climate change. Most (if not all) of the policy frames and interventions related to climate change and disasters, focus on reducing vulnerability and facilitate local adaptation to climate change. Hence, analysis and reduction of climate change related disasters came to focus on vulnerability and adaptation. These are currently key concepts in disasters and climate change discourses.

The concept of vulnerability was first applied, conceptually, in disaster studies in the early 1980s when terms such as marginalization and resilience started to be introduced (Wisner and Luci, 1993:1). Towards the late 1990s when concerns over climate change increased, a growing number of publications on vulnerability have emerged (Weichselgartner, 2001:3). The vulnerability concept tries to capture social, economic, political and environmental variables that make people be exposed to hazards and be susceptible to hazard impacts (DFID, 2005:2).

At a conceptual and practical level, vulnerability has indeed been approached mainly from a structural approach, addressing the macro-structures and by designing a number of policies and intervention models to be implemented mainly in poor and vulnerable countries. As pointed above, the global policies such as the Kyoto or Copenhagen protocol and the Hyogo Framework of Action are mechanisms that aim to reduce vulnerability to disasters in poor countries and communities. Although macro-structures are still critical in analysing vulnerability, I believe that vulnerability should be

addressed at local level where these macro-structures show their relevance in addressing vulnerability. As discussed above, actors at the local domain are not only subjects of macro policies and interventions but they have capabilities with which they address their vulnerability and reshape policies and interventions (cf. Anderson and Woodrow, 1989).

Adaptation to climate change is a parallel concept to vulnerability. Adaptation is believed to reduce vulnerability and to increase local resilience to climate change. Adaptation measures can reduce or delay economic and other losses from climate change related disasters (Burton *et al.*, 2002).

In disaster studies, concepts such as coping, coping capacity, adaptation and adaptive capacity have long been applied to refer to the different practices people apply to survive in the short or long term under the threats of natural or human induced hazards. Development experts, especially in rural development, have used livelihood strategies in a similar way as coping or adaptation strategies, to refer to a dynamic and complex *bricolage* or portfolio of activities that local people engage in to make a living in adverse conditions (Scoones, 2009:172).

Over the past two decades, the discussion on coping and adaptation has re-emerged strongly with the adoption of the concept in the climate change discourse. Alongside there are attempts to disentangle coping from adaptation. For many scholars coping tends to refer to short term adjustments in natural and social systems while adaptation refers to the ability to adjust over longer timescales (Eriksen, 2004:19; UN, 2006:20). Further, differently from coping, adaptation practices tend to become institutionalized in the contexts where they are applied (Oliver-Smith, 2008).

In climate change discourse, adaptation has primarily been defined as the process of adjustment in ecological-social-economic systems in response to actual or expected climatic stimuli, their effects or impacts (Smit *et al.*, 1999:200). But more recently the definition has undergone different metamorphoses and the last IPCC report (the fourth assessment) defines adaptation as the process of adjustment or change that reduces vulnerability or enhances resilience in response to observed or expected changes in climate and associated extreme weather events (Adger *et al.*, 2007:720). This new definition brings vulnerability and resilience much more upfront and enables linking up climate change adaptation with disaster risk reduction and livelihood security.

Despite this metamorphosis climate change adaptation discourse is still largely narrow in its conception and application. It still assumes that decisions to adapt to climate change are separate from the everyday lives, needs and constraints. Christoplos (2010) has cautioned that local people are exposed to a multiplicity of risks and climate change is only part of a bigger and more complex set of factors. Decisions regarding adaptation to climate change occur in the context of socio-economic and demographic changes, competition over natural resources, changing technologies, changes in global governance, social conventions and the globalising flows of capital and labour (Adger *et al.*, 2005; Leichenko and O'Brien, 2008; Christoplos, 2010). Thus, adaptation

can be induced by non-climate related social and economic changes that renders it difficult to detach climate change induced adaptations from actions triggered by other events. It is mainly by focusing on everyday practices and people's livelihoods that we may best understand the process of adaptation and the myriad of trigger events.

LIVELIHOODS AND DISASTERS

Studying disaster response involves mainly examining how people manage their everyday lives, that is, how they construct their livelihoods. The occurrence of disasters can disrupt the assets that people depend on to build their lives while disaster risk reduction measures that allow a certain continuity in livelihoods have to be applied by individuals in their daily activities for making a living. It is mainly by understanding people's livelihoods that one can understand disaster reduction measures being taken or rejected by individuals and communities. The strength of a livelihood analysis is therefore that it allows us to attach exceptionalities to normalities.

The concept of livelihoods emerged in development studies as a response to top-down development interventions that were not based on people's own strategies to make a living. The publication by Robert Chambers in 1983 '*putting the last first*' which calls for an inversion of the roles local people and development agencies and experts were playing (Chambers, 1983) can loosely be considered as the major lever toward livelihood conceptualization and analysis. Chambers argued that development interventions were supply driven taking 'the beneficiaries' as merely passive and helpless actors. For Chambers, beneficiaries have capabilities, perspectives and worldviews that should be taken as the starting point for any intervention.

In 1991 Chambers and Conway developed the first comprehensive definition of livelihood and since then an enormous body of literature on this topic has been published. According to Chambers and Conway, 'a livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living. To be sustainable a livelihood should be able to cope with or recover from stress and shocks, maintain or enhance its capabilities and sustain future generations' (Chambers and Conway, 1991: 9).

In 1998, Ian Scoones took the livelihood concept further and developed the Sustainable Livelihood Framework (Scoones, 1998:4) which became a central part of the Sustainable Livelihood Guidance Sheets by DFID (1999). According to the framework, people make a living in a context of vulnerability. Within this context people have access to certain capitals (namely social, natural, human, financial and physical). The access to these capitals depends on the prevailing social, institutional and organizational structures which influence the livelihood strategies and outcomes. The access and use of assets then produces livelihood outcomes that involves more

income; increased well being; reduced vulnerability; food security and more sustainable use of natural resource base (DFID, 1999:1). Since its publication in 1999, the Sustainable Livelihood Framework or the DFID Livelihood Framework has become very popular, being widely adopted or adapted as a model for livelihood analysis and interventions.

Despite its wide popularity, the DFID livelihood framework appears to have, in my view, several limitations in understanding disaster responses. It is essentially a normative tool conceived for intervention purposes in the existing *status quo* rather than to be grounded in local people's agency and strategies. Firstly, the framework sets out by presenting the limitations actors have in crafting their everyday life. It starts with the vulnerability context and emphasizes structural factors affecting the crafting of livelihoods. This is done without offering analytical and methodological tools as how to deal with institutions, power relations, stratifications and the very dynamic and sometimes unpredictable processes of crafting livelihoods. This is in sharp contrast with the capacities and vulnerability framework proposed by Anderson and Woodrow (1989) which starts from capacities and is therefore more actor-oriented. Starting by the capacities allows grasping the strengths that exist within the society which are essential for the design and implementation of responses that aim to reduce vulnerability (Anderson and Woodrow; 1989:11).

Secondly, the concept of capitals brings about a connotation that identifies livelihoods with economics and macro discourses rather than the micro level where its proclaimed focus is. The definition of five capitals, for instance, tends to exclude the more context based assets such as cultural assets³ (Bebbington, 1999: 2034) and symbolic assets⁴ (CERES Research School, 2006: 5). This leads to an oversimplification of local everyday lives and to equate livelihood with merely making a living. In everyday life, livelihoods go far beyond just making a living; it embeds identity, status, life style, power relations and value choices (Long, 2001; Noteboom, 2003; Kaag, 2004).

Finally, a critical analysis of the model brings out the assumption that livelihood outcomes are always positive (more income; increased well being; reduced vulnerability). In practice indeed, livelihoods are generated in arenas where politics, discourses and power relations play a role. In such contexts no one can predict beforehand what livelihood outcomes will look like. Positive or negative outcomes are emergent properties of people's interlocking strategies and the ways in which they socially negotiate. By pushing into 'positives' and by overlooking parallel and complex processes involved, the livelihood framework appears to operate conceptually at the levels-borrowing Max Weber's concept- of society rationalization. It works as a process of producing discourses which allow the development of bureaucratic systems and administrative practices that push people to act in a certain

³ Defined by the proponent as a range of cultural practices that are valued for their meaningfulness.

⁴ Defined as a range of repertoires, images, meanings, discourses formed and used by the actors in making their living.

rationalized way prescribed by the model. In this way, the framework starts to act like a regulatory instrument of social control.

In this thesis I embrace the livelihood concept to analyze local everyday lives and responses to disasters from a perspective that focuses on local capacities. I perceive of livelihoods as being crafted in contexts where actors negotiate and shape the assets, the institutions, the strategies and the generated resources. In my analysis I follow actors rather than 'capitals' and institutions. I attempt to grasp how actors shape 'capitals' and institutions and what 'capitals' and institutions do or represent to the actors.

THE RESEARCH METHODOLOGY

The present book is based on a four-year project within the framework of the Vulnerability, Adaptation and Mitigation Programme (VAM) of the Netherlands Organization for Scientific Research (NWO). It was a collaborative project involving Disaster Studies at Wageningen University in the Netherlands, the Eduardo Mondlane University in Mozambique, the Mozambican Red Cross (CVM) and the Red Cross/Red Crescent Climate Centre in the Netherlands. This research set up was designed in order to grasp everyday practices of people and their institutions, and produce insights, which could be of useful interest for practitioners and disaster managers. The research encompassed three periods: one year of building theoretical and methodological understandings, 18 months of fieldwork in Mozambique and another 18 months of writing the dissertation in the Netherlands.

The study is grounded in the ethnographic tradition. Ethnography is a research methodology widely used by social scientists especially by anthropologists. The methodology aims to study social processes in everyday settings by depicting the activities and perspectives of actors in a setting (Hammersley and Atkinson, 1983:23-24). Ethnography is based on meticulous fieldwork, which makes use of multiple methods such as participant observation, interviews and a wider range of data sources. The objectives of ethnographic studies are not necessarily to establish universal laws of human behaviour. Instead they aim to create, through data gathered and analysis, new insights that may challenge established theories and propositions (Garfinkel, 1967).

Although ethnography has long been applied in social science, there is still a limited understanding on what ethnography is all about. For many scholars, ethnography is the same as 'thick description' (Geertz, 1983) and most of the academics relate it with anthropology and qualitative data. This is indeed an oversimplification of ethnography. Ethnography is about living amongst research subjects, reflecting upon their everyday lives and your own life amongst them, and using whichever research methods allow to understand, answer or reshape the research questions. Thus, ethnography is

based on people's practices, on local challenges and makes, whenever required, use of quantitative and qualitative tools (Sayer, 2006:23).

Reflexivity is a core concept in doing ethnography. Reflexivity means that researchers reflect upon the subjects, upon themselves and their actions as shapers of the knowledge being produced. Knowledge production comes from a sharing and blending of experiences and negotiations in a field of interpersonal relations (Reason, 1994:11; Jackson, 1998:28). In such contexts, researchers should exploit their participation in the world under study to develop or test theories.

One of the major challenges of reflexive ethnography is how and when do you follow the actors? Everyday life is complex and made up of different encounters. Following actors across all their everyday events and practices is virtually impossible. To overcome this challenge I take Long's (1997) suggestion to follow *critical events*. Critical events refer to individual or collective happenings, which underline everyday practices or have had a substantial impact triggering changes in the process or outcomes of the everyday practices. They represent points, in time and space, where social actors interact and display their agency (Long, 1997:7). By following critical events researchers, focus on the process and the chain of actions and events throughout the process of making the outcome rather than focusing on the final endeavour *per se* (Latour, 1987:21).

A further advantage of following critical events is that researchers are not bound within a specific geographical area. There is a fallacy of conceiving the research setting as delimited by clear geographical boundaries. In reality, people's practices and livelihoods are informed by and done in multiple localities. Delimiting geographical boundaries tends not only to exclude the complexities of these multi localities but also to narrow the analysis to unrealistic contexts. Researchers end up not paying attention to networks developed beyond the research context which inform practices and processes taking place in their delimited research context. Rather than encapsulating on a clearly delimited research area, the focus on critical events and in following actors allows to capture processes taking place beyond a defined geographical research area.

This research is informed by these insights. I initially formulated the research problem with a focus on a disaster risk reduction project funded by the Red Cross/Red Crescent Climate Centre in the Netherlands and implemented by the Mozambican Red Cross in southern Mozambique. Nonetheless, at the beginning of the fieldwork in January 2007, central Mozambique was hit by floods and the Mozambican Red Cross and many other actors from the different domains of disaster response shifted their focus to humanitarian assistance to the affected population along the Zambezi delta. I shifted my focus as well and took the floods as a critical event to understand everyday practices of disaster response and actors' interfaces. I moved to the Zambezi delta and for one year, I lived among local people along the Zambezi delta in Mopeia, Mutarara, Caia, Marromeu and Chinde districts. This allowed me getting in-depth data on local perspectives and

responses to disasters - the core objective of the book. This was eased as I speak the local language.

I started the research at local level as a participant observer, placing focus on everyday life and attempting to get an overview of the context. In doing so, I asked people to be part of the research and co-opt the research agenda by bringing upfront issues of their interest on the research. During this stage, I followed some local critical events such as celebrations, church services, community meetings and sport events. I had also informal gatherings with different government servants (including teachers, police and military forces), NGO's staff, kids, pilots, traders, fishermen, farmers and volunteers from the CVM. Through participant observations and informal gatherings, I was able to collect detailed description of events, people, interactions and observed patterns of behaviour and practices. In total, I attended 19 church services, 2 funerals and 3 weddings.

As I came to understand better the context, the local jargon, hierarchy, concepts practices, and developed a rapport with local actors, I chose some key informants and conducted semi-structured interviews. In addition, I followed some of them to their agricultural fields, fishing and marketing journeys. This led me to get beyond my 'research site'. For instance, although I was based in Mopeia district I ended up interacting with other actors in Mutarara, Caia, Marromeu and Chinde districts. Besides this, I held separate focus group discussions with females, males and kids.

Semi-structured interviews and focus group discussions are similar in the approach. They are both guided by a checklist of issues and questions on which the researcher intends to collect information. Both are also flexible and provide data on knowledge, perceptions, beliefs and attitudes. The chief difference is that in semi-structured interviews, the interviewer asks questions to a single individual while the focus group discussion involves a group answering the questions. In the latter, it is still possible for an individual to give his or her own answers, but only in a group context (Bailey, 1994:192). In Mopeia, Mutarara, Marromeu, Chinde districts along the Zambezi delta, and in Maputo, Beira and Quelimane I interviewed a total of 78 people from different domains of disaster response using semi-structured interviews and had 16 group discussions (with around 15 people each). Semi-structured interviews and focus group discussion are an integral part of ethnographic studies and provide additional information to that collected through observations and informal gatherings. Annex 1 presents the list of people interviewed and of group discussions.

From the participant observations, informal and semi-structured interviews, and focus group discussions it emerged that there were considerable differences between people living in the lowlands and those living in uplands although there were many interdependencies between them. To capture, quantitatively, the difference I decided to run a survey. Qualitative methods such as these enumerated above, are well placed in providing in-depth information but have limitations in telling the reader the differences in numerical and statistical terms. I also believe that a combination

of qualitative and quantitative data provides a better understanding and enriches the analysis.

For the survey I used the household as the unit of analysis. There has been a considerable debate regarding the use of households in surveys. Households are composed of different members that do not necessarily share the same views and objectives over time. Under such a perspective, the views of the representative of the household may not necessarily represent the views and claims of the remaining members. Further, households may virtually expand over large territories diffusing the core concept of unit of analysis (Kaag, 2004:64).

Notwithstanding these problems, as households comprise groups of people who share most aspects of consumption, drawing on and allocating a common pool of resources (including labor) to ensure their material and social reproduction (Schmink, 1984:89), it remains critical in analyzing social life. Although people at the household level do have different value systems and worldviews, they also share responsibilities, resources and values. Human beings are social creatures and for this the first social unit of analysis still continues to be at the level of the household.

For data gathering using the questionnaires I employed four research assistants and trained them on research methodology and interviews. I chose them amongst the local people in Mopeia village that had been involved in data collection during the 2007 national census and had worked on the sites of interest of the present research. The survey was conducted in Cocorico community and Mopeia village (figure 3.3. chapter 3) in September 2007.

I chose Cocorico and Mopeia village for different reasons. Cocorico is located on the floodplains of the Zambezi River and is among the most flood prone areas of Mozambique. Despite this, many people repeatedly refuse to be evacuated and resettled. This offered an opportunity to unravel the local domain and understand local perceptions of extreme-weather events and their disaster response practices. Moreover, due mainly to that aspect- of refusal- the Mozambican Red Cross decided to implement- with funding from the Danish Red Cross- a Community Based Disaster Risk Management (CBDRM) project. This project became a case study to understand how interventions enter into the lifeworlds of the locals and what can we learn from CBDRM (see chapter 4).

Mopeia village is sited on uplands and due to flooding in 2007 and 2008, some households from Cocorico ended up being resettled in that location. As I intended to follow actors, interfaces and everyday practices, I included Mopeia village in order to understand differences in livelihoods between the floodplains and uplands and to understand the dynamics of people livelihood due to their resettlement.

By 2007 about 300 households inhabited Cocorico, see chapter 3 for further details on Cocorico, and the survey covered 84 households (43 in Mulamba; 21 in Sanguimbe and 20 in Cuara). This sample represents 28 percent of the total population. In Mopeia village, the survey was conducted at 24 de Julho and Zonas Verdes resettlement centres. Within the resettlement

centres the survey was administered to those resettled before the 2007 flooding. I excluded the newcomers because as most of them had received aid recently, this would likely have a bias on the numerical data on items such as spoons, cups, income and other resources. In total, 114 households were interviewed in Mopeia village: 59 households at 24 de Julho and 55 at Zonas Verdes. The total population in these two centres is unknown but it is estimated to be about 1290 households at 24 de Julho (about ½ newcomers) and about 500 at Zonas Verdes with nearly 1/3 newcomers (see chapter 7 for further details on resettlement). The survey sample represents about 10 percent of the population already settled before the 2007 floods in each centre.

The sample size depends on many factors, which include purposes of the study, total number of the population, resources available, stratification of the population and the level of accuracy required. A basic principle of sampling is that a sample should be representative of the population from which it is drawn (Babbie, 2007:189). The exact size for a representative sample is indeed very fluid. Bless and Achola (1990:77) claim that a sample size of 5 percent of the population can be used when lacking a precise formulae. Bailey (1994:97) suggests that for studies that are more exploratory than entirely quantitative and statistical, which is my case, 30 cases seems to be the bare minimum but 100 cases should be preferred. Mwanje and Gotu (2001:29) suggest that for contexts where a complete measurement is impossible or not feasible but we still need results, which are sufficiently accurate for the purpose of the study, the sample size should be based on researcher reflexivity upon the context. My sample size was informed by these insights. I attempted to reach a minimal sample size and to critically reflect upon it. This was particularly the case when choosing the households.

To choose the households I applied a multistage sampling methodology (Russell Bernard, 2005: 146). First, I used a heterogeneous purposive sampling (Smith, 1975: 116) by which I attempted, on purpose, to include in the sample, different social groups such as female-headed households, male headed households, widows, different ethnical groups and different age groups. To do this, I asked local leaders and local Red Cross volunteers to provide me with a list of households they recognized as minorities, which they used to call 'the vulnerable'. This exercise provided lists of female-headed households, people with disability, etc. Then, the groups with few frequencies were automatically chosen to be part of the sample while for those with higher frequencies (including the 'non vulnerables') I set up a second sampling method. I used systematic random sampling (Russell Bernard, 2005: 151). For this, I recommended to the assistant researchers, while walking within the research areas, to pick up every third household of these not yet included in the sample. A total of 198 household were interviewed using the survey. Annex 2 presents the checklist used for semi-structured interviews, group discussion and the questionnaire.

To analyze the survey data I used the Statistical Package for Social Science (SPSS). I ran descriptive statistics and tests of significance. Finally, I chose three extended case studies (including the Inácio case cited in the

introduction of the book) to serve as 'illustration' of different lifeworlds and strategies devised by people at local level to respond to disaster events. An extended case study is a detailed study of small number of units, selected as representative of the groups relevant to the issue under consideration, but not necessarily representative of the population as a whole (Casley and Lury,1982:62). Extended case studies enrich the research as they are very particularistic, descriptive, heuristic and inductive (Meriam, 1990; Stake, 1995). They are particularistic in a sense that they focus on a particular individual or phenomenon. The term descriptive is fitting in the sense that they provide a rich description of the phenomenon under study including many variables and their interaction. They are heuristic as they tend to illuminate the reader's understanding of the overall arguments of the author but also of the phenomenon under study. Finally inductive in a sense that extended case studies bring up new relationships, concepts and understandings rather than attempting to verify predetermined hypothesis.

Another relevant method used during the research was secondary data collection. This involved, amongst others, visits to libraries in Mozambique and in the Netherlands. In Mozambique, the libraries of the historical archive (Arquivo Histórico), Centre for African Studies (CEA), Land Tenure Centre (NET), National Water Directorate (DNA), and National Institute of Statistics (INE) deserve to be mentioned as they provided useful material for the present thesis. Secondary data was also gathered through listening to radio and TV programmes and by checking bulletins and newspapers. I had also access to various project and institutional reports and memos especially from the Mozambican Red Cross (CVM) and National Institute for Disaster Management (INGC).

Besides these research methods, I had, in 2006, an eight weeks exposure visit to Thailand, Bangladesh and The Philippines. The visit was intended to learn how these disaster-prone countries in Asia manage disasters and what lessons could enrich my research on Mozambican disaster management practice (see chapter 4). In Thailand, I visited the Asian Disaster Preparedness Centre (ADPC), while in Bangladesh I followed everyday practices of the NGO ActionAid. In The Philippines, I interacted with the staff from the Centre for Disaster Preparedness (CDP) and their partners.

THE STRUCTURE OF THE THESIS

The present thesis is structured in eight chapters. The next chapter sets the general landscape of disaster management and climate change adaptation in Mozambique. Using a historical perspective, the chapter looks at changes and continuities in disaster management practices and shows that disaster management is part of state formation informed by broader political and economic interests.

Chapter three narrows the research down to the local level and discusses local adaptation strategies for flooding events. It argues that

adaptation strategies cut across geographical boundaries and encompass a balanced arrangement between individual and collective interests as well as a complex social and economic set up. Notwithstanding, the chapter ends up by suggesting that the strategies are limited for extreme events and have been under erosion due to political, social and economic changes taking place globally, nationally and in the research area.

Chapter four deals with a Mozambican Red Cross project that was sponsored by the Danish Red Cross. The project aimed at strengthening local capacity for adapting to climate (change) related natural hazards. Throughout the chapter, I show that during the implementation, the project became a source of local power politics and conflicts. It was re-configured to respond to everyday needs rather than sporadic extreme flooding events as initially designed. The project was also a means for different actors at national and provincial levels to have access to resources and reinforce their visibility across different settings.

From chapter five up to chapter seven, the book follows actors' interactions during the 2007 flooding. Chapter five looks at the interactions between the international actors, the national government and the NGOs. The chapter claims that there were contradictions and power conflicts between those actors and this was reflected in disaster response practices undertaken by them. Further, I claim that government control and coordination over the 2007 flooding response was an emerging property rather than a genuinely devised process as claimed by some analysts. Chapter six focuses on the local domain of disaster response and argues that during the floods there were different perceptions and responses between local actors and aid providers. While aid providers focused on life saving, local people opted for a holistic approach of saving lives and livelihoods. These differences became a source of contradiction and conflict. In some cases, rather than reducing local vulnerability to future hazards, the humanitarian response tended to hamper and increase the vulnerability of the most destitute groups.

Chapter seven looks at the resettlement programme devised by the government for the people affected by the floods. It discusses interfaces at the registration; at the building of the houses; at seed and tools fairs and, finally, the different livelihood pathways emerging from the flooding and the resettlement programme. There were households that managed to settle 'permanently' on the upper lands. However there were households that did not manage to adapt to upper lands and went back to the floodplains. The third category was households in between the spectrum managing their livelihood in both lower and upper lands.

Chapter eight concludes the book and discusses different practices undertaken for continuities in crisis. Overall, this chapter claims that there are many continuities in crisis at the same time that continuities are in crisis. The chapter argues that the focus with which scholars have looked at disasters tended to blind them on the continuities, local dynamics and strategies applied by different actors to fulfill their agendas. Focusing on responses from the international domain narrowed them to stress crisis,

powerlessness and weakness, a discourse used fruitfully by local actors to access international aid. Nonetheless, everyday realities discussed in the book show that neither the government nor the local people are passive recipients of hazards and international interventions. Rather, through discourses and practices they creatively respond to natural hazards and tend to reshape international responses to fit their own needs and maintain continuities in crisis.

CHAPTER 2

MANAGING DISASTERS AND CLIMATE CHANGE IN MOZAMBIQUE

This chapter sets out to map the general landscape of disaster and climate change management in Mozambique. It maintains that understanding disaster responses by the local actors needs to be grounded in broader socio-political and historical processes. The ways in which local actors today craft their relationships and responses to disasters are, to a large extent, a by-product of national and global historical socio-economic and political processes. An understanding of the broader context helps to unravel the national and global discourses, practices and power relations and how they are redesigned and enter the lifeworlds of the local actors.

In this chapter, then, I aim to reconstruct the historical relationship between disaster management and socio-political and economic agendas of the actors concerned. Mozambique has been undergoing continuous socio-economic and political transformation shaped by local, national and international actors, who have fed disaster management practices in the same way that disasters have had an impact in shaping the country's socio-political and economic situation. Hence, the chapter asks how disasters and responses to it by different actors co-shaped or have been co-shaped by the political and socio-economic agendas of the actors involved. In particular, I will focus on the ways in which first the pre-colonial and then the Portuguese colonial authorities and later the Mozambican government organized disaster management in such a way as to co-shape society and strengthen their own position vis-à-vis society. To undertake this, the chapter focuses on the domain of disaster governance and its interfaces with international disaster response and local people.

Existing analyses on disaster governance in Mozambique fall short in two main ways. First, they have mainly taken a structural approach claiming that the governments of Mozambique both during the colonial period and after the independence, lacked resources (including policy frames) for disaster response. Therefore, these analyses far more emphasized the role of the international community in managing disasters, especially after independence, leading to an oversight of how the national government and local people interpreted disasters and reshaped international responses to suit their interests.

A focus on the international response meant also that the analyses tended to centre on a specific period, which was related to international aid inflows neglecting the dynamics which disaster management practices have undergone over time in answering the changing context. In the existing literature there is virtually no reference on disaster governance prior to 1980 and hardly any reference on how disaster management practices have been changing over time. If Mozambique has been undergoing continuous socio-

political and economic transformations how have practices in disaster management swung over time? Is there continuity or have there been changes in disaster governance in Mozambique? This chapter will elaborate that there have been continuities and changes over time both in discourses and practices of disaster response from the government and also from the other actors involved in order to remain in or withdraw from the arena of disaster response.

A second major limitation is that disaster governance tends to be detached from the economic and political agendas of the actors involved. It is assumed that disaster responses are guided by the humanitarian principles of neutrality, independency and impartiality, hence, that they are detached from politics. In practice, however, disasters and disaster response do play a role in politics and shape the relationship between governments and citizens as well as relationships between national governments and the international community (De Waal, 1987; Middleton and O'Keefe, 1997). As we shall see, disaster response in Mozambique has been highly politicized and humanitarian principles have hardly been applied. The influx of international aid favoured and strengthened FRELIMO as a party and it was very much aligned to the Breton Woods interests of structural adjustments, democratization and free market reforms.

I will start the chapter by providing an overview of the major natural hazards affecting Mozambique and how they are presented in the mainstream literature. Following this, I will then reconstruct the historical relationship between disasters and the socio-political and economic contexts. The last section of the chapter addresses specifically the ways and means by which actors interface in the arena of climate change response. In this section, I will argue that there is a lack of a coherent framework for climate change response. This can be partly explained by the competition between different ministries involved in leading and coordinating the response. Nonetheless, actors use the room for manoeuvre created by the lack of coordination, to develop and implement climate change interventions according to their own understanding, needs and rules. The result, until now, is a proliferation of initiatives and interventions under the umbrella of climate change without coordination, evidence base, or a critical appraisal of the interventions.

With regard to the pre-colonial and colonial history in particular, however, I have to make a disclaimer. I am not a historian and did not have the time or the skills to study original historical archives. Instead, I have based my analysis on secondary sources of the political history of Mozambique, re-interpreting some of the claims the authors have made. Furthermore, I have based some of my arguments on oral history gathered during my fieldwork. I do not pretend to provide the ultimate history of disaster management, and parts of this chapter may be better read as an evolving narrative on the history and politics of disaster management that invites other scholars to further substantiate, elaborate or refute in future debate.

NATURAL HAZARDS AND DISASTERS IN MOZAMBIQUE: AN OVERVIEW

Mozambique is a disaster-prone country. The country lies along the Indian Ocean where every year cyclones of different intensities are formed and make a landfall in the country. Mozambique is also the lower riparian country of ten international rivers that drain their waters into the Indian Ocean. Excessive rainfall coupled with rivers and dams mismanagement and environment degradation has produced a history of flooding of different magnitude in the country. Further, some of the regions of the country have a semi-arid climate and drought has historically been part of people's everyday life. Droughts, flooding and cyclones are three major natural hazards which, allied with poverty and higher vulnerability of the affected people, have produced disasters in Mozambique. Mozambique experiences, on average, one disaster per year (INGC *et al.*, 2003:7) and ranks third on global weather-related damage following Bangladesh and Ethiopia (Buys *et al.*, 2007:38).

Natural hazards and disasters are manifested differently across the country and, as we shall see, produce differentiated responses. Drought hits mainly the southern part of Mozambique, flooding is concentrated in the central region while cyclones tend to make the landfall mostly in the northern parts. In southern Mozambique the low rainfall patterns (on the range of 400-600 mm/year) and soils of lower fertility and limited water retention capacity have lead to cyclical drought, limited agricultural production and food insecurity amongst rain-fed agriculture dependent households. On average agricultural production from the rain-fed agriculture dependent households enables food security for just about four to five months especially in the interior of Gaza and Inhambane provinces (De Matteis *et al.*, 2006).

Droughts in Mozambique, with particular incidence in the southern region, have been depicted by different actors. Newitt (1988) describes the drought from 1823-1831 which led to numerous deaths, widespread depopulation of the countryside, massive migrations including that of many Portuguese settlers, a decline of the slave trade and of the Portuguese authority. Serra (2000) describes the drought of 1895/98, which led to massive migrations to South Africa. Rocha *et al.*, (1999:9) suggest that from 1900 to 1930s a combination of drought and forced labour led to increased migrations and drastic demographic changes.

From the 1940s up to the early 1980s, drought and reduced agricultural production occurred in 1940/41, 1943/44; 1948/49; 1950/51; 1953/54, 1959/60, 1963/64, 1965/66, 1967/68, 1969/70 and 1972/73 (Santos and Henriques, 1999:8). The beginning of the 1980s was marked by the worst drought ever recorded (1980-1985) that affected nationwide more than five million people and claimed the lives of one hundred thousand (GoM, 1988: 15). Severe drought was also recorded from 1991 up to 1993, affecting 1.32 million people (INGC, UEM and Fewsnets, 2003:10). This drought forced Mozambique to import nearly 60 percent of its cereal needs (Holloway, 2000: 262). On average Mozambique is affected by severe drought once every three-

to-seven years and the southern region reports droughts almost every year (Tschirley, 1998:8).

Central Mozambique as stated earlier is flood-prone. The region is characterized by high precipitation and large flat areas especially along the Zambezi basin (the largest basin in Mozambique). Annual rainfall in central Mozambique ranges between 800 to 1200 mm/year becoming exceptionally higher (around 1500 mm/year) in the Zambezia and Tete plateaus (Santos and Henriques, 1999:6). Further, out of the ten international rivers, five (Zambezi, Shire, Pungue, Buzi and Save) cross Mozambique through the central region. This leads to recurrent flooding in the region with particular emphasis along the Zambezi delta.

Chidiamassamba and Liesegang (1997) found written records of flooding along the Zambezi delta dating back to 1548. In a group discussion during my fieldwork, oral history recollected flooding on the Zambezi delta back as early as 1840. The floods of 1840 which opened up the ZIU-ZIU channel and created the Inhangoma Island in Mutarara district were considered the largest in cultural memory⁵. Written records suggest that the Zambezi delta was partly flooded in 1926, 1938, 1939, 1940, 1944, 1948, 1952, 1955, 1958, 1961, 1963, 1966, 1968, 1969, 1970, 1978, 1989, 1997, 1999, 2001, 2007 and 2008 (Taveira, 1943; Chidiamassamba and Liesegang, 1997; Beilfuss, 2005; INGC, 2008). On average, floods of the magnitude of 9,000-13,000 m³/s (which inundates most of the lower lands) along the Zambezi River occurred, in the past, once in every three years (SWECO, 1982: 55).

Floods have also been recorded, with less frequency, in the south, in 1955, 1967, 1972, 1976, 1977, 1981, 1996 and 2000. The 2000 flooding was the worst in this region since 1848 (Christie and Hanlon, 2001: 141). This flood killed approximately seven hundred people, affected nearly five million and caused economic losses estimated at more than 600 million USD (GOM, 2000). Due mainly to this flooding the national GDP in 2000 slumped from the expected 10 percent increase to just about 2 percent and inflation was at its peak in 2000 since the end of the civil war in 1992.

Cyclones affect particularly badly the northern provinces of Nampula and Cabo-Delgado. Mozambique is, on average, hit by one cyclone and three to four tropical depressions every year (INGC, UEM and Fewsnets, 2003:12). Hewitt recorded natural hazards all over the world for the first time in 1969 and found records of cyclone activity in Mozambique for the year 1956 which claimed 110 lives (Hewitt, 1969). Ever since and indeed up to 2009, sixteen disasters resulting from cyclones were recorded half of them having occurred over the last 10 years (see graph 2.1 below). Cyclones and tropical depressions are linked to flooding and droughts as they are accompanied by rainfall. The 2000 flooding for instance, was related to three cyclones: Eline, Gloria and Hudah.

⁵ Group discussion, Inhangoma Island, Mutarara District September 10, 2008.

The above overview shows that natural hazards have been part of the history of many Mozambicans. The number of people affected and killed by natural hazards, which dictates to a large extent the call for relief aid, needs, however, to be treated with extreme caution for a variety of reasons. These include poor collection methods, such as the use of different units of measurement (individual, households, communities), outdatedness and, importantly, omission and commission (deliberate distortion by those involved in data collection and analysis). In Mozambique, numbers play a political role. During the 1980s, when the government needed much international aid and wanted to stress how the South African's apartheid backed civil war in Mozambique had devastating impacts, presenting higher numbers of the affected and killed was not a major concern for the government. In the 1980s, data provided by the government was, in most of the cases, questioned by donors and verification missions were deployed to the affected areas to determine the number of people requiring aid relief (Barnes, 1998).

Conversely, since the government has been attempting to demonstrate its commitment and efficiency in disaster management, there is a tendency to downplay the numbers. Over the recent years, not only has the government tended to present the lowest figures in comparison to other different sources but it has gone out of its way to dispute higher figures provided by external sources, including UN agencies which otherwise used to question government numbers. For example, during the 2007 flooding on the Zambezi delta, the government estimated that 163,045 people were displaced while WFP estimated 285,000 and USAID 331,500.

There is little dispute, as we shall see, that the government response to disasters has improved but the production of figures needs to be taken within the broader national interest and international context. Of particular relevance, the Millennium Development Goals (MDGs) have been playing a crucial role in producing figures. As the evaluation of the achievement on the MDGs requires figures and government's performance is evaluated based on these figures, data production and processing have become highly politicized. In 2005, the state president claimed that in order to reduce poverty, plans are to be fully achieved- "*os planos são para serem cumpridos*". In response to this presidential directive, different governmental institutions have intensified their efforts and managed to achieve impressive results. It is not clear, however, how realistic the results are and to what extent they are 'produced' by providing statistics that reflect better results. In early 2010, a case leaked to the media revealing that the Provincial Directorate of Work in Zambezia province forged data in order, mainly, to prove that the plans had been fully achieved. The director was sacked.

Some authors have critically questioned government data and recently Hanlon (2007) disputed the claim that poverty has been reduced in Mozambique by 15 percent between 1997 and 2003. He claims that the figure is based on incorrect indicators of the data analysis. Hanlon suggests that if the analysis was based on the consumption of maize rather than cassava, as it

was done, the result would be that 11.7 million, rather than 10 million people as claimed by the government and donors respectively are below the poverty datum line. Further, shifting the consumption from maize to cassava is a clear indicator of impoverishment (Hanlon, 2007:10).

Given the above, data on disasters in Mozambique may be viewed at best as estimates of a general magnitude. In the section that follows, I will reconstruct the dynamics of the occurrence of natural hazards and disasters in Mozambique based on the EM-DAT database provided by the Centre for Research on the Epidemiology of Disasters (CRED) at the University of Louvain in Belgium. I aim to use the EM-DAT database for different reasons. It is an independent academic institution which takes great care to verify disaster reports and CRED encourages public access and scrutiny of the dataset (UNDP, 2004:99). Furthermore, as new information becomes available it updates the database, even years after an event (IFRC, 2009:159).

CONTINUITIES AND CHANGES IN THE OCCURRENCE OF NATURAL HAZARDS AND DISASTERS

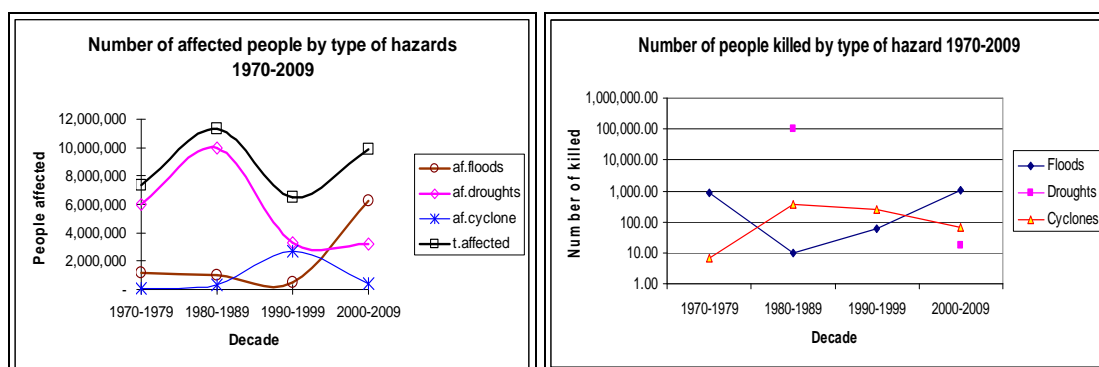
Natural hazards are on the rise in Mozambique. Since 1970, Mozambique has been hit by 77 disasters of which 41 (53 percent) occurred just over the last 10 years (2000-2009). The number of people killed has more than tripled compared to the previous decade and there is an increase of nearly 50 percent in the number of people affected by natural hazards. In 2005, an estimated 94 percent of the population in Mozambique was affected by natural hazards (Mafambissa, 2007:5).

The increase may partly reflect an improved capacity in data collection. They also reflect increased vulnerability to disaster. Growing population, environmental degradation and limited alternative sources of livelihood tend to increase people's vulnerability to disasters. There is mounting evidence that poverty reduction programmes have failed to reach the poorest segments of society (James *et al*, 2005; Hanlon, 2007; UNICEF, 2007). Climate change is also adding to this trend. INGC (2009) suggests that increases in frequency and intensity of natural hazards in Mozambique are related to climate change which will continue to become manifest. As vulnerabilities to disasters increase, increases in frequency and intensity of natural hazards may lead to more disasters, if urgent action to reverse the trends is not taken.

While disasters are increasing, in general the precursor to these disasters has shifted. Droughts have historically been the major natural hazard claiming more than a hundred thousand lives and affecting nearly 23 million people since 1970. Nonetheless, flooding has become the major natural hazard over the last 10 years (graphs 2.1 and 2.2 below).

Graph 2.1: Number of people affected by hazard type

Graph 2.2: Number of people killed by hazard type



Source: Author based on EM-DAT database

This trend may suggest an improvement in drought and cyclone management practices, but not much in the area of floods. The cyclone early warning system has improved thanks mainly to a 4.7 million USD donation by USAID. For drought management, irrigation schemes have been set up or expanded and water reservoirs have been established in a number of drought-prone areas. By 1998, the country had about 33,000 hectares under irrigation but this increased to 51,185 hectares by 2002 (Marques *et al.*, 2002). From 2004 up to 2009, 49 small-scale irrigation schemes were set up in Inhambane province - the country's most drought-prone province - and thanks to this bold move, the total production area nearly doubled from 419,312 to 783,670 hectares⁶.

Moreover, the government has mandated the INGC to promote the development of drought-prone areas and a department to undertake the task- *Departamento de Desenvolvimento de Zonas Áridas* was established in 2007. Drought resistant crops, water harvesting techniques and small-scale irrigation schemes have been promoted by INGC since then. Alongside the department different NGOs such as Mozambican Red Cross, World Vision and ActionAid have also been working in drought-prone areas introducing, among others, drought-resistant crops and small-scale irrigation schemes. In comparison, flood management has been more complex, for reasons that will be elaborated in the next chapters. That said I now turn to reconstruct the historical relationship between disasters and the socio-political and economic situation by looking at how disaster management practices evolved over time.

⁶ Notícias newspaper, July 10, 2009

DISASTER MANAGEMENT PRACTICES: A HISTORICAL PERSPECTIVE

Disaster management practices have undergone different transformations in response to changing characteristics of the disasters themselves but also to political and economic interests of the actors involved. In this section I consider eight major periods of disaster management in Mozambique. They reflect practices developed (1) during the period of pre-colonization and (2) during the colonization period. After independence from Portugal, I distinguish other six periods: (3) during the socialization era (4), during the period of economic collapse; (5) during the period of international aid inflow to respond to the economic collapse and humanitarian crisis; (6) during the period of outflow of international humanitarian aid following the end of civil war; (7) during the period of re-inflow of international aid following the 2000 great flood and (8) the later five years marked, on the one hand, by an ascendancy of a national sovereignty discourse in disaster management and, on the other, by the ascendancy of climate change discussions and interventions.

Although within each period disaster management practices were diverse and dynamic, they were marked by some common elements which allow me to cluster them according to these periods. Amongst other elements, they were marked by particular interfaces between the international, national and local domains of disaster management that differentiate one period from the other.

THE 'KINGDOMINATION' OF DISASTERS: PRE-COLONIAL DISASTER MANAGEMENT PRACTICES

Before colonization, Mozambique was administered through lineages, chieftaincies and a very complex system of kingdoms. Kingdoms encompassed different chieftaincies and lineages; literally, there were dozens of them before Portugal conquered the last one (the Gaza kingdom ruled by Ngungunhana) in 1895. The set up, expansion, retreat or dissolution of these kingdoms was highly influenced by natural hazards and disasters. Serra (2000:88) points out that southern Mozambique had about 20 kingdoms by 1770. Severe drought and famine that affected the region resulted in widespread migration, warfare and a massive dissolution and retreat of many kingdoms. In 1815 only 2 kingdoms (*Nduandue* and *Mtetua*) remained.

Disaster management practices were, therefore, an integral part of the kingdoms in order to survive and expand. Hence, the kingdoms had to control and or dominate the disasters in order to exist. Two major levels of disaster management may be distinguished in the kingdoms, the individual household and the general kingdom levels. At the individual household level disaster management practices depended on whether the hazard was drought or flood, hence it affected the southern or central Mozambique. The northern

region was 'less' hit by hazards and there are hardly records on disaster management practices for that region.

In the south, households tended to craft their livelihoods taking into account the drought phenomenon. Sorghum and millet, both drought resistant crops, and later on cassava, which is also drought resistant were the major crops in their farming systems (Junod, 1996). Additionally, like in many other drought prone regions, cattle became an integral part of their farming system⁷. Furthermore, to compensate for the low agricultural production levels, households tended to increase the production areas and this influenced the birth rates and polygamy practices. Having more children and wives provided labour to open up larger fields and increase production. Livestock played a role in polygamy. The dowry, *lobolo*, generally involved cattle (Hedges, 1977:190). Hence, cattle, agricultural production and drought became integrated into the everyday practices of local people.

At the kingdom level, the focus was on addressing the root causes of drought and disasters. As droughts and disasters were perceived as natural problems permeated by the ancestors, the focus was on searching the connection with the ancestors, asking for their protection and to bring rain. Rainmakers and mediums became an integral part of the ruling class (Newitt, 1995:32). Rainmakers and mediums performed rituals and offerings to ancestors before the rainy season so that the ancestor could bring rain and good harvests. Over time, the rainmakers and mediums expanded their roles and became involved in conflict resolution, in choosing the kings, the wives for the kings and by instituting 'guiding' practices that people were expected to follow in order to make ancestors happy and bring fortune instead of disasters. Kings that were not rainmakers or mediums or were not backed by rainmakers and mediums tended to have a weaker authority and shorter mandates (Liesegang, 1970:323; Newitt, 1995:33). Hence, disaster management through rainmakers and mediums played a socio-political role in the kingdoms and the 'kingdomination' of disasters. Disaster management became embedded in the everyday practices of the kingdoms and in shaping the relationship between the rulers and the ruled.

In central Mozambique the major hazard, as we saw above, was and still continues to be flooding and this will be discussed in the next chapter. At the household level, contrary to the south, there was low investment in cattle, especially, along the Zambezi basin (Chidiamassamba and Liesegang, 1997:8). The lack of investment in cattle indeed impacted on *lobolo* practices. In order to access new wives and forge alliances and networks as well as expand lineages chieftaincies and kingdoms, the Tonga people that inhabited the area, had to resort mainly to warfare, rape and banditry. Newitt (1995:35) claims that the Tonga were willing to participate in wars and become mercenaries as far as the payment was in the form of women. Both in the south and central

⁷ These practices are still recognizable today. By 2000 the southern Mozambique, comprising Maputo, Gaza and Inhambane provinces, championed on cattle production with a stock of 338,589 heads representing 46 percent of national cattle (INE, 2002). New livestock census was under way in 2010 but the data to be released by 2012 may not change drastically this historical pattern.

Mozambique women (wives) did not only play the reproductive role but had also a political and administrative role. The kings, for instance, preferred to place their wives in the newly conquered areas rather than their sons and brothers as the later ones tended to rebel and claim autonomy (Serra, 2000: 90).

As in the south, mediums also played a crucial role on disaster management in central Mozambique. They were involved in 'forecasting' whether there would be extreme floods or drought and they played an intermediary role in the relationships between the ancestors and the living (Negrão, 2001:244). Moreover, they were necessary for protecting those going to war and in cleansing those coming back from the war. There was a belief that the slain would revenge, hence, those who had killed needed cleansing and protection, and ultimately the protection of the whole kingdom from revenge which would otherwise manifest itself in terms of hazards such as plagues, droughts and floods (Newitt, 1995: 38, and field interviews⁸).

Thus, both in the south and central Mozambique, drought and flood management practices involved social, political and economic interests and were part of the creation, expansion or retreat and dissolution of lineages, chieftaincies and ultimately the kingdoms. Controlling disasters was an integral part of people's livelihoods including their administrative systems.

THE 'COLONIZATION' OF DISASTERS: DISASTER MANAGEMENT PRACTICES DURING THE COLONIAL PERIOD

Literature on disaster management during the colonial period is scarce and the existing literature is dominated by a view that the colonial authorities were not interested in disaster management as it affected mainly the poor native people living in the countryside (Wisner, 1979; Bolton, 1983). This view is based on two arguments. First, despite recurrent natural hazards in Mozambique, the Portuguese authorities were not able to establish a disaster management institution over their nearly 500 years presence in Mozambique. Second, it finds strength in the cruelty and brutality with which the colonial rulers treated the native people. Portugal's colonization of Mozambique was, as mentioned in the preceding chapter, one of the most brutal around the world impinging slavery, forced labour, and forced cash crop production and, coercive taxation (Vail and White, 1978; Isaacman, 1996; Rocha *et al.*, 1999).

I would like to qualify these observations. Although I concur that the colonial policies have increased people's vulnerability to disaster, there have also been policies that aimed to reduce disasters, or policies that were meant for other reasons but had nonetheless a positive effect towards disaster risk reduction. There are oral and written records claiming that colonial authorities did, somehow, intervene during disasters. During the great famine of 1823-1831 Portuguese authorities organized in some parts of the

⁸ Interview with chief *regulo* Cocorico, September 24, 2007 and chief *regulo* Chamanga, Mopeia, May 7, 2008

countryside food for work programs for the most destitute groups of the native population (Newitt, 1988:29). Furthermore, after flooding colonial authorities or private companies used to distribute agricultural seeds and tools so that the natives could resume agricultural production (Vail and White, 1978: 250; Negrão; 2001:70). Life stories collected during the present study suggest that the authorities and private companies used to distribute humanitarian aid whenever they found people secluded. This included mainly food and clothes⁹.

Defending the view that the colonizers were not interested in disaster management would be to suggest that they would appreciate if the entire native population perished from disasters. But given that colonisers depended on the natives for labour, food and cash crop production and earned considerable resources from taxing native people (Rocha *et al.*, 1999; Negrão, 2001), it is hard to sustain such claims. I would like to suggest that the colonial authorities did pay attention to managing disasters but this was mainly done in order to implement their colonization interest, strengthen their political and economic position rather than being moved by truly philanthropic motivations. To sustain this claim, I will briefly use the cases of drought in the southern region.

Droughts are, as discussed above, a recurrent natural hazard in the south of Mozambique. This shaped the way the Portuguese authorities in Mozambique administered this region. On the one hand, Portuguese people tended to refuse to settle unless the government provided basic infrastructures for agricultural production, especially irrigation schemes. Smith (1991:502) noted that even the Portuguese troops who were sent to Mozambique during the era of the scramble refused to remain as colonists; they preferred rather to leave Mozambique and migrate to Brazil and United States.

Emerging from this and aligned with the colonization objective of settling Portuguese people in Mozambique, the Portuguese authority assembled an irrigation scheme in Chokwe district where it established the first *colonato* (an organized Portuguese settlement). Comprising 30,000 hectares, the Chokwe irrigation scheme is the largest in Mozambique. Each colonist accepting to stay in Mozambique was given 4 hectares of land on the irrigation scheme for agricultural production and 24 hectares for livestock grazing outside the scheme. They also had government technical support for their activities (Muchave, 1998:25). Hence, to colonize the region, the government had to 'colonize' drought first.

On the other hand, for the native people, drought and Portuguese domination and the ways in which the domination was carried out, tended to weaken their social, economic and political fabrics and migration to South Africa became increasingly the primary option for livelihoods (Covane, 2001:55). Rather than inhibiting the migration practices, the colonial

⁹ Interview with Fernando Chapo, 63 years- Inhangoma-Mutarara, September 11, 2008; interview with chief *regulo* Cocorico, September 24, 2007 and chief *regulo* Chamanga, Mopeia, May 7, 2008.

authorities decided to profit from it. In 1897, Portugal and South Africa signed a treaty concerning the recruitment of labour from southern Mozambique for the mining industry in South Africa. In exchange, the Portuguese demanded, among others, direct payment in gold, increased use of Maputo Port (at the time called Delagoa Bay) by South Africa and a payment of 13 shillings per individual supposedly to cover administrative costs (Wuyts, 1981: 37; Newitt, 1995: 491).

To reinforce the treaty, the Portuguese authorities passed a law in 1907 under which 'illegal' emigration to South Africa was punished by up to twenty months of forced labour without payment (Serra, 2000:201). By 1952, nearly 250,000 Mozambicans were working in South Africa and by 1967; the Portuguese earnings from those migrants were estimated to be around eight times the value of the marketed agricultural products of southern Mozambique (Murteira, 2000 in Vaz and Zaag, 2003:10). Up to independence in 1975, nearly one in five adult males in southern Mozambique was working in South Africa (Wuyts, 1981:35).

The policies on migration were not designed to reduce disaster, but had the consequence that people could enhance their protection against drought at the same time that Portugal earned financial resources and strengthened its position in Mozambique. Thus, drought shaped, to a large extent, the colonization policy especially in southern Mozambique and the relationship between colonial Portugal and South Africa.

1975-1979: THE 'SOCIALIZATION' OF DISASTERS

The period from 1975-1979 was marked by the inception of what would become FRELIMO's vision of a new Mozambique. Following independence in 1975, the FRELIMO party declared socialism and Marxism-Leninism as its main political ideology. It proclaimed Mozambique a People's Republic which would be led by the working class *classe operária* and followed by the peasantry *camponeses*. Agriculture was defined as the basis of the economy which would be strengthened through state farms and cooperatives. Individual property was abolished and assets reverted to the state in 1977. A new socio-economic order was envisaged under which the FRELIMO government planned and executed most of the development interventions.

Based on the socialist ideology, peasants who lived scattered in the countryside were forced to move to communal villages *aldeias comunais* under the slogan of socialization of the countryside, *socialização do campo*. The government claimed that in communal villages development take-off would be quicker. In communal villages, it would be cost-effective to provide services such as schools, clean water, agricultural inputs and electricity. Moreover, by embracing the collective mode of production on state farms and cooperatives, peasants could learn modern agriculture, engage in economies of scale and produce surplus, for export and inputs for the envisaged industrial development of the country. By moving into the communal

villages, hazards that scattered households tended to face individually now became socialized and they had to find ways to cope collectively with them.

Government policies further tended to reinforce the 'socialization' of disasters. On February 3, 1976, the government created the Bank of Solidarity *Banco de Solidariedade*. *Banco de Solidariedade* was proposed by President Samora Machel with the major objective to help households affected by hazards and disasters. He proposed that those with paid jobs would have one day (day 3) of their monthly salary deducted to contribute to the bank. Those without paid jobs such as peasants would have to contribute with a share of their agricultural products. Organizing groups (*grupos dinamizadores*) were given orders to collect the contribution within their neighbourhoods¹⁰.

While the villagisation policy tended to 'socialize' disasters, disasters on the other hand were used to promote the villagisation and socialization policy. In 1977, cyclone EMILY struck the southern coast of Mozambique and in conjunction with waters discharged from the Massingir dam in Gaza province, produced the worst flood in 60 years. The flooding killed 300 people and affected 400,000. The damage costs were estimated at about 35 million USD. The UN system and voluntary agencies mobilized nearly 5.5 million USD (Wisner, 1979:298) which was handed to the government. Internally, the government provided 100,000 escudos¹¹ and goods from the Solidarity Bank¹².

To handle the disaster, the government created a political commission called the Commission for the Reconstruction of Gaza Province *Comissão para a Reconstrução da Província de Gaza*. The commission was composed of high-ranking FRELIMO leaders- the Ministry of Interior (Armando Guebuza), Ministry of Agriculture (Joaquim de Carvalho) and the governor of Gaza province (Fernando Matavela). Interestingly, the commission was given the mandate *criar um Homem novo e uma nova ordem social* - to create a new Man and a new socio-economic order. This was based on three pillars. First to organize the affected people into communal villages, second to transform the Limpopo valley into the national granary *celeiro do país* through state farms and cooperatives and finally to create infrastructure which would attract people to remain in the communal villages, state farms and cooperatives¹³.

The commission established four brigades comprising military forces, police, *grupos dinamizadores* and technical staff from the ministry of agriculture and others¹⁴. They used what Coelho (1993:383) called *aggressive political mobilization* to force people to go into communal villages and accept state and cooperative farming. In the national media, those declining the *villagisation* were called *Xiconhocas*- the enemies of the people, and coined anti-revolutionary and anti-FRELIMO. They faced penalties which included jails or being sent to the so-called re-education centres *centros de re-educação*, established to educate the *Xiconhocas*. A further penalty was exclusion from humanitarian aid. Aid was selectively provided to those embracing the

¹⁰ Noticias newspaper, February 3, 1976

¹¹ 1 USD=32 escudos, 1977

¹² Noticias newspaper March 2, 1977

¹³ Noticias newspaper February 28, 1977

¹⁴ Noticias newspaper February 28, 1977

villagisation policy. As a consequence of these political measures, 26 communal villages were created in Gaza province along the Limpopo River, comprising about 200,000 people (Coelho, 1993:384).

Figure 2: A typical poster during the flooding in 1977. 'Xiconhoca' says: 'Stop! Why communal villages? Flooding is nothing! We can not leave our ancestor's land!!!'



Source: Noticias newspaper, February 28, 1977

The clear use of disasters for the villagisation policy was evidenced in 1978 during the flooding of the Zambezi delta. In March 1978, the Zambezi delta was flooded claiming the lives of 45 people and affecting nearly 450,000 people. The cost in damage and the subsequent humanitarian assistance was estimated at 62 million USD (Palmer and Tritton, 1979). During this episode, the government decided to create what was called the Inter-Provincial Commission for Natural Hazards and Communal Villages *Comissão Interprovincial de Calamidades Naturais e Aldeias Comunais*. The commission was chaired by the national director for communal villages Mr. Baptista Cosme and had the mandate to resettle people in communal villages.

1980-1986: DISASTERS AND THE DISSOLUTION OF MARXISM

The period from 1980-1986 was marked by a decline of the national economy. A complex emergency arising from policy failures, droughts and civil war was hitting Mozambique and the government faced serious problems that needed to be addressed. To understand the disastrous situation, I will give a brief overview of trigger events. During the first few years of independence, FRELIMO initiated and embarked on an ambitious socio-economic programme. Mozambique imported 1,200 tractors in 1977 and a further 1,000 in 1979 for the agricultural sector. By 1981, the state enterprise responsible for agricultural machinery MECANAGRO, had 5,200 tractors, 120 combines and about 7,000 farm implements under its control (Tibana, 1989:6). In the

industry sector wages for factory workers increased fourfold compared to what the Portuguese paid in the pre-independence era. Parallel social services were offered to such an extent that school enrolment tripled and hospitals were built in all the 10 provinces (Fitzpatrick, 1981). To undertake these massive investments the government relied, apart from a few grants and loans from the Socialist bloc and Nordic countries, heavily on its gold reserves. As a result, by early 1982, the country's gold stock fell by over 80 percent and by 1983 the foreign reserves could pay about a month of imports (Cravinho, 1995: 163). The economic position of the government was further restrained by South Africa's decision to cut the labour force from Mozambique and freeze remittances by the Mozambican workers in South Africa. Added to this were the losses related to the UN-led boycott to the Ian Smith regime in the then Rhodesia (now Zimbabwe) in 1976. Mozambique adhered, to the boycott which resulted in losses as Zimbabwe was a major client of the Mozambican Ports and Railways.

In the meantime, all the investments were directed and implemented by the government which had limited human resources and weak infrastructure. The political ideology of socialism, state farms, and communal villages was also creating a considerable number of disillusioned and dissatisfied people. People were showing their dissatisfaction in a number of ways; they burned houses in communal villages; refused to participate in or sabotaged state and cooperative farms and increasingly deserted communal villages but taking seeds and agricultural implements along with them (CEA, 1979). In the end, the results of the investments lagged far behind the expectations and the economy shrank.

Besides the economic situation, Mozambique was facing two parallel and intertwined events. From 1980, the southern region started to face drought which became acute from 1983 to 1985 claiming the lives of one hundred thousand people and affecting more than five million. To deal with the natural hazards such as drought the government decided to set up the Department for Prevention and Mitigation of Natural Calamities *Departamento para Prevenção e Combate a Calamidades Naturais* (DPCCN) in 1980. DPCCN was placed under the Ministry of Foreign Affairs and was responsible for humanitarian aid mobilization and distribution. The humanitarian organizations present in the country by 1986 (Oxfam-UK, Oxfam-America, CUSO/SUCO-Canada, SCF-UK, ARO-Sweden) were all working directly with DPCCN or government line ministries, there was no parallel programme implementation (Barnes, 1998:10).

In 1983, however, the US pressured the government, by imposing this as a condition to receive US aid, to accept that the American organization CARE would work with DPCCN in providing technical assistance and handling the financial aspects. In 1984, a Logistic Support Unit (LSU) managed by CARE was created within the DPCCN and DPCCN became mainly an aid delivery unit depending on the LSU. LSU was financed by USAID, SIDA, NORAD, and Overseas Development Aid (Coelho, 2001:4-5).

Civil war added to the emergency situation. The civil war started in 1976 around the Mozambican border with Zimbabwe in Manica and Tete provinces but by 1986 the RENAMO guerrilla movement claimed control of about 80 percent of the country (Lyon, 1987:2). By 1985 RENAMO had an estimated 20,000 trained fighters while the government had 35,000. Due to limited resources, FRELIMO's soldiers were thinly spread throughout the country, and 'poorly' reinforced and supplied hence RENAMO was able to make significant advances. In 1985/86 RENAMO launched a major military offensive on the Zambezia province and was able to take 13 of Zambezia's 18 districts (Weinstein and Francisco, 2005: 170, 181). The intention was to cut the country into two and reduce FRELIMO's influence to a minimum. To counter this attack, the government was forced to ask support from the Zimbabwean, Malawian and Tanzanian troops. It launched a major counteroffensive in 1987 using army, navy and air-force. From there on, the government was able to regain significant areas. This counteroffensive and further government military gains were based mainly on international support which increased from 1987 and will be discussed in the next period.

As the outcome of the three major trigger factors (failure on policies, drought and civil war), the country's social, economic, political and military position was seriously eroded. Mozambique's export earnings fell from 280.8 million USD in 1980 to 79.1 million USD in 1986; imports fell, in the same period, from 800 million USD to 543 million USD and the budget deficit escalated from 32.4 million USD in 1980 to 488 million USD in 1986 (Cravinho, 1995:187-188). From 1982 onwards, the country could no longer afford to pay its external debt, which had increased to 2.9 billion USD by 1985. As a result, the government was having difficulties to access additional credit (Plank, 1993:410).

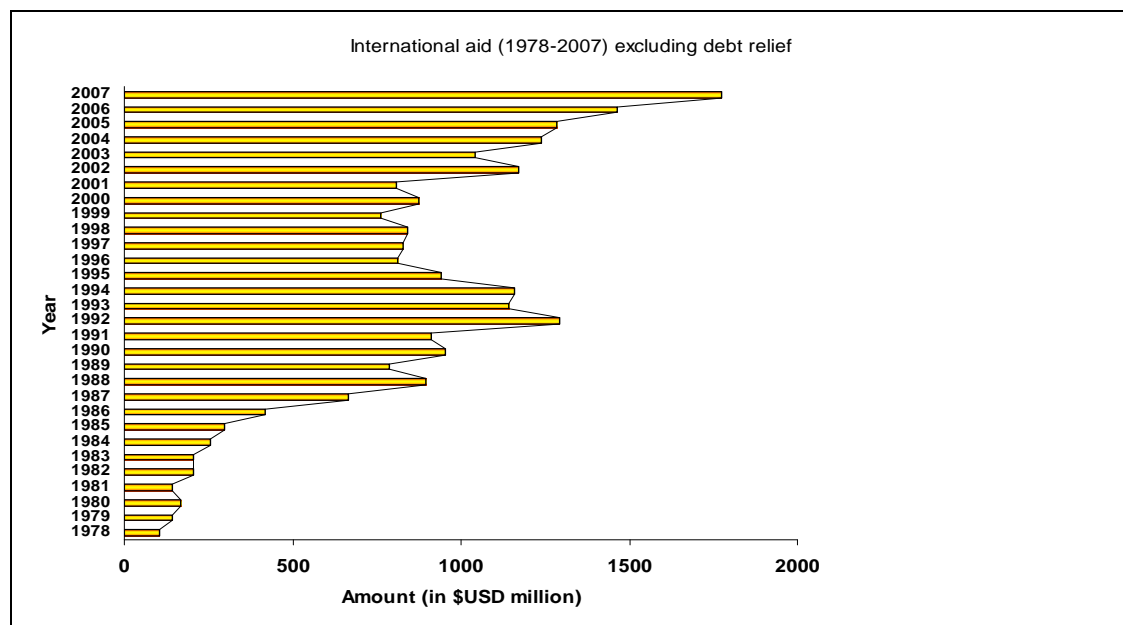
To overcome the problem, the government approached its Eastern allies and applied for membership to the Council for Mutual Economic Assistance (CMEA/COMECON). CMEA was composed of countries following the socialist ideology namely the Soviet Union, Bulgaria, East German, Cuba, Hungary, Poland, Romania, and Czechoslovakia. The application was rejected in 1981 due to a Soviet Union veto saying that it was already subsidizing Cuba, Vietnam and could not afford to do the same for Mozambique (Cravinho, 1995:160). This left Mozambique with no choice but to approach the West. In 1984, Mozambique joined the IMF, World Bank and Lomé convention (Adam, 2005). Negotiations for the national Structural Adjustment Plan (SAP) were dragged up to January 1987 when finally the agreement for disbursement was signed. The SAP was a clear detachment from the Marxist ideology to a more liberal and market oriented economy. Ever since, international (Western) aid has continued to flow.

1987-1994: 'UN-NEUTRAL' AID. AID EMPOWERING FRELIMO

The period from 1987 to 1994 has been the most highlighted in the history of disaster management in Mozambique. This period was marked by an influx of international aid and represents the period of the emergence of the so-called dependency and begging mentality presented in the previous chapter. To start the discussion of this period we need to refer to three interlinked major events at the turn of the year 1986 which ushered unprecedented changes in Mozambique. The first was the death of President Samora Machel in October 1986. The second was the ascension of Joaquim Chissano as the country's new president in November of the same year. The third was the successful conclusion of the negotiations to start the structural Adjustment Programme. These three events are interrelated and, as I will discuss, created a favorable environment for the relationship between Mozambique and the Western international community.

The year 1987 started with the disbursement agreement between IMF and the government in January and with an emergency appeal of 333 million USD in February, launched by the UN Secretary General. By the end of 1987, international aid had increased by 58 percent and in 1988 by 110 percent compared to 1986 (graph 3.1 below). In 1989, international aid amounted to nine times the national revenues from exports and represented 66 percent of the national GDP (Adam, 2005:180). From 1987 to 1994 emergency appeals totalled nearly 1.5 billion USD.

Graph 2.3: International aid 1978-2007 excluding debt relief



Source: author based on OECD database. Available at <http://stats.oecd.org/index.aspx?datasetcode=csp2009>

How did the government manage to get such amount of support and for so long? Scholars such as Hodges and Tibana (2005) and Hanlon and Smart

(2008) claim that this is the case because the government used a *subservience strategy* and followed the conditionalities imposed by the international community. However, the government had already affiliated to the Bretton Wood institutions in 1984, so why did the influx start only in 1987? Further, what did local actors do with the space for manoeuvre created by the resource inflow? In the section that follows I argue that from 1987 onwards the government developed a range of strategies that together display a much more active attitude than subservience. The government to a large extent managed to negotiate, circumvent and transform the international community assistance towards its own objectives.

CREATING ROOM FOR MANOEUVRE: FRELIMO'S STRATEGIES IN DEALING WITH DONORS

To access the badly needed Western resources, FRELIMO devised a number of covert and overt strategies to gain Mozambique sympathy of the Western world. I was able to identify the following:

(1) Appointing a mediator rather than a president. The relationship between Mozambique and the West had been complicated since independence when the country embraced the Marxist ideology. Although Mozambique had been approaching the West for development and humanitarian aid from 1980¹⁵, aid kept being delayed. After the death of Machel, FRELIMO appointed Joaquim Chissano as the next president.

Chissano had already acquired considerable international acceptance as a negotiator with the Portuguese authorities for the national independence in 1974 and later as a Minister for Foreign Affairs for eleven years. As a Minister for Foreign Affairs Chissano was seen by western diplomats as a soft, moderate, skilled politician compared to most of FRELIMO's leaders, including Samora Machel, who were perceived as being much more radical (Maier, 1989:15). Internally Chissano was also comfortable with the idea of privatizing some of the economic sectors that had been nationalized after independence (Cravinho, 1995:185).

By choosing Chissano as president, FRELIMO presented to the West a trustworthy figure. The softness of Chissano and his way of handling internal and external conflicts and interests during his mandate, gave him the reputation, in Mozambique, of being the man of *deixa andar*, that is, let it go! Since Chissano left the presidency, he has become a reputable negotiator. Chissano was appointed as chief mediator of conflicts in Rwanda, Burundi, and Madagascar among others.

(2) Blaming external forces and being weak. The Mozambican government managed, during the 1980s, to ride successfully on the mounting sentiments in the West against the Apartheid regime of South Africa. Civil war backed,

¹⁵ Joaquim Chissano interview for the newspaper *O País*. Published November 7, 2009

partly, by the apartheid regime became the major claim to justify the country's economic collapse. In April 1988, the US State Department released a report which pictured RENAMO, backed by the apartheid regime, as a brutal movement involved in mass killing and rape (Barnes, 1996:6). The report was released a few days before the launch of a UN-led donor conference held in Maputo, 26-27 April. During this conference, attended by representatives of 37 countries, 41 NGOs, 10 United Nations Agencies and 2 regional organizations¹⁶, the same message prevailed. In the conference, Chissano stressed civil war and apartheid over internal policy failures¹⁷. This gambit was resonated by the speeches from other prominent guests. In his speech the UN Secretary General noted:

*... 'The damage of the undeclared war against Mozambique totalized more than 6 billion USD..... and the government should be given every support.'*¹⁸

The UN Under-Secretary General for Special Political Issues stated:

*'...this conference has reached a complete agreement that all possible measures must be taken to help the government and the people of Mozambique deal with this profound human suffering they face, and to strengthen their capacity to bring the country back onto the road to rehabilitation and recovery. The donor community assembled here, has also underlined the essentially political nature of the emergency facing Mozambique, which is vested in S.African supported destabilization policies.'*¹⁹

Roy Stacy, at the time the US Deputy Secretary of State for African Affairs, fiercely condemned the war:

*'...what has emerged in Mozambique is one of the most brutal holocausts against human beings since WWII.'*²⁰

Since the Mozambican government was perceived as an innocent victim, donors and NGOs alike did not invoke the principle of neutrality in humanitarian aid. Without discussion, they all worked through the government or with the government to an extent that people at local level associated aid with the government. Governmental military force was involved in aid escorts, received payments, fuel and got food through the international assistance (Vaux, 2001:105). By 1990, 56 percent of humanitarian aid required governmental military escort (UN, 1990: 14). The effect was the politicization of aid. The escorts were used to gather military intelligence, move military forces around districts and strengthen the position of the government with the local population. It also led to a distribution of aid that

¹⁶ CENE and DPCCN (1988)

¹⁷ In his speech of seven pages, Chissano mentioned 15 times war perpetuated by apartheid regime, only 3 times natural hazards and none on policies. Speech accessed at the Centro dos Estudos Africanos, Maputo,

¹⁸ Excerpt from the speech delivered. Speech accessed at the Centro dos Estudos Africanos, Maputo,

¹⁹ Excerpt from the speech delivered. Speech accessed at the Centro dos Estudos Africanos, Maputo

²⁰ Excerpt from the speech delivered. Speech accessed at the Centro dos Estudos Africanos, Maputo

was far from needs-based. Maier (1989) interviewed people fleeing RENAMO controlled areas and most of them claimed that FRELIMO controlled areas were far better off because they got humanitarian aid that was absent in the RENAMO areas.

Additionally, as international humanitarian aid increased, the Mozambican government was literally exempted from its obligation of feeding and dressing its people and could afford to reinforce its military force either numerically, materially or financially. Up to 1990, the international community provided 90 percent of total food requirements for both rural and urban population and in 1989 donors funded the purchase and armour of 12 trucks to escort humanitarian aid (UN, 1990:2,7).

As aid was being 'pumped' into the country, the government appointed new military leadership in 1987 and sought additional military assistance from UK, Italy and Portugal. By the end of 1987 the FRELIMO army had grown from 35,000 soldiers in 1985 to 65,000-70,000 soldiers (Weinstein and Francisco, 2005: 170) and started larger military operations in provinces of Manica, Sofala, Zambezia and Tete. By 1989 the government regained control of all the districts in Zambezia province which had been under RENAMO control. The government became so confident that it sent home the 3,000 Tanzanian troops that had been in Zambezia province (Maier, 1989:14).

SAP and international aid also strengthened financially the FRELIMO party and its leaders. The structural adjustment stipulated that Mozambique had to move into a massive and rapid privatization process. Thousands of firms were privatized, 92 percent of these were sold to Mozambican nationals. They were expected to pay about 52,4 million USD (Cramer, 2001:91). Although the exact payments have been held secret, it is widely believed to have been much less as most of the buyers were the local elite related to FRELIMO. The companies have continued to support FRELIMO's political agenda and finances (Hanlon, 2002: 7). Some borrowed funds from local banks but never repaid the loans and consequently one bank went into bankruptcy. Attempts to investigate the major borrowers and creditors from SAP and the bank and to reinforce payments led to the killings of the journalist Carlos Cardoso and the newly appointed bank CEO Siba-Siba Macuacua (Hanlon and Smart, 2008).

(3) Improving the country's image worldwide. Before 1987, Mozambique's record on economic performance, human rights and other indicators was generally poor. Starting in 1987, Mozambique attempted to improve its reputation by taking a number of measures. In the economic sphere, in 1987, the economy rose from the negative to a 4 percent growth; this was the greatest achievement over the last eight years and donors, who had

recommended SAP from the beginning of 1987, were highly impressed with the improvements²¹.

In parallel the government launched several measures to improve human rights. A first military criminal law and a military tribunal were approved and three militiamen were found guilty of human rights abuse and given prison terms which ranged from 4 to 8 years. Furthermore, around 1,500 convicts were given a presidential pardon and, in December president Chissano proposed the extension of the pardon law to the RENAMO guerrillas who turned themselves in to local authorities and seek reintegration. Freedom of speech and press were more respected and freedom of religion was enlarged.

In 1987 the government allowed the return of 2,000 Jehovah's Witnesses who had been deported or exiled since 1976 (Amnesty International, 1988). In September 1988, Pope John Paul II made a historic visit to Mozambique and in December of the same year president Chissano met face to face with the person who could have been called his major enemy: P.W. Botha president of South Africa. All these measures and events were highlighted in the 1988 Amnesty International report and in the US Department of State report on Human Rights. They tended to improve the country's image worldwide and to ease relations with the West.

(4) Exploiting contradictions within the donor community. When the UN General Secretary launched the first Mozambican international humanitarian appeal in 1987, it was not yet clear who among the donor community, would be coordinating the efforts. To fill this position the General Secretary established the Emergency Operations Office (UNSCERO) in Mozambique and appointed the UNDP country representative as the UNSCERO Special Coordinator. UNSCERO was established within the UNDP but most of the bilateral donors, other UN agencies and international NGOs were against this. For example, during emergency appeals WFP and UNICEF pledged more funds than the UNDP and they thought they were more entitled to lead UNSCERO (Barnes, 1998:15).

While international donors were arguing over the coordination of UNSCERO, the government provided the middle ground for the international donors and its own agencies working on disaster response. In May 1987, the government created the National Executive Commission for the Emergency (CENE) and the Emergency Operation Committee (COE). CENE formulated disaster related policies and regulations and, monitored the activities developed by the national DPCCN. COE was a platform between international and national actors. COE had weekly meetings that were attended by international and national organizations working on disaster management. It was co-chaired by the CENE and UNSCERO coordinators. With this set up the Mozambican government managed to maintain its stake

²¹ Speeches by UN Secretary, the American Sub Secretary for African Affairs and other donors at the launch of the 1988 emergency appeal highlighted this improvement to stress why the government should get support for its emergency appeal.

in disaster management and to a large extent continued to receive aid inflows through DPCCN and LSU. In general COE was much more consensual than the UNSCERO and became much more active compared to UNSCERO (Alexander, 2000: 189).

The signing of the peace agreement in 1992 while ushering peace and stability also meant that money had to be mobilized for operations of voluntary repatriation back to their home areas of 4 million internally displaced people and 2 million in neighbouring countries as well as the demobilization and reintegration of ex-soldiers. The period from 1992 to 1994, when the first multiparty elections were held, saw much influx of external aid (see graph 3.1 above). During the period from October 1992 to December 1994, the United Nations committed 663 million USD to support emergency and rehabilitation programmes targeting the returning refugees, the resettlement of the internally displaced and of the ex-combatants. This was the largest amount ever committed in post war situations in Africa (Barnes, 1996:4).

With increased funds, government practices in handling humanitarian aid started to be sharply criticized. Corruption within DPCCN became a widely criticized concern from donors who also blamed the UNSCERO coordinator for allowing the corrupt practices to prevail. Following the critics, the UN secretary appointed a WFP senior staff member with experience in emergency operations in Ethiopia and South Africa as UNSCERO coordinator (Alexander, 2000: 188). Among other measures taken to reduce corruption the international community decided to provide better salaries and incentives to DPCCN staff. Staff from DPCCN and LSU had a subsidized food basket and other monetary incentives.

Despite these incentives, corruption and theft continued and even increased. But the government claimed that the best way to handle the problem was to improve accountability, reporting and relief delivery at provincial levels, which required training and funding. For that, the government requested additional funding. Donors were divided on the effectiveness of such measures but the Mozambican government managed to add a budget line on the emergency appeals for that purpose (Barnes, 1998).

Nonetheless, aid started to drop by 1995 when the UN peace keeping mission *ONUMOZ* ended its mandate in January and there was an overall demand to move from emergency to development intervention (see graph 3.1 above). With the move to development interventions most of the organizations that relied on international donations for their activities started a restructuring process. Within the DPCCN for instance, the LSU was closed in 1994 and the government faced increasing problems to keep the DPCCN operational.

1995-1999: AID WITHDRAWAL, RESTRUCTURATION AND CONFLICTS

The emergency situation and funds channelled during the previous period had led to an increased number of staff and an accumulation of material assets. By 1997, the DPCCN had nearly 900 workers, about 700 vehicles and dozens of warehouses (DPCCN, 1997:12). Most of the logistics such as spare parts and car repairs, fuel, monetary incentives to DPCCN qualified staff was provided by the LSU. With the abolishment of the LSU and the drop in international funding, the government had to cut the staff and withdraw the incentives provided previously. A restructuring process took place to reduce the number of staff and redress the role of DPCCN in a development context. DPCCN was finally abolished in 1999 by the government decree 38/99 of 10th of June and in its place the National Institute for Disaster Management (INGC) was created. INGC availed of nearly 200 people and many of the former DPCCN assets such as cars, warehouses went on sale. Other organizations undertook similar measures. The Mozambican Red Cross for instance, had to reduce its staff from nearly 500 to about 150 and sell some of its assets.

The process was contentious, with different conflicts over who stays and who goes and, who takes what and where. Some experienced and qualified staff left the government to join INGOs and international organization that offered better conditions. Organizations such as WFP, FAO and CARE were accused by the government of poaching its most qualified staff (Adam, 2005: 47). Some people were dismissed without compensation and some took the institutions such as the Mozambican Red Cross and DPCCN to the court²².

2000-2004: FLOODS AND THE RE-EMERGING OF HUMANITARIAN AID

In 2000 and 2001, Mozambique was hit by two successive floods of great impact. Together, they claimed the lives of 813 people and losses were estimated to be more than 750 million USD; 2,704,840 people were directly affected of which 767,000 had to be evacuated. Nearly 250,000 hectares under different crops were lost and about 18,600 fishermen lost their tools (Negrão, 2001a:14-15). To address the emergency situation, the government appealed for international aid. By the end of April 2000 more than 160 million USD were offered to the government of Mozambique through different channels (Christie and Hanlon, 2001:64). Furthermore, the government made a reconstruction appeal in Rome in May 2000 asking for 449.5 million USD with donors promising 452, 9 million USD. In 2001 the government appealed for 30 million USD for emergency operations while different organizations such as the UN, Red Cross society among others made their own appeals.

²² Interview with Fernanda Teixeira, Mozambican Red Cross General Secretary, October 11, 2008.

The appeals in 2000 and 2001 marked the resurgence of humanitarian aid after an interlude of nearly ten years. Graph 3.1 above shows the rise in aid following the great flood of 2000. Christie and Hanlon (2001) analyzed the response to the 2000 flood and claimed that given the magnitude of the flooding Mozambique would not have been able to manage the response by itself. International response was needed and it resulted in many lives being saved and livelihoods (re)constructed. Nonetheless, they also stressed that there were considerable management problems with a number of actors acting outside the national coordination lines. The coordination of the 2001 flood response was generally claimed to have been far better than in 2000. Amongst other reasons it has been pointed out that the government was better prepared and staff could improve their practices based on the lessons learnt from the 2000 floods (GoM, 2001; IFRC, 2002; World Bank, 2005). Evidence of this claim was partly found in the fact that this time 'only' 113 people had died, compared to 700 in the 2000 flooding (GoM, 2001; Christie and Hanlon, 2001).

My analysis on the 2001 floods shows, however, that a great amount of funds allocated to INGC was spent outside the affected areas. 80 percent of the funds were spent in Maputo rather than in the affected provinces. Furthermore, nearly 90 percent of funds went on aerial transportation, per diems, fuel and car maintenance. Finally but not least, while the disaster occurred in February-March, most of the funds were spent by June (see annex 3). All this suggests that we need to qualify the improvements and not attribute too much significance to the mathematics of the number of people affected and killed. Further, it suggests that higher interests in Maputo prevailed over interests at the lower levels. Complaints of lack of decentralization, transparency and sharing of information were common among the affected provinces and communities (World Bank, 2005:25).

2005 ONWARD: STRENGTHENING OF THE NATIONAL CAPACITY ON DISASTER MANAGEMENT

In 2005, Armando Guebuza replaced Joaquim Chissano as the head of state. In his inaugural speech Guebuza mentioned three factors that in his view contributed to the prevailing high rates of national poverty and vulnerability. The first was the 'let it go approach' (*espírito de deixa andar - laissez faire*). According to Guebuza by following the *espírito de deixa andar*, public servants' performance had become extremely low to an extent that people could no longer trust the public institutions. The second factor was corruption within the state administration. Corruption and *deixa andar* fed into each other and diverted resources which could be applied to alleviate national poverty. The third was the national lack of self-reliance and self-esteem.

Regarding the disaster management set up, Guebuza's government perceived that the INGC traditional attachment to the Ministry of Foreign Affairs portrayed its dependency to the international community and

therefore weakened national sovereignty, self-reliance and self-esteem. Secondly, there were also claims that INGC inherited a corrupt staff from the previous DPCCN and a corruption scandal involving the General Director of the INGC leaked to the media in 2005. Both aspects forced to some extent changes within INGC. In December 2005, INGC was shifted from the Ministry of Foreign Affairs to the Ministry of State Administration by the decree 27/2005 of December 1. In 2006 a new General Director of INGC was appointed and some old staff was sacked or reassigned elsewhere. New staff was contracted and by 2009 the number of staff had nearly tripled as compared to 2006. It had 380 people as compared to 134 when INGC was attached to the Ministry of Foreign Affairs²³.

In 2006, the government approved an 80 million USD, 10-year Master Plan focusing on disaster risk and vulnerability reduction. In 2007 the mandate of INGC was modified to accommodate the new responsibilities. The decree 52/2007 of November 27 and decree 29/2008 of July 3 set new responsibilities for INGC. Rather than disaster prevention and response, INGC is now charged with the authority for coordinating the development of drought prone areas and for coordinating reconstruction following disasters. New agencies and departments were created within the INGC that started operating since 2007. Three National Emergency Operative Centres *Centro Nacional Operativo de Emergência* (CENOE) were established, a Unit for Civil Protection (UNAPROC) was created as well as a Cabinet for the Coordination of Reconstruction (GACOR). These new units started to take action in resettling the 2007 flood affected households. Funding had also improved considerably. Since 2007, annual budget directly committed to INGC reached 4.5 million USD for current expenditure and investment (Prevention, 2008:6).

These changes were not just dynamics emerging from the new president and government but they also responded to national and international politics. At the national level, the government wants to ensure that the coordination of disaster management is a matter of national sovereignty and with this new set up, the government believes that all external actors can be accommodated and work through governmental lines²⁴. During the 2007 and 2008 flooding, to be discussed in the next chapters, the government refused to appeal internationally as a matter of national self-reliance and sovereignty.

Internationally, the government aligned the organization of disaster management to the Hyogo Framework of Action on disaster risk reduction. It also aimed to give a new impetus on the implementation of the three Rio conventions- on Desertification, Climate Change and Biological Diversity²⁵. Scholars and donors alike praised the new structure during the 2007 and 2008 flooding. Jay Knott from USAID even suggested replicating the Mozambique set up worldwide. He stated that *“The Mozambique government has responded to a*

²³ Interview with Dr. Bonifácio Antonio, INGC chief coordinator, 28 May 2009

²⁴ Interview with Dr. Paulo Zucula, INGC Director Caia, February 14, 2007.

²⁵ Interview with Dr. Bonifácio Antonio, INGC chief coordinator, 28 May 2009

*devastating flood and cyclone with speed and efficiency that could serve as a model for the rest of Africa and the world*²⁶.

At present, then, we can identify a shift in the international appreciation of disaster management in Mozambique. Instead of a powerless entity, Mozambique is starting to be seen as a capable and committed country.

GOVERNMENT RESPONSE TO CLIMATE CHANGE: BETWEEN ECONOMIC GROWTH AND ENVIRONMENTAL CONCERNS

One of the major reasons for the need to strengthen INGC over the past years relates to climate change and disaster management. The country is vulnerable to climate change and the strengthening of the INGC allows a better government response to disasters triggered by climate change²⁷. A report by INGC (2009) takes stock of processes of climate change in Mozambique. Over the last fifty years, the average temperature in Mozambique has increased by 1.6° C, the rainfall season has started later and there has been an increase in the length of dry spells. By the year 2100, temperatures are expected to increase by up to 6° C with further consequences of long droughts and heavy flooding. Although climate data are highly imprecise and scarce in Mozambique, the report sheds light on climate change or variability and resonates earlier claims (i.e. Christie and Hanlon, 2001; World Bank, 2005).

Leaving aside the question of the accuracy of the report, the acknowledgement of climate change has become a social and political fact in Mozambique. In the footsteps of this, research on climate change in Mozambique is on the rise. Patt and Schroter (2008) compared perceptions of climate risk in Mozambique from the local people in southern Mozambique and the decision makers. They concluded that the two groups disagreed about the seriousness of climate risk and, the potential negative consequences either of climate change or of the adaptive measures. They recommend that climate risk management policies need to incorporate a great deal of participatory risk appraisal and response (p.466).

Osbahr *et al.*, (2008) analysed local responses to climate shocks, food insecurity and poverty and concluded that people rely heavily on their traditional coping mechanisms involving diversification and collective land use management. They also observed that planned interventions on agriculture have strengthened local capacity to adapt to drought, food security and poverty.

Eriksen and Silva (2009) analysed how climate stressors and economic changes related to liberalization affects the local vulnerability in two villages in south Mozambique (Matidze and Massavasse villages in Gaza province). Contrary to Osbahr *et al.*, (2008) they concluded that increased drought reduced market integration by small scale farmers and that policies and

²⁶ <http://www.america.gov/st/washfileenglish/2007/March/200703011406311EJrehsiF0.6547205.html>

Assessed 20 July, 2008

²⁷ Interview with dr. Paulo Zucula, INGC Director, Caia, February 14, 2007

regulations for liberalization have favoured commercial farmers while squeezing the small scale farmers hence reducing their adaptive capacity.

In this section, I want to address two issues: first, how the government is responding to climate change? Secondly, how different actors in the climate change arena interact? I leave the analysis on how actors at local level interpret and respond to climate change to the next chapters.

Following the Rio Summit in 1992, Mozambique has gradually developed a legal framework for coping with climate change. Under the coordination of the Ministry for Coordination of Environmental Action (MICOA), different working groups and regulatory tools have been established. An inter-institutional working group carried out the first national inventory on greenhouse gases and vulnerability assessment in 1998. This group also led the implementation of the Clean Development Mechanism (CDM) and the National Action Plan for Adaptation (NAPA). Ever since, the country has produced different legal instruments related to climate and sustainable development. These include: (i) Regulation for Environmental Quality Standards and Emissions, (ii) Regulation for Environmental Inspection, (iii) Environmental Strategy for Sustainable Development, (iv) Environmental Law, (v) Environmental Impact Assessment Regulation, (vi) Land Regulation, (vii) Land Law, (viii) Water Resources Legislation, (ix) Energy Policy, (x) National Program for Environmental Management (xi) Regulation for Mine Activities, (xii) Territorial Planning Law.

Despite these legal tools, the overall achievement of environmental sustainability (Millennium Development Goal 7) is unlikely to be achieved by 2015 (GoM and UN, 2005). It turns out that in practice, the government is focusing more on MDG 1 (halving the proportion of people living in extreme poverty). It appears that economic growth competes with environmental concerns.

A major economic policy has been to encourage private foreign investments with different incentives such as limited taxation. Although some of these seem climate-friendly, for instance the provision of five million hectares of land for producing biofuels²⁸ and investments in hydro-power dams, others will certainly increase greenhouse emissions in the years to come. These include the granting of 256,680 hectares for coal exploration to the Australian mining company Riversdale²⁹. Similarly, the Brazilian company Vale do Rio Doce will extract about 2.4 billion tons of coal over a renewable period of 25 years³⁰. Both companies are planning to produce electricity by burning coal. Forests, in the meantime, are being depleted by exportation of wood mainly to China, what some ironically refer to as the 'Chinese takeaway' (Mackenzie, 2006).

Given the extreme poverty, lack of employment and basic infra-structures, it is understandable that the government is preoccupied with

²⁸ <http://knowledge.cta.int/> accessed 13 December 2009

²⁹ www.riverdalemining.com.au/content/19/ accessed 16 October 2009

³⁰ www.vale.com/vale/moatize accessed 18 October 2009

development concerns rather than investments in climate change whose returns may only be visible in the long run. The effect is, however, that climate change mitigation and adaptation become competing claims in the allocation of budgets and investment decisions by the government. The hopeful suggestion that climate change adaptation may lead to economic growth and that economic growth can provide the resources for adaptation (UNDP, 2008) cannot prevent that decision-making today often entails a negotiation between the two interests.

ACTORS AND STAKES ON CLIMATE CHANGE IN MOZAMBIQUE: POWER STRUGGLES AND STRATEGIES

In recent years, internationally-funded programmes for climate change adaptation are increasing. Major programmes in Mozambique in 2009 were:

- (i) Joint Program in Environmental Mainstreaming and Adaptation to Climate Change in Mozambique funded by MDG-F Spain and UNDP;
- (ii) Mozambique Poverty and Environment Initiative funded by the government of Ireland,
- (iii) Joint Program on Strengthening Disaster Risk Reduction and Emergency Preparedness by UNDP;
- (iv) Coping with Drought and Adaptation to Climate Change funded by GEF
- (v) A World Bank study that is expected to result in a fund for Climate Change Adaptation.

This has led to competition among government bodies to handle these large programmes. As mentioned above, the Ministry for Coordination of Environmental Action (MICOA) was initially the coordinating body for climate change adaptation. Development agencies have questioned MICOA's authority by claiming that climate change is a development more than an environmental problem. In 2005, the government of Mozambique created a Ministry for Planning and Development (MPD). In order to mainstream climate change adaptation in the national development process, this Ministry has started to claim the coordination of adaptation measures. This has created conflicts between MICOA and MPD over leadership, which became apparent when both Ministries wanted to handle a World Bank project for integrating small scale farmers into the market with a large component of climate-change adaptation. Another player is the Ministry for Science and Technology (MCT), which has the mandate to handle interventions regarding science and technology. This Ministry created a working group on climate change in 2007.

The disaster management community in Mozambique, notably the National Institute for Disaster Management (INGC) also has increased its stake in climate change adaptation programmes. INGC has broadened its mandate by incorporating prevention, vulnerability reduction, reconstruction

and development of drought-prone areas. Because of its strong reputation, nearly all international actors have a preference to work with INGC. INGC is handling climate change related projects with UNDP, DFID, GTZ, World Bank, FAO, and the Nordic countries among others³¹. As mentioned above, INGC has also produced the first national study on climate change. At the launch of the study in Maputo in May 2009, which I attended, the issue of coordination of climate change became a major bone of contention, and many guests from competing institutions perceived the initiative as an attempt by INGC to claim the leadership.

Municipalities are also emerging as actors in the climate change arena. When UN-Habitat launched a project aiming to develop mitigation and adaptation mechanisms in two cities of Mozambique, representatives of the municipalities were keen to defend their position that they had the lawful duty to develop any intervention in their areas of jurisdiction. Development agencies such as the Mozambican Red Cross, Care international, GTZ, and World Vision are also unilaterally or in partnerships implementing climate change related projects. And lastly, the private sector is also stepping into the climate change arena. The Matola Gas Company (MGC), the Cimentos de Moçambique (CM) and the Electricity Company (EDM) have all requested certificates to access funds under the Clean Development Mechanism.³²

The emerging property of this unfolding arena is a lack of coherent strategy and leadership for dealing with climate change. This leads to a dispersion of projects, efforts and funds. It is unclear what the outcomes of the dispersed initiatives will be for adapting to climate change at the local level. Actors use the room for manoeuvre created by the lack of coordination, by developing and implementing climate change interventions according to their own understanding, needs and rules. INGC assumes that millions of US dollars are being pledged annually for disaster and climate change in Mozambique, but the government is not aware how many organizations and donors are working on the issues and where³³. Hence, government claims of sovereignty and capacity to coordinate or control the multiple actors is in practice being reshaped and appropriated by different actors within the governance domain and outside it.

CONCLUSIONS

In this chapter I have reconstructed – within the limitations of available data and records - the historical relationship between disaster and socio-political and economic agendas of the actors concerned. I asked how disasters and disaster responses co-shaped or have been co-shaped by the political and socio-economic agendas of the different actors involved.

³¹ Interview on 28 May 2009 with Dr. Bonifácio Antonio, Coordinator Office Manager INGC

³² Interview with Felício Fernando from MICOA on 27 May 2009

³³ Interview on 28 May 2009 with Dr. Bonifácio Antonio, Coordinator Officer Manager INGC and Felício Fernando from MICOA

Throughout the chapter I have discussed disaster management as part of state formation. I have shown that disasters played a crucial role in the formation and dissolution of traditional kingdoms, in shaping the colonial policies and interventions, and in keeping FRELIMO in power. Further, I have disclosed that the over claimed local powerlessness needs to be treated with extreme caution. Rather than solely applying subservience, the national government used, throughout the time, different active strategies to shape disaster response, fulfill its own agenda and to keep a stake in disaster management despite the influx of the international community in the late 1980s. Appointing a moderate president, blaming external forces, shifting strategies and alliances, exploring the room for manoeuvre created by contradictions within the international community, producing and promoting institutions have all been elements used by the national government in its interaction with other actors. Equally, at the local domain of disaster response, local people have, within the limits of their resources, responded to disasters in a variety of ways. By choosing crops, investments, alliances, networks and by migrating, local actors have attempted to reduce their vulnerability to disaster and to cope better with hazards.

A current change in disaster management practice has resulted in the paying of attention to climate change and its presumed effects on increased disaster risks. Climate change adaptation has become an arena of power struggles where different actors in disaster management dispute resources including knowledge. In analyzing climate change and actors' interfaces the chapters shows that there is a lack of a coherent framework for climate change response. This lack of a coherent framework is an emerging property of complex politics between different ministries (and other actors) for leading and coordinating the response. Nonetheless, this allows the different actors to operate without much concern of coordination. Actors use the room for manoeuvre created by the lack of coordination, by developing and implementing climate change interventions according to their own understanding, needs and rules. The result up to now is a proliferation of initiatives and interventions under the umbrella of climate change without coordination, database and above all, a critical appraisal upon them.

CHAPTER 3

LIVING ON THE FLOODPLAINS: ADAPTING TO FLOODING IN BUILDING LIVELIHOODS ON THE DELTA OF THE ZAMBEZI RIVER¹

In the preceding chapter, I analyzed actors' strategies in the domain of disaster governance in Mozambique and the interfaces with the international and local domains. Now I turn the focus to the local domain of disaster response to understand how people in the delta of the Zambezi River manage their livelihoods in the context of disaster risk triggered by flooding. In so doing, the chapter aims to answer the following questions: (1) How do people perceive and act upon flooding in building their livelihoods along the floodplains of the Zambezi delta? (2) What structures exist or have existed and what role do they play to enable or limit the adaptive capacity of actors in the Zambezi delta? (3) How have these structures been changing over time?

By attempting to understand how people craft their livelihoods in the delta of the Zambezi River, I hope to shed light on the topic and contribute to the current academic and political discussions on adaptation to climate change in Mozambique. As discussed in the previous chapter, recurrent droughts, flooding and cyclones in Mozambique are increasingly understood as clear manifestations of climate change (INGC, 2009) and people, at local level, are supposed to adapt.

Throughout this chapter, I will step away from climate change *per se* to discuss adaptation to flooding and adaptive capacity at local levels. I will focus on adaptation to flooding irrespective of the question of what climate change contributes to the phenomenon. As we shall see, amalgams of different factors cause floods, and it is hard to single out the role of climate change. Moreover, research on climate change in Mozambique is still embryonic and inconclusive. Whether current processes are part of climate variability or real climate change is an issue requiring further research. For the purpose of my research it is not important to know exactly what climate contributes as my interest is in people's perceptions on climate change and their everyday practices to withstand its manifestations.

I will argue that in order to understand adaptation practices, we need to broaden the discussion and incorporate the everyday needs, power relations and social negotiations of different actors operating in the climate change arena. As pointed out by Hilhorst (2003: 107) everyday life is best represented by looking at interventions as an ensemble of practices that provides local actors with alternative and exit options, and brings together

¹ A previous version of this chapter was presented at the 2008 United Nations University/UNU-EHS Summer Academy held in Hohenkammer, Germany from 27 July-2 August with the title: Adapting to Climate Related Natural Hazards on the Lower Zambezi Valley.

competing discourses, resources and networks. Similarly, as discussed in chapter 1, decisions regarding adaptation to climate change are not isolated from other decisions and adaptive strategies can be induced by non-climate related social and economic changes. This renders it difficult to detach climate change induced adaptations from actions triggered by other events. As this chapter will clarify, adaptation strategies are rarely specific. Adaptation to flooding is embedded in livelihood and social institutions, often as a property of a more general or multi-faceted strategy. Possession of a canoe, for example, is multi-functional as it helps households to generate income and provide transportation and in addition is a preferred means of evacuation in times of floods.

Theoretically, adaptation to climate related disasters such as floods has been addressed by using two main approaches or what Burton *et al.*, (2002) called generations. The first generation starts by modeling climate scenarios, developing impact models and later on by trying to see which regions, countries and people are vulnerable to the modelled impacts and what adaptation policies and regulations could be advised.

The second generation starts by looking at vulnerability as a present inability to cope with external pressures or changes like those posed by climate change. As such rather than starting with climate scenarios, the second approach starts with vulnerability and focuses on a wider range of contemporary social and economic practices that bring about vulnerability and dampen adaptive capacity. This approach does not start from models and projections, but from the existing policies and regulations, and their strengths and weaknesses to propose policies and measures to improve current adaptation measures (Burton *et al*, 2002: 157).

This chapter follows the second approach. It looks comprehensively at the causes of vulnerability and takes a broad perspective of the policy fields that are therefore relevant to adaptation.

Nonetheless, I notice that both generations are based on a shared assumption that policy, regulation, science and technology can bring about expected 'good' adaptation practices (cf. Bankoff, 2004). My view on the policies and practices of adaptation is different. Drawing on the notion of agency I step away from the systems thinking that is characteristic of the engineering and interventionism approaches presented above. I see adaptation as a process taking place in arenas where factors leading to vulnerability and resilience (including policies and other measures) are socially constructed through everyday social negotiation. They are acted upon or contested by different power holders and actors who creatively attempt to secure their short and long-term projects. To capture this, it is not enough to focus on the systems thinking approach of analysis-recommendation-policy formulation and implementation. Approached from an arena perspective, adaptation is not linear but complex and, to some extent, an unpredictable emerging property.

ZAMBEZI DELTA AND FLOODING EVENTS

The Zambezi Delta is part of a larger catchment area of the Zambezi River in Africa. The Zambezi River is the fourth largest floodplain river in Africa, the largest watercourse in the Sub-Saharan region and the largest system flowing into the Indian Ocean (Davies *et al.*, 2000:1; Shela, 2000:65). The river emerges from the plateaus of the southern border of Democratic Republic of Congo with Angola and its catchment area includes territories of Angola, Botswana, Namibia, Zambia, Zimbabwe, Tanzania, Malawi and Mozambique. The total catchment area is estimated around 1,321, 800 km² (World Bank, 2008:6).

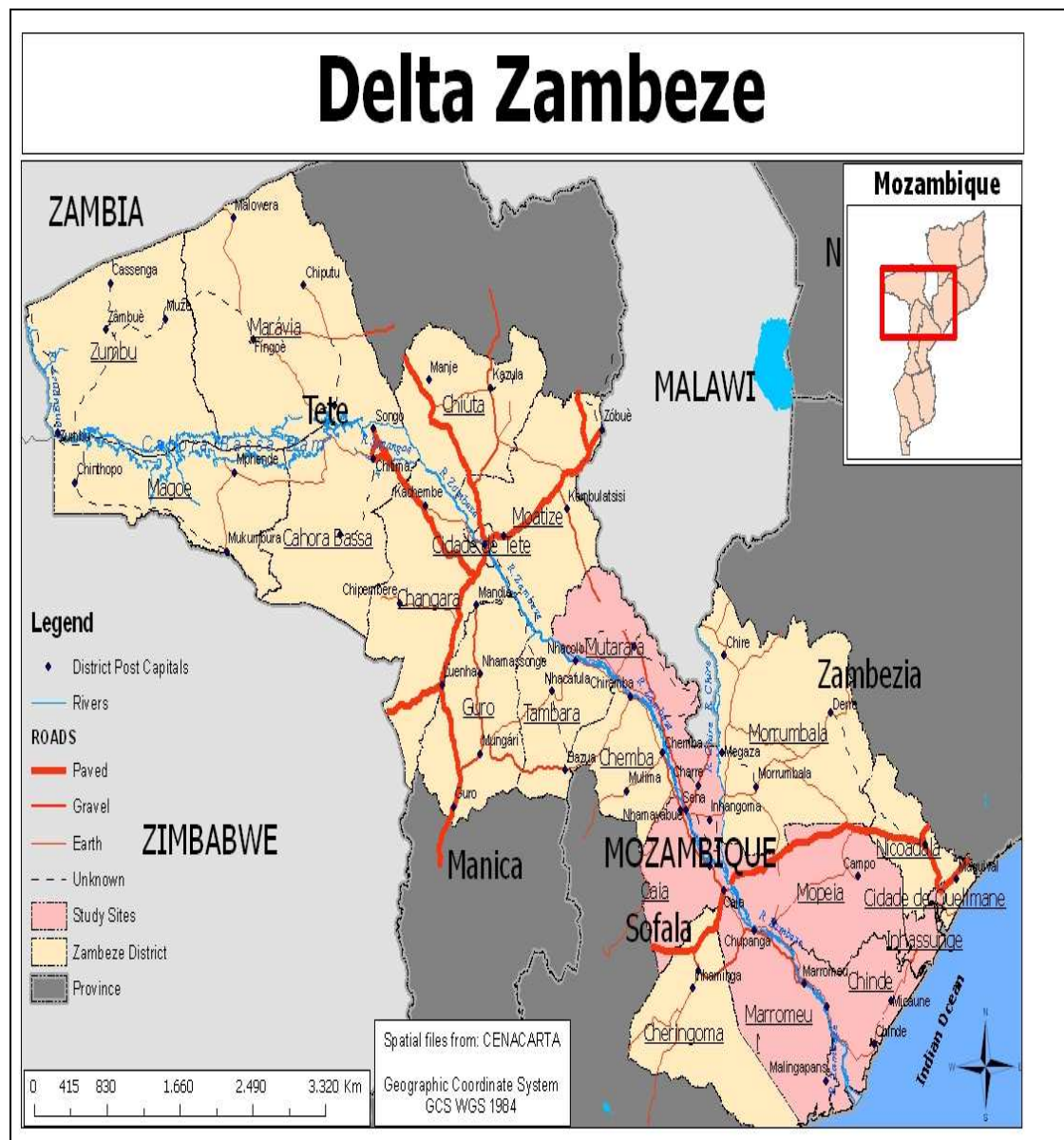
Being an international river, water management appears to require collaboration between different riparian countries and social negotiations of different actors involved. I will limit my analysis of interfaces and social negotiations to the Mozambique delta rather than the entire catchment area.

Once in Mozambique the Zambezi basin is divided, according to its topography, into four major zones (Sweco, 1982; DNA, 1998). The first zone comprises the high plateaus of Maravia, Macanga and Angonia districts- close to the borders with Zambia and Malawi- where the altitudes vary between 1000- 1500 meters. The second is the zone of medium plateaus with altitudes between 500-1000 meters. The third zone comprises higher plains with altitudes between 200-500 meters along the river in Chemba, Morrumbala and Cheringoma districts. The fourth zone, the Zambezi delta, is characterized by low plains with altitudes lower than 200 meters occupying most of the lower basin from the confluence of the Shire and Zambezi rivers up to the Indian Ocean. This area includes territories of Mutarara, Caia, Marromeu, Mopeia Chinde, Inhassunge and Quelimane districts² (see figure 3.1 below).

The last zone -the delta- is the focus of this book. The delta is a broad, flat alluvial plan which extends over nearly 150 Km from the confluence of Zambezi and Shire rivers up to the Indian Ocean (Sweco, 1982:24). Along the coast the delta expands 200 km from the mouth of Zuni River in the south to the Cuacua River outlet near Quelimane in the north. All in all the entire delta covers an estimated total area of 1.2 million hectares and supports a vast mosaic of animal life as well as grassland, palm, thicket, woodland and mangrove forests (Beilfuss, 2005:24).

² The definition of the area comprising delta Zambezi is highly fluid. Sweco (1982:24) includes as part of the delta the districts of Tambara (Manica province), Chemba (Sofala province) and Morrumbala (Zambezia province) which are located above the confluence of Shire and Zambezi. MICOA (2005:3) makes a list of 8 districts which includes Caia, Cheringoma, Marromeu (Sofala province) and Mopeia, Chinde, Inhassunge, Nicoadala and Quelimane (Zambezia province). They exclude Mutarara, Morrumbala, Tambara, Chemba from the list. I focused on districts located from the confluence of shire and Zambezi rivers up to Indian ocean which are geographically below 200 meters.

Figure 3.1: Districts along the delta Zambezi



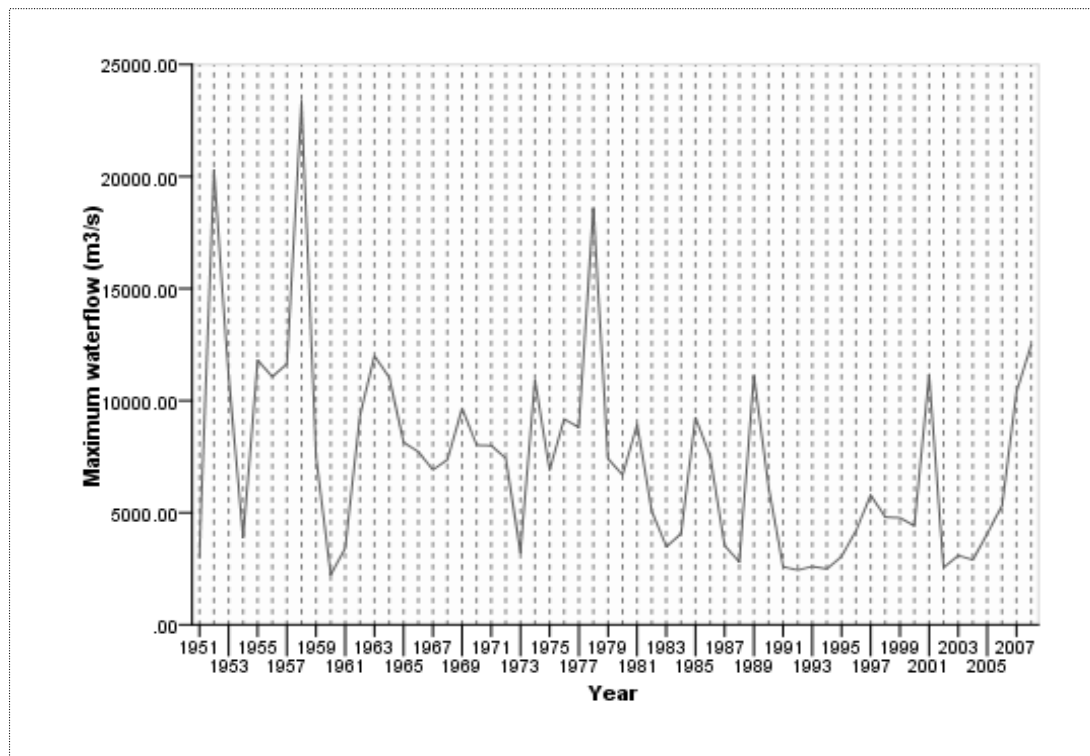
Source: produced by Arsénio Banze and Luís Artur based on CENACARTA database

Based on the above districts and using data from the 2007 census (INE, 2007) the delta area shelters about 965,859 people, mainly from the *Sena* ethnic group, who build their livelihoods essentially from agricultural production, fishing and 'petty' trade. These activities are indeed highly influenced by flooding which has been part of the Zambezi delta history.

Flooding on the Zambezi delta is a historical phenomenon (graph 3.1 below). Records collected by Chidiamassamba and Liesegang (1997) date flooding on the delta as far back as 1548 and in the 19th century alone different authors have recorded more than 21 great floods, whose dimensions and impacts have remained on people's mind (Taveira, 1943; Monteiro, 1955; Chidiamassamba and Liesegang; 1997; Beilfuss, 2005b).

According to Rendal Palmer and Tritton (1979:25), one third of floodplains on the delta are affected at 7,000 m³/s water flow of the Zambezi River and the flooded area may increase by up to half when water flows reach 9,000m³/s. However, before the Cahora Bassa dam- to be discussed next- water flows of 9,000m³/s-13,000 m³/s occurred in every 2 years (graph 3.2 below; Haws *et al.*, 1982:348). If Rendal Palmer and Tritton's claims are right then more than half of the Zambezi delta was flooded during a part of the year, in 1952, 1953, 1955, 1956, 1957, 1958, 1962, 1963, 1964, 1969, 1974, 1976, 1978, 1985, 1989, 2001, 2007 and 2008.

Graph 3.1: Recorded water flow's peak on the delta Zambezi since 1950



Source: author, based on the National Water Directorate (DNA) database

Although flooding of the Zambezi has always been a 'normal' occurrence, flooding regimes and their impacts on people's lives on the delta have been changing substantially due to a number of factors that are mainly related to policy measures and political processes beyond the locality. The effect of these factors on extreme weather events is usually disputed, with claims and counter claims made by actors from the different domains of disaster response. In the section that follows, I will discuss the different factors, discourses and practices related to flooding on the Zambezi delta.

FLOODING AND THE ENSEMBLE OF INTERVENTIONS, DISCOURSES AND PRACTICES

Flooding or non-flooding and its impacts on the delta Zambezi have been attributed to an amalgam of different factors. Of particular relevance we may distinguish the following: (1) the construction of embankments, (2) the construction of the Cahora Bassa dam (3) the policies implemented after independence in 1975, (4) civil war and the resettlement process, (5) Structural Adjustment Programme and (6) changes in rain pattern. Along these factors arises different claims and practices making the flooding an arena marked by power struggles, different interests and social negotiations.

(1) the construction of embankments: According to Beilfuss and Brown (2005:1), major (environmental) changes in Zambezi delta started after 1800 with the construction of dikes in 1893 to protect sugar fields in Mopeia district. It continued over the next 30 years with new embankments to further protect sugar fields and sugar factories (the Sena Sugar company) in Marromeu and Chinde districts. John Peter Hornung, an Englishman married to a Portuguese woman, owned the Sena sugar company.

Hornung managed to get land from the Portuguese government and finances from British banks to pursue his idea of sugar production to feed European markets (Head, 1980). This is how globalized economic and political processes came to be part of the initial major (environmental) transformations of the delta. The embankments had a height of 7.85 meters above sea level and could protect floods of approximately 18-19,000 m³/s (Beilfuss, 2005a:5). Additionally, roadways and railways were also developed at dikes about 7.5-7.6 meters above sea levels (Beilfuss, *ibid*).

The impacts of these embankments were contested. While the Portuguese authorities and the sugar industry praised the embankments, environmentalists claimed that they obstructed the passage of water and reduced the movement of floodwater from the Zambezi River to its tributaries along the delta. This would have negative consequences for the local flora, fauna and to the livelihoods of people living in the delta (Tinley, 1994; Impacto, 1998; Hogueana, 2000).

A different theory suggests that different actors have felt the impacts of the embankments differently across time and space. By the late 1920s when embankments were made, the Zambezi delta was less populated and cultivated; less than one percent of all land in the Zambezi valley was under cultivation (Issacman and Issacman, 1976:79). Furthermore, embankments also provided refuge to local people during the flooding periods³. Ribeiro (2006:2) suggests that the impacts of the embankments were marginal by comparison to the impacts of the Cahora Bassa dam from 1975 onward.

³ Interview with chief *régulo* Chamanga, Mopeia village, May 7, 2008.

(2) The Cahora Bassa dam: the Cahora Bassa dam is located about 350 kms upstream of the Zambezi delta and was constructed from 1969 to 1974. The construction of the dam and its subsequent impact on flooding, local environment and local people's livelihoods has raised a number of different claims and counter claims from different actors. At least two major discourses can be distinguished from the current debate on the merits and de-merits of the Cahora Bassa. They are what I will call the pro-dam and the pro-environment discourses.

It is mainly the government that promotes the pro-dam discourse on flood management. Governments, both from the colonial period and after independence, portray flooding on the Zambezi delta as a natural problem to be solved by dams. To push towards dam construction, the colonial Portuguese authorities claimed that floods on the Zambezi delta produced annual agricultural losses of around 60 million escudos and required further governmental and private resources for post-flooding rehabilitation and reconstruction (Bolton, 1978: 148). The authorities believed that the dam would solve this flooding problem. The government of Mozambique also praises the relevance of the Cahora Bassa dam for flood control and the minimization of losses (GoM, 2007; INGC, 2001; 2007). Based on such claims, new dams for energy generation as well as flood control are planned to be built along the Zambezi River. The Mpanda Uncua, an estimated investment cost of USD 2.5 billion (Li-EDF-KP, 2001), is the next dam to be built, starting in 2012.

The environmental movement mainly articulates the pro-environment discourse. Environmental scientists claim that the Cahora Bassa project has produced devastating social, economic and environmental effects for downstream riverine communities (Bolton, 1978; 1983; Jackson, 1997; Beilfuss, 1999; Beilfuss and Brown, 2005). Jackson (1997: 14) suggests that Cahora Bassa has the dubious distinction of being one of the major dams in Africa with the smallest amount of accompanying research. Beilfuss and Brown (2005:19) claim that with the dam, water discharges and flooding on the delta have become unpredictable and that the water flow has been reduced to less than half of the pre-dam levels (see graphic 1 above). This, they suggest, affected the production and reproduction of animal and plant species that depended on regular flooding. Sweco (1982:10) argues that with the dam and subsequent lower flooding of the delta, sediments are trapped and soils get less organic and inorganic nutrients. Consequently, soils have now lower fertility affecting agricultural yields downstream. Moreover, some environmentalists claim that with reduced flooding, there are also problems with the fishing activity. Fish breeding, growth and survival depend on flooding and water level variations. Hogueane (1997) claims for instance that reduced and unpredictable flooding on the delta affects shrimp production by about an estimated USD 30 million a year.

Finally, some environmentalists have claimed that the extreme flooding on the delta, from 1975 onwards, is partly due to the

mismanagement of the Cahora Bassa dam (Bolton, 1978:4; Rendal Palmer and Tritton, 1979:28; Sweco, 1982:69; Lopes, 2007).

An international workshop regarding the sustainable use of the Cahora Bassa and the Zambezi valley was held in Mozambique in 1997. It was attended by more than 50 scientists, dam managers and decision makers. The pro-environmentalists recommended that flooding was a necessary phenomenon and as such natural water flows should be produced by Cahora Bassa dam managers. Moreover, they recommended the creation of a multi-stakeholder platform for Zambezi river management in Mozambique (ARPAC, 1998). This assertion was a clear disagreement with the pro-dam discourse.

With the government approval of the Mpanda Uncua, the discussion on the impacts of dams on the Zambezi delta has been reignited recently between pro-dam and pro-environment actors. In October 2009 *Justiça Ambiental*, an environmental group in Mozambique, released a report which pictures a number of expected negative impacts from the dam - including a decline in local livelihoods. However, the government, through the minister of energy, claimed the report was an external fabrication to hamper national development and as such should be ignored. The dam will go ahead.⁴

At the local level, there are multiple discourses at play. In group discussions⁵ and individual interviews⁶ local people, especially the elderly, tended to make a distinction between the causes of the flooding and its impacts. They have distinguished flooding which results from *Madzi a Mulungu* or God's water⁷, and flooding which results from *Madzi a ku Fungula*, that is, discharges from the Cahora Bassa dam. Flooding from *Madzi a Mulungu* is produced by heavy rain, coming from the skies, which they themselves have witnessed in their areas. This is called the natural flood and represents the flooding which always existed before Cahora Bassa dam. Flooding from *Madzi a ku Fungula* however is perceived as produced by the discharges from the Cahora Bassa dam upstream and is said to be unnatural.

While people are right in emphasizing that floods may originate from local rains or dam management (i.e. rains upstream), they do not take into account that in addition tributary rivers downstream the dam may add up to 7,000 m³/s of water flow during the rainy season and produce considerable flooding. In February 1981 for instance, while water flows from the dam peaked at about 4,800 m³/s, tributary rivers added more than 5,000 m³/s and water reached downstream Marrromeu district at a flow of 10,450 m³/s producing considerable flooding (Suschka, 1986:10).

⁴ Mediafax Newspaper, October 21, 2009.

⁵ Canhungue (Mutarara District), May 23, 2007; Inhangoma (Mutarara District), September 10, 2008; Xitsomba (Chinde district), June 15, 2007; Luabo (Chinde District), October 23, 2007; Cocorico (Mopeia District), September 24, 2007 and Chupanga (Marromeu District), March 11, 2007.

⁶ Interview besides group discussions with Mr. Languitone (local governmental authority in Canhungue); Feliciano Luis and Fernando Samo (local traditional leaders in Canhungue); Baptista Cocorico (traditional leader *regulo* in Cocorico). Individual interview with *regulo* Chamanga in Mopeia May 7, 2008

⁷ In Sena language Rain is *Mulungu* the same as God and water is *Madzi*

The perceptions of the impact of Cahora Bassa and flooding on local livelihoods are indeed fluid. They vary across the actors but mainly with age, area of origin, education and settlement within the delta. Elderly people who grew up along the Zambezi delta and experienced flooding before the Cahora Bassa tended to echo pro-environmental claims of unpredictable and less flooding after Cahora Bassa and its negative impacts. Young people and newcomers were less concerned with this distinction. Thus, within the local domain, a handful of actors have knowledge/expertise on the (negative) impacts of Cahora Bassa. These few actors tend to reproduce the pro-environment discourse.

Although the elderly tend to reproduce these claims to the younger and new comers, there is much fluidity locally. During the group discussions while some condemned the dam, others acclaimed it and many others were undecided. For instance, government authorities and some local educated people who had knowledge of electricity generation by the dam tended to praise the dam. Overall, it appeared that at local level both discourses (pro-dam and pro-environment) coexist and in many cases, local people tend to use them according to the context. During flooding periods, many local actors, expecting compensation or external aid, tend to strengthen the pro-environment discourse and blame Cahora Bassa while in other contexts they (including the elderly) may ask government to extend electricity generated by the dam to their residential areas.

Regardless of the discourses, the hydrological data shows that since the building of the dam there is less frequent flooding on the Zambezi delta (see graph 3.1. above; Beilfuss, 2005b). The effects of the dam on livelihoods are indeed difficult to gauge. There are different concomitant factors which also produced considerable transformation on the delta. They include the policies implemented after independence, the civil war and the process of resettlement after the war, Structural Adjustment Programmes and changes in the rain patterns.

(3) The policies implemented after independence in 1975: Flooding and its impact on local livelihoods have also been attributed to policies and regulations following the Mozambican independence in 1975. While the government supported the socialist ideology and nationalization policies, social-science researchers have claimed that these policies increased local vulnerability to flooding in a number of ways.

The fleeing of non-natives, predominantly the Portuguese, and those who did not share the socialist ideology meant, largely, that the skills and employment opportunities they provided were lost. The rural economy, which depended heavily on the expatriates for production, marketing and consumption virtually, sank. On the Zambezi delta thousands of irrigated schemes previously used by native and non-native people became unexploited and those who were employed shifted to 'subsistence' agriculture and fishing (BUREP, 1980). The immediate emerging property was that more

people became dependent on natural resources for making a living and became engaged in agriculture and fishing.

There have also been claims from social scientists that attempts by the government, after independence in 1975, to ban the traditional leaders and practices such as rituals for rain making and social order disrupted the social fabric relevant to withstanding the impacts of flooding, therefore increasing their vulnerability (Negrão, 2001).

The conjunction of these interventions by the government has reshaped the physical, social, political and economic landscape of the Zambezi delta, while at the same time producing a considerable number of discontented people who ended by backing the guerrilla movement in the early 1980s in the civil war against the government (Weinstein and Francisco, 2005).

(4) The civil war and the resettlement process: The civil war discussed in the previous chapter was another element adding to changes in the delta. Due to the civil war, more than 60 percent of economic and social infrastructures on the Zambezi delta were destroyed (GPZ, 2001:5) and many individuals lost possessions relevant for their resilience to flooding such as canoes and livestock⁸.

By the end of the civil war, repatriation from the neighbouring countries and returnees inside the country took place from 1992 to 1995. However, this was also a period marked by heavy drought. The Zambezi River for instance reached its longest and lowest water flow ever recorded (graph 3.1. above) and due mainly to this, many households returning to their native areas- either on the delta or outside the delta- established either temporarily or definitively, on the floodplains of the Zambezi River to develop agriculture and fishing activities.

To illustrate this, 83 percent of 270,000 people living in Mutarara district by 1995 were returnees from Malawi and a large number were not originally from that district (UNHCR and UNDP, 1997:4-5). Similarly, 91 percent of the 177,738 inhabitants of Caia district by 1995 were returnees and included native and non-natives (UNHCR and UNDP, 1997b:5). In 1992 immediately after the cease fire, 5,000 people settled in the floodplains of the Mopeia district (UNHCR and UNDP, 1997c:2). This and further population growth of about 33 percent over the last ten years⁹ has reshaped the settlement pattern including settling in areas historically not suitable due to flooding regimes.

This was not indeed the only pattern. Although many people witnessed a decline in their livelihoods, there are claims that a considerable number of people benefited from the civil war, the drought, and the

⁸ Group discussions Canhungue (Mutarara District), May 23, 2007; Inhangoma (Mutarara District), September 10, 2008; Xitsomba (Chinde district), June 15, 2007; Luabo (Chinde District), October 23, 2007; Cocorico (Mopeia District), September 24, 2007 and Chupanga (Marromeu District), March 11, 2007

⁹ Between the 1997 and 2007 census, the population on the delta Zambezi comprising the districts of Mutarara, Mopeia, Caia, Marromeu, Chinde, Inhassunge and Quelimane districts has increased from 724,801 to 965,859 people.

resettlement process. Callamard (1994) argues that civil war and drought produced a flourishing trading and income-generating system in Mozambique along the Zambezi delta and in the District of Muanza in Malawi. Bowen (2000) suggests that a considerable number of better off and established traders in Zambezia province (including the Zambezi delta) accumulated their resources and networks during the period of civil war and immediately after it. Hence, there are competing claims on the impact of the civil war and resettlement for different groups of people along the delta of Zambezi River.

(5) Structural Adjustment Program: As mentioned in the previous chapter, from 1987, Mozambique embarked on the Structural Adjustment Programme (SAP) promoted by the international financial institutions. SAP brought the neo-liberal agenda of market economy, private property and low government interference in the market. This resulted in unemployment. For example, the Mozambican Railway company (CFM) which employed a considerable number of people from the delta reduced its work force by 67 percent while the Sena Sugar Company, another major employer in the delta, was closed down and waiting for buyers up to 2000.

SAP and limited investments afterwards tended as well, to squeeze alternative sources of livelihood and to push people to rely on natural resources and engage more in agriculture and fishing. This is not to suggest that SAP was all negative. Along the Zambezi delta, some people who were dismissed and paid large sums of money, invested their funds in productive activities and turned into successful entrepreneurs¹⁰. On the other hand, some of those who remained employed saw their working conditions improved¹¹.

(6) Changes in the rain pattern: In group discussions and individual interviews local people suggested that rain patterns have changed. People feel that over the last 15 years (since most of them returned after the civil war) rainfall has reduced and has become unpredictable and heavier. Moreover, it increasingly tends to start earlier and to end earlier. Changes in the rain pattern with extremes of floods and droughts are bringing, at local level, different discourses. The scientific discourse on climate change is not widely known, and people find different alternative explanations for the seeming increase in extreme weather events and changes in rain patterns.

During the fieldwork, I found three such alternative discourses of attribution: a discourse finding explanation in the will of God, the ancestors and the wrongdoing of witchcraft. These three different cosmologies of disaster risk and attribution are widespread in Mozambique (MICOA, 2006:19). The questions is how these different interpretations play a role in shaping people's responses and how they are used by different actors to secure their political, economic and social interests?

¹⁰ Interview with Joao Sande, entrepreneur dismissed from CFM, Marromeu October 26, 2007

¹¹ Interview with Alfredo Joaquim, CFM employee, Beira April 3, 2007

The first discourse I distinguish is one that attributes extreme weather events to the will of God. It comes in two variations: one more benign and the other more threatening. One of my respondents was a man from Xilembene, a place hit by drought after having endured the great flood of 2000. This man objected during a workshop on climate-change adaptation project: “*Nobody can claim droughts and floods- only god can decide when to send rain or not*”! This turned out to be a popular explanation, one that was moreover actively propagated by church leaders.

In dozens of services in local churches along the Zambezi delta, I found priests talking about climate change in their sermons. Typically, a priest would pray for those who lost their lives and belongings. He would refer to God as all powerful and able to command floods and droughts, and the only power capable of choosing who dies and who lives. Those chosen by God should be mourned but people should also be aware that a long afterlife awaited them. One should find comfort in God, follow His commandments and help those in need. These sermons had three important social roles. They provided comfort to the survivors, helped them make peace with their situation, and enhanced solidarity with victims.

In some churches, the sermon took a more threatening turn. The priest in these cases used different bible verses where increased flooding, drought and other natural hazards were connected to the end of the world and the urgent need for people to convert and follow the church’s guidance. While the latter is obviously geared towards enhancing the influence of the church, the comforting variation can also be seen as reproducing social order, because flooding and droughts are seen as produced by forces beyond human control. Both variations diffuse social tension and strengthen the church’s grasp of people. They do not recognize potentials for mitigating climate change.

A second alternative discourse was found in the role of ancestors. In the lifeworlds of many Mozambicans, ancestors play a large role. They have to be placated by rituals that precede major events or the launch of new public works or development interventions. A lack of connectivity with the ancestors is linked to failures in projects and in individual and collective misfortunes. Hence, there are continuities with the past regarding the role of ancestors. This is the domain of *líderes tradicionais*, traditional leaders. They are deemed the medium to ancestors and they reproduce the beliefs and the norms. When there is a lack of rainfall, the *líderes tradicionais*, in some regions of the country, perform rituals to ask forgiveness from the ancestors and make peace with them. Ritual offerings are made to overcome the crisis.

The offering consists of beverages and food (mostly made of millet or sorghum) which are placed or poured at one of the oldest trees available locally or where the oldest local chief, regarded as the owner of the land, used to rest or is buried. In many cases, the offerings involve all the community members, but in some cases, it may involve just a limited number of people (those directly involved such as the local chiefs and elderly). While making the offerings the *líder tradicional* evokes the name of the ancestor(s), explains the

crisis and asks for his/her mediation to overcome the crisis. Evidence was found in group interviews about such rituals in Canhungue, Mutarara District in 2003; in Xinsomba, Chinde District in 2005, and in Cocorico-Mopeia district in 2006. Searching for protection from ancestors reinforces and strengthens traditional leadership especially when after the offerings the crisis is perceived to have eased. Like the church interpretation, the 'traditional' interpretation understands extreme events beyond the influence of living creatures and has the same effect of deterring social tension and ignoring possibilities for mitigation.

A third alternative discourse that can be found in Mozambique concerns witchcraft. Some people associate natural hazards such as droughts, excessive rainfall and flooding with the influence of people believed to be witches. In June 2009, newspapers in Mozambique reported stories about alleged witches who were thought to have put off rainfall (figure 3.2 below). Local people in some districts of the Zambézia province seeking 'justice' had lynched some of the perceived witches. In a TV interview in the first week of June 2009, interviewees tended to blame the lack of rain to the machinations of those who were better off and were thus able to maintain production and continue to feed their families or even have a luxurious life- '*Eles fazem só chover na machamba deles, ...produzem só eles... e ficam ricos*': 'They only make it rain in their own fields so that they are the only ones having production and become rich'.

Figure 3.2: A national newspaper reporting lynching related to the lack of rainfall



Source: Noticias newspaper, June 4, 2009

More than the other two discourses, this discourse displays a - misdirected - sense of social injustice. And it is obviously disruptive. While the other two discourses usually remain uncontested by the government, the lynching

incidents compelled government not only to arrest the perpetrators, but also to launch an immediate campaign. Teams from the National Institute of Meteorology were sent to local areas to explain what generates droughts and flooding and why rainfall patterns are changing.

The three discourses all attribute extreme weather events to cosmological forces. This does not mean that people do not adapt to changes. People respond pragmatically to the perceived changes by using a range of strategies that I will discuss in the next section. It does mean, however, that the role of social institutions, economic processes and political choices remains hidden. The different interpretations of climate change affect social order: by reinforcing the existing order or by challenging this order, as in the case of the witchcraft accusations. The latter expressed people's deep discontent and it compelled the government to reach down to people with educational campaigns on climate change.

By now, it appears that rather than living far from the floodplains, the general political economy after independence, the environmental changes and the demographic trend pushed a considerable number of people to do the contrary: to live on the floodplains or to depend on the floodplains and the Zambezi River. This pattern, an emerging property of different pressure factors, tended to drive people to live in 'unsafe conditions' (Blaikie *et al.*, 1994) of the floodplains increasing their physical vulnerability to flooding. In the section that follows, I discuss how local people adapted to floods in the Zambezi delta.

ADAPTATION TO FLOODING IN THE DELTA ZAMBEZI

Flooding continues to be the major natural hazard on the delta and over the past 10 years the frequency and magnitude of flooding has increased steadily. There were three heavy floods (magnitude above 10,000 m³/s) recorded over the period 2000-2009 with none in the previous decade and only one of that magnitude in the decade 1980-1989 (see graph 3.1. above). How do people manage to live in such a flood-risk environment? The next section discusses different strategies people developed over time in order to withstand flood risk. The section is mainly based on data collected in Cocorico 'community' along the floodplains of the Mopeia district. I collected data through ethnographic methods, which included participant observations, survey, life stories, group discussions, interviews with key informants and informal and casual encounters. To do that, I lived in Cocorico for about six months and throughout one year, I travelled back and forth to Cocorico.

When I arrived in Cocorico I was invited to stay at the local chief's house, but I rather preferred to negotiate a free room at the local school in Sanguimbe where I stayed. I asked a local boy to be my companion and to help me with household chores and sharing meals. I feared that being hosted

by local chiefs, without a good understanding of the local context including the relationships between the chiefs and the ordinary people, could eventually limit my interaction with different groups of people.

Once settled, I started the research by asking the local chiefs for public introductory meetings where I introduced myself, my research agenda and asked them to be part of the research. From that moment, I nearly spoke to people everyday. I visited families, ate and drank with them; I visited agricultural fields, *machambas*, went on fishing journeys and attended 8 church services, 1 funeral, 1 wedding, had 4 group discussions, 15 interviews with key informants and 2 extended case studies. Whenever possible I gave my material, financial and moral support to locals. For example, on one occasion, a local boy was very sick and because there was no hospital I called Red Cross staff and health services in Mopeia village to come and assist the boy which they did gladly.

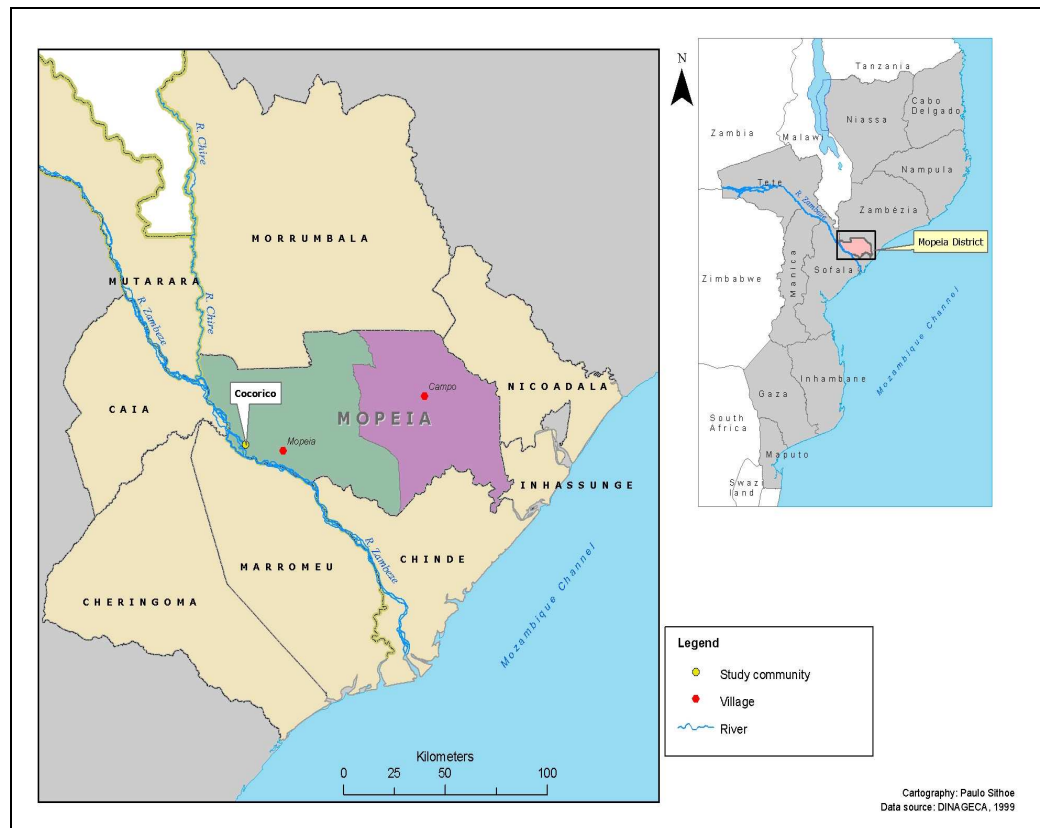
This episode appeared, on the one hand, to have strengthened my relationship with locals but, on the other, people thought I could be a channel to voice their concerns to higher levels. This engulfed me between local desires, powers and my purposes as researcher. Whenever possible I channelled their concerns but I always made it clear that I had no power to change whatever preoccupied them.

COCORICO 'COMMUNITY'

Historically, Cocorico is a *chieftaincy* or '*community*' comprising scattered households around three settlements (*Mulamba*, *Sanguimbe* and *Cuara*). Geographically *Cocorico* is located 15 km South-West of the Mopeia main village and expands for nearly 30 km along the Zambezi River (figure 3.3. below). *Mulamba* is the nearest to Mopeia main village while *Cuara* is far away. By 2007 the area had about 300 households and nearly 1,500 inhabitants. Nearly half of this number lived in *Mulamba* and the remainder in *Sanguimbe* and *Cuara*¹².

¹² Interview with chief Cocorico, July 2, 2007

Figure 3.3: Mopeia village and Cocorico Community



Source: Produced by Paulo Sithoe based on DINAGECA database

The name Cocorico belongs to the chief who is believed to have been the first to rule people living in that area and Cocorico lineage has been ascribed the ruling position under the local term of *Inhacuaua*- head chief. Below the *Inhacuaua* follows the *Sapanda* and finally the *Mwenes*, or *Fumos*, at the lowest rank. By 2008, there were three Sapandas one in each of the three settlements and eight Mwenes under the three Sapandas.

Inhacuaua Sapandas and Mwenes played historically a considerable social and cultural role. They used to ratify and supervise marriage alliances, the inheritance and the redistribution process and appeared as well to interface with other communities. Within the community, their authority was directed, in most of the cases, not to individuals but to the head of the lineage or household, normally a man- *Bhabha*- who is supposed to regulate, impose or implement social norms within the lineage or household.

There is also a council of elders, *Thubhu*, which at a higher level supervises and decides on most of the issues concerning community life including the way *Inhacuaua*, *Sapandas* and *Fumos* act. The healer, *Nganga*, also supports this regulatory system. He is a key person when it comes to spiritual life. The *Nganga* acts as a doctor, as a protector and as a predictor. *Nganga* is generally responsible for the spiritual life and acts as an interface between the living and the dead. All these traditional institutions together (*Inhacuaua*, *Sapanda*, *Fumos*, *Bhabha*, *Thubhu* and *Nganga*) are important in

reproducing and evolving the local social norms relevant either for increasing the adaptive capacity or for restraining it.

By western standards Cocorico is a poor community. Houses are generally made up of grass and wood and there is a tendency to build them on the high ground which remains dry in the wet season and in cases of minor flooding. Most households have a house and a separate granary. The granary is usually a levelled thatched house made of the strongest wood available locally. Within Cocorico, Cuara appeared to have more thatched houses and granaries reflecting, in part, its geographical propensity to floods; compared to the other two settlements Cuara is the one closest to the bifurcation of the Zambezi and Cuacua rivers.

Social infrastructure in Cocorico is weak. In 2007 there were two primary schools (one in Mulamba and another in Sanguimbe) providing primary education from level one to five. The schools were built by the NGO, Save the Children in the middle of the 1990s, after the civil war. School attendance was very low and dropouts, especially girls, were very high, up to 70 percent¹³. In general, formal education is very low with most people having had no formal schooling and a few with only primary education. As illustrated by the Inácio case at the introduction of this thesis, the teachers lived at Mopeia village and their appearance in Cocorico was very irregular. Being appointed to work as a teacher in Cocorico was even regarded by one of teachers as a form of punishment.

Apart from schools there is little social infrastructure. It used to have three water pumps (two in Mulamba and one in Sanguimbe) built by Save the Children at the time of school construction but, by the time of the research in 2007 and 2008, none of them were operating and people were using water from the Zambezi River, local lagoons and lakes. There are no market places or stores and people use barter trade for exchanging commodities. The most common exchanges concern fish and fish traders may come from up Milange district about 250 km north. 'Modern' medical assistance is also deficient. For medical assistance people rely on the Ngangas or have to travel to Mopeia village or to Caia and Marromeu districts both on the other side of the Zambezi River.

There has been little effort on the part of the government to improve the local conditions. On the contrary, the government does whatever is possible to force people to abandon the area. By 2005 a private investor was allowed to bring in about 150 water buffalo which led to competition for resources with local people. Further, in the past it was compulsory for teachers to live in Cocorico so that they could have better performance because of their close proximity to the workplace. They are no longer obliged to do so and following the 2008 flooding, local schools were shut down and teachers and pupils are supposed to attend class in the resettlement centres. In 2007, people complained that hippos and buffalos were destroying their agricultural fields and the local chiefs went to ask for government intervention. The government answer was that they should move out of

¹³ Interview with school masters 01 and 04 July 2007.

Cocorico¹⁴. All these developments mean that livelihoods in Cocorico are becoming increasingly squeezed adding to local vulnerability to flooding.

ADAPTING TO FLOODING IN BUILDING LIVELIHOODS IN COCORICO

I have described the Cocorico landscape and argued that livelihoods in Cocorico are becoming increasingly squeezed. In this section, I discuss how people in Cocorico craft their livelihoods and how this crafting relates to flooding. Livelihoods in Cocorico are crafted mainly around agriculture, fishing and trading. Agriculture is mainly a female domain while fishing and marketing tend to be dominated by males. Access to land for agriculture is secured in two main ways: inheritance from parents and ancestors or resulting from negotiations with those possessing the land. Local leaders may provide land only when nobody claims rights over such land, thus, it is deemed vacant. Local leaders intermediate disputes over land but these have never been major issues in Cocorico¹⁵. Overall, the Mozambican land law states that the land belongs to the state and cannot be sold or used as mortgage. People using the land for more than 10 years have the right over it and newcomers should consult the locals if they need land. The government can confiscate the land if lies idle for more than 10 years.

In order to spread the risks, most households have a minimum of two agricultural fields (*Munda*). One is located in the upper areas (*Kuntunda*) usually around their homesteads. The other one is located on the lower land either close to the river or other water bodies (*Kugombe*) or on islands (*Kunswa*). Production in upper areas takes place during the rain and flooding period. This happens between October/November when field clearing and planting takes place until March/April, the harvesting period. Lower lands and islands are normally used just after flooding has taken place, for receding agriculture. Crops are also chosen accordingly. In upper areas, millet, sorghum and cassava are the dominant crops as they are drought resistant while on the lower lands, maize, vegetables, beans and sweet potatoes are dominant, as they require relatively more humidity and fertility.

Meanwhile, changes in the rain and flooding patterns have been pushing women to explore distant lowlands and islands for their humidity and fertility; thus, one of the major changes produced by reduced rainfall and flooding is that women are being forced to stay longer outside their homesteads, on islands or lowlands where production takes place. In order to save time and be more productive, females may spend a week or more on these lowlands and islands. This requires them to improvise shelter. Improvised temporary shelter on the islands or lowlands, built mostly by the women themselves, can be seen when navigating the Zambezi delta. To look after the homes and children they leave behind, a group dependency system

¹⁴ Interview with chief Cocorico July 2, 2007

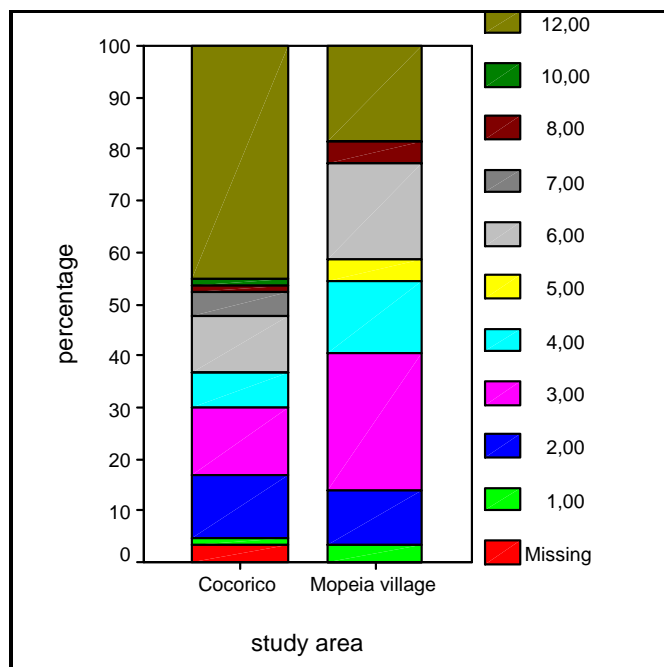
¹⁵ Interview with Chief Cocorico July 2, 2007 and Group discussion in Cocorico September 24, 2007

plays a critical role. In the absence of parents, one may ask neighbours to take care of their children.

The agricultural outputs in Cocorico are still, to some extent, larger when compared to Mopeia. I found that in Cocorico nearly 60 percent of households manage to secure food for the whole year from their own production compared to just 20 percent in Mopeia village (graph 3.2 below). Mopeia village is relatively far from the Zambezi river compared to Cocorico. The higher levels of production on the floodplains such as Cocorico have largely contributed to a dependency system between households living on the floodplains and those living on the upper flood-free areas such as Mopeia village where production levels are lower. Trade relationships have long been established between Cocorico and upper areas. Maize and fish are major products in the trade system of the Cocorico households.

Beyond markets, marriage relationships have also been historically forged between people in Cocorico and those in the upper flood-free areas. Marriages between people in Cocorico and those in upper areas are encouraged, and one of the benefits from these relations is that family members from the upper areas can access food, in times of need, from those in Cocorico, while those living in Cocorico can have shelter and other aid during flooding in the upper flood-free areas¹⁶. This is an illustrative example of how livelihood comes to mean more than earning a living, encompassing social relations, gender, power relations and negotiations.

Graph 3.2. Percentage of households and respective feeding period (months) from own agricultural production



Source: author based on fieldwork data

¹⁶ Group discussion in Cocorico September 24, 2007

Besides agricultural production, fishing and the social relationships established around them, adaptation to flooding in Cocorico takes other forms. Of particular relevance is how they build their houses and how they make their investments.

Housing: In the previous section, I mentioned that houses in Cocorico are located on upper lands which remain dry in the wet season and minor flooding. Further, I noticed that they are made of grass and wood. The use of grass and wood is not necessarily a matter of poverty and lack of financial resources.

In group discussions and individual interviews people mentioned financial limitations as a handicap in building better homes. Nonetheless, they also suggested that it would be 'irrational' to pretend to build conventional houses while it is clear that from time to time there will be flooding which could wash away the investments. Secondly, they suggest that unless proper engineering takes place and people use cement in the right amounts, grass and wood houses are the best option. They offer better resistance to flooding events. Some people who had stayed in Malawi as refugees and had learnt to build brick houses using cement, attempted to do so in Cocorico. When the 2001 flooding appeared their houses were the first to collapse while most of the wood and grass houses remained standing. Building on high ground is also a strategy to protect the household against low levels of flooding while having houses and/or granaries thatched tends to offer safety during higher flooding (see chapter 6).

Selective investment and reduced material accumulation. Saving, investments and insurance are not clearly distinguishable in Cocorico. Canoe and fishing nets are, for instance, amongst the most popular investments in Cocorico. They are at the same time saving mechanisms in a context where saving in currency, jewellery or animals such as cattle are restrained by flooding regimes as I will discuss next. However, they may also be used as collateral or insurance in cases of credit, marriage and other circumstances¹⁷.

Based on our survey, which compared the Cocorico floodplain to upper Mopeia village, it appears that households on the floodplains make higher investments in canoes, fishing nets, radios and small poultry (table 3.1. below). These are not just investments, they are also a form of insurance as well as saving and preparedness measures which respond to flooding events. Thus, as I will demonstrate, they tend to respond to everyday livelihood needs of local people rather than just to extreme flooding events.

Canoes have multiple purposes. They are used for fishing and trading and become an important and most used means of transportation during the floods. Having a canoe is a flood preparedness measure on its own. It allows local people to evacuate at the perceived right moment, carrying household members and most of their valuable assets (see chapter 6). The majority of the

¹⁷ Interview with chief Cocorico, July 2, 2007; interview with chief Nhanswimbo in Mulamba (Cocorico), September 20, 2007; Group discussion in Sanguimbe (Cocorico) September 24, 2007

people who are displaced from the flooded areas evacuate using canoes. During the 2001 flooding out of 220,000 people displaced on the delta Zambezi, 97 percent evacuated using canoes (INGC, 2001:23) and during the 2007 flooding a similar pattern was witnessed (Foley, 2007:15). In Cocorico, the survey revealed that 46 percent of the households have a canoe and in 2007, 55 percent of the interviewed households, evacuated using local canoes.

Fishing nets are another priority investment. Fishing is a widespread male dominated activity carried out on the Zambezi delta and the major source of income. This becomes particularly relevant when agricultural harvests have been 'washed away' during flooding. When there is little or no harvest, households rely heavily on fish for cash and food security.

Beyond food security, fishing nets encodes also a social meaning. During childhood, a normal tool used by boys is a fishhook. As they grow up, they are socially expected to use tools that are more productive. After marriage, males are expected to start using fishing nets. There is a wider range of fishing nets namely *Chave*, *Phiasso*, *Malichera* and *Cocota*. Hierarchically, *Chave* and *Phiasso* are ranked lower and socially, younger people preparing for their marriage or just after marriage may use them. Successful adults are socially expected to buy a gill net, *Malichera*, or a trawl net, *Cocota*, which provides higher catches and earnings.

People owning a *Cocota* are socially and economically ranked highly *Patrão/Boss/Muzungo* as they tend to employ others and have more earnings¹⁸. Thus, investment priorities become part of the social life and institutionalized practices. Investing in fishing nets, especially *Cocota*, does not only help to secure food security at the household level but it also gives social status. This illustrates as well that livelihoods go far beyond making a living solely by encoding power relations, status and gender aspects.

The Radio appears to be another priority investment on the floodplains. Our survey found more households owning radios (67 percent) in lowland Cocorico than on the upper Mopeia village (57 percent). Investment in radios has multiple rewards. As environmental cues for flood forecast become less reliable due to environmental changes¹⁹, people tend to rely on the radio for information regarding flooding. In Cocorico, 62 percent of the households got informed about the 2007 flooding through radio.

Thus, similar to a canoe, a radio is a preparedness measure for floods. It also allows, among other things, catching of emerging or more profitable markets either for fish or for agricultural products. Moreover, through music, radio is a socializing tool in a society where festivities and drinking are, as it will be discussed later, accepted and reinforced practices.

¹⁸ Interview with chief Cocorico, July 2, 2007; interview with chief Nhanswimbo in Mulamba (Cocorico), September 20, 2007; Group discussion in Sanguimbe (Cocorico), September 24, 2007.

¹⁹ For flood forecasting, local people have developed their folklores based on the birds, ants, rats, trees and wind movements as well as from their observations on local aquifers and water levels on rivers, lakes and lagoons. Mango tree flowering on the sunset side is related to flooding but in group discussion on September 24, 2007, people explained that mango trees have flowered twice before the 2007 flooding. 'first it flowered on the sunset side and then on the sunrise side and we did not know what to expect'

Cyclical flooding has tended to discourage investments in productive and non-productive items whose dimension would jeopardize the cyclical evacuation process or would be lost due to flooding. Focus has been on accumulating only the necessary items for everyday use. There is a tendency to avoid accumulating animals such as goats and cattle or large furniture such as mattresses, beds, and tables. Similarly, items for domestic use such as pots, dishes, cups and spoons are possessed mainly according to their utility. Living amongst people in Cocorico I could see that in general six plates (two for serving the father, two for the boys and two for mother and daughters) was the average number per household while two to three spoons (one for the father and one or two for the remaining members of the household) was common. The table below shows this pattern although not all variables (i.e. mattress, bed and tables) were mentioned as their occurrence among the interviewed ranked zero generally.

Table 3.1. below shows that on average, there are more radios, canoes, fishing nets, poultry (chicken and ducks) and pigs in Cocorico than in Mopeia village. Conversely, there are more utensils (i.e. plates, cups and spoons) as well as goats in Mopeia village. In addition, households earn slightly more than in Cocorico. Nonetheless, the differences are only statistically significant for canoes, plates, cups, fishing nets, spoons and polygamy.

Table 3.1: Investment priorities in the Cocorico floodplain and Mopeia village

Group Statistics				
	Study area	Cocorico (N= 84) Mopeia village (N=114)	Mean	Std. Deviation
Radios	Cocorico	83	.8313	.74603
	Mopeia village	114	.6579	.63565
Canoes**	Cocorico	83	.6386	.83488
	Mopeia village	114	.1316	.41033
Plates**	Cocorico	49	5.6327	1.39484
	Mopeia village	105	8.9238	5.40956
Cups**	Cocorico	49	4.2449	1.25051
	Mopeia village	104	5.6923	3.64725
Bikes	Cocorico	82	.6585	.61302
	Mopeia village	110	.6091	.76740
Fishing nets*	Cocorico	82	.7439	.95337
	Mopeia village	109	.3486	.59901
Spoons**	Cocorico	50	3.5800	1.53981
	Mopeia village	71	5.7887	3.35481
Chickens/ducks	Cocorico	81	5.2099	6.61951
	Mopeia village	113	3.6283	4.91389
Goats	Cocorico	81	.4815	1.81046
	Mopeia village	113	.6637	1.94390
Pigs	Cocorico	81	.6296	1.61589
	Mopeia village	113	.5575	1.44505
Cows	Cocorico	81	.0000	.00000 ^a
	Mopeia village	113	.0000	.00000 ^a
Polygamy*	Cocorico	83	2.5000	1.06904
	Mopeia village	114	2.0667	.25820
Overall average Income per month (in Meticaï)s)	Cocorico	80	1.2200	.50669
	Mopeia village	110	1.3000	.56747

a. t cannot be computed because the standard deviations of both groups are 0.

** statistical significant differences at 1%; * statistical significant differences at 5%

Source: author, based on fieldwork data

Other studies on the Zambezi delta show similar patterns. Schmidt conducted a survey in 1997 and found that the vast majority of households in the delta had chickens (82 percent) and a small percentage (9 percent) owned

goats (Schmidt, 1997: 24). Similarly Barbosa *et al.*, (1998:38) found that households on the delta spent less than 1 percent of their time on rearing livestock while in the upper Zambezi valley in Zimbabwe, livestock rearing consumed more than 32 percent of a household's time. A survey by SETSAN, a governmental institution, which compared Zambezi flooded areas to cyclone and drought affected areas, shows similar patterns (table 3.2. below); households on the flood areas tend to have fewer productive items, such as bicycles, hoes, scythe, animal traction and hammers. They also have fewer non-productive items, such as radios, beds, telephones, watches, tables, mattress, chairs and plates (SETSAN, 2007:22-23).

Table 3.2. Productive and non-productive items per affected areas (N=3792)

Area	Productive item (average)	Non-productive items (average)
Flood affected	5.09	2.65
Cyclone affected	5.90	10.25
Drought affected	7.17	16.66

Source: Adapted from SETSAN (2007)

Although poverty and other constraints may also explain these patterns, I found no statistical difference in earnings between floodplain Cocorico and upper Mopeia (1,220 Meticaï vs. 1,300 Meticaï; $p=0.118$ see table 3.1. above). Rather, in group discussions²⁰ people on the floodplains suggested that small poultry such as chicken has multiple advantages. It is easier to carry during evacuations; it is easier to sell if needed; it reproduces faster and, due to its lower monetary value, losing it during flooding is less painful if compared to animals of higher monetary value. For bigger animals, they tend to prefer pigs rather than goats. The major explanation, apart from its faster reproductive capacity, was that pigs are better at resisting flooding compared to goats. Hence, people's agency in reflecting upon their experiences and devising decisions, which are more conducive to the local environment cannot be ignored.

So far, I have discussed the average differences between floodplain Cocorico and upper areas of Mopeia village. Now I want to look at differences within Cocorico. This I will do by using the column of standard deviation from table 3.1. Standard deviation shows data dispersion from the mean; if there was not much inequality and people owned more or less the same possessions, the standard deviation for each asset presented on the table 3.1. would be zero or close to zero, as was the case with cows.

Based on table 3.1 it appears that compared to Mopeia village, the standard deviation for canoes, wives, fishing nets and small poultry is higher

²⁰ Group discussions Canhungue (Mutarara District), May 23, 2007; Inhangoma (Mutarara District) September 10, 2008; Xitsomba (Chinde district), June 15, 2007; Luabo (Chinde District) October 23, 2007; Cocorico (Mopeia District), September 24, 2007 and Chupanga (Marromeu District), March 11, <2007

in Cocorico, which suggests a higher degree of inequality on these assets. To exemplify, although on average each household in Cocorico had five chicken or ducks, an analysis of frequencies shows that 27 percent had none and 57 percent had less than five chickens and ducks. Similarly, analysis of frequencies shows that 50 percent of the households had no fishing nets.

Overall, it appears that not every single household in Cocorico is close to the mean. There are a considerable number of households below the mean and some far above the mean. So, how do they balance these differences and inequalities? In the next section, I will claim that they balance the differences mostly by applying social ordering principles, which appear to have resisted different crisis and transformations. These ordering principles have also been very relevant in withstanding disaster risk triggered by flooding.

Continuities in crisis. Historically, people on the Zambezi delta have produced and reproduced a collective life. This has been done using different ordering principles. Ordering principles are, according to Long (2001:56), different social arrangements built upon strategic interests and representation of self and others.

Based on my observations during the period I stayed in Cocorico, I noted that the ordering principles start from childhood. In their infancy, boys and girls are expected to live a collective life through what is known as *Sedzeka pabhozi*, which means 'play together' or 'play as one'. *Play as one* marks the beginning of a social/collective life from childhood onwards. Those not complying with it tend to be sidelined and given the pejorative adjective *apussa*, meaning not bright/intelligent. It is also through *Sedzeka pabhozi* that children learn to share things they possess such as food. Not sharing may lead to being sidelined and being called *Tshintima* (egoist).

Apussas and *Tshintimas* are hardly integrated into the social life of Cocorico. Parents would hardly accept their daughters or sons to marry *tshintima* or *apussa*. Similarly, hardly anyone would make friends with *tshintima* and *apussa*. This process tends to exclude some people who, most of the times, end up migrating yet it also strengthens a social redistribution process among households. Amongst the most important ways of spreading the resources, I found multiple marriages and festivities to be of particular relevance and worth presenting.

Multiple marriages. Polygamy is, to some extent, a historical and present practice on the floodplains of the Zambezi delta (see table 3.1. above; Martins, 1960: 33; Negrão, 2001:258; SCF, 2006:12). Under Mozambican law, polygamy is neither forbidden nor encouraged. What family law suggests in articles 18 and 30 is that the government will officially recognize one partner (GoM, 2004:2-3).

Marrying more than one wife is considered a symbol of prosperity²¹ and it tends to be a strategic investment in the short and long run. For food

²¹ Interview with chief Cocorico, July 2, 2007; interview with chief Nhanswimbo in Mulamba (Cocorico) September 20, 2007; Group discussions in Sanguimbe (Cocorico), September 24, 2007.

and flood securities in particular, marriages between lower and upper areas are very much encouraged. Polygamous males tend to have households both, in upper areas- where during the flooding period households from the floodplains can take refuge, and on the lower lands- from where the households in upper areas can get food supplies during drought periods. This arrangement stresses the relevance of cross-community relationships for disaster risk management. As it stands wives tend to provide food security for the husbands, as they are in principle the food producers. Finally, they also provide them with social security when they get older, through having more children and grandchildren who are supposed to take care of the elderly parents and grandparents.

Marriage also tends to reinforce social security in other ways. Firstly, the marriage process ties two families that will both aim to uphold the bond and not break the marriage. This is partly related to the fact that marriage on the Zambezi delta is, in general, a long and costly process. It encompasses six steps: *Mafungula Mulomo*; *Kumutsa*; *Malumphato*; *Phete/Kucemba*; *Machinguizo*, and *Makhutchafwa* that involve rituals, money and gifts from the husband's family to the family of the bride²². Although not all steps are followed nowadays, the payment process is still alive for different social and economic reasons. It includes the fact that the money being paid may be used for marriage of the brother of the bride or in other circumstances to ease/relieve temporarily, the poverty situation of the bride's household.

Dissolution of the marriage would force, to some extent, the bride's family paying back the amount and other items received from the marriage, and to the male it would mean the loss of one food producer and reproducer²³. As in many other African contexts it is a female responsibility in the Zambezi delta and Cocorico in particular, to produce food for the household (see also Barbosa *et al.*, 1998). Female responsibility for producing food may be perceived as exploitation but food providership has given them certain protection at the household. Negrão (2001: 259) suggests that one crucial element, tying males to their wives on the Zambezi delta is food and many males who are no longer able to work in the fishing sector or elsewhere would starve from hunger if left unmarried.

Women's perception of multiple marriages is fluid. In some households it is a male's decision alone to marry another wife and the present wife has to 'submit' to the decision. In others, the wife asks the husband to marry another wife in order to have her workload reduced. In other cases, husbands propose but marriage takes place only if the wife agrees. In some of these cases, the wife may even attempt to find the next wife for her husband. If a wife has fertility problems, she might ask her sister or another female she trusts to be the next wife in order to provide them with children.

²² Group discussions in Sanguimbe (Cocorico), September 24, 2007.

²³ Interview with Rosa Ernesto, 36 years, widow, Mulamba (Cocorico) July 7, 2007; Interview with chief Nhanswimbo in Mulamba (Cocorico) September 20, 2007.

Finally, a historical practice which is indeed in decay allowed, after the death of a husband, one of his brothers to marry- 'take care of' - the widow²⁴.

Festivities. Apart from marriage, earnings are heavily used on festivities. Anthropologists in the 1960s and 1970s have suggested that on the Zambezi delta people, especially males, are disposed for festivities and drinks (Martins, 1960: 13; Osorio, 1964: 18; Granjo, 1970:7). This is still, to a large extent, a very much present practice. During the fieldwork, drinking appeared to be part of the everyday life of many males. However, drinking appears to be a process of resource (re)distribution and social networking and security. There is a belief that by limiting accumulation and redistributing resources through marriage and festivities, one is less likely to be targeted by a witch *Nfiti*, be pointed as *Tshintima* or be accused of practicing adultery²⁵.

In the meantime, the society in Cocorico promotes an ordering principle called *kuphezhana*-helping each other. Through *kuphezhana* fishing, agriculture and evacuation during the flooding period tend to be a collective responsibility and these practices allow livelihood activities to be carried out within the required time frames. For example, fishing and trading, which is a male domain, requires in most of cases a minimum of two persons (at least one to pilot the canoe and another to do the fishing or the trading), this becomes a group activity and boys start accompanying their fathers from their youth.

When households have no boys, *kuphezhana* allows boys or males from other households in the neighbourhood to be involved in fishing in exchange of a learning process as well as material or financial gains from the fishing catches²⁶. For agricultural production, as I discussed previously, *Kuphezhana* plays a crucial role. In their absence parents may mutually ask neighbours or friends to take care of what they leave behind. It was by following this norm that Inácio's parents (in the introduction of the present book), left Inácio and his sister in the custody of neighbours and went to their fields on the islands. *Kuphezhana* guarantees labour force for meeting peak needs, for instance during weeding and harvest²⁷.

During the flooding period *Kuphezhana* tends to be even stronger. Some males are left behind during the evacuation process with the responsibility of taking care of the left belongings and houses of different households while those evacuating take the responsibility of looking, at the resettlement centres, after the household members of those remaining behind (see chapter 6).

²⁴ Interview with Rosa Ernesto, 36 years, widow, Mulamba (Cocorico), July 7, 2007; Group Discussion with women in Mulamba (Cocorico) September 21, 2007.

²⁵ During group discussion on September 24, 2007 in Sanguimbe, it was suggested that those who do not drink alcohol are more likely to be pointed as adulteries, as people would suggest that instead of alcohol they spend their money with women.

²⁶ Interview with fishermen Luís Ngota in Cocorico, October 9, 2007.

²⁷ Group discussion in Cuara (Cocorico), July 20, 2007; Group Discussion with women in Mulamba (Cocorico) September 21, 2007.

In sum, witchcraft and the established codes of social conduct in this way become normative tools used for limiting material accumulation and to perpetuate local practices influenced, to a large extent, by the Zambezi River and flooding. Although these normative tools including the magical beliefs may be interpreted as stagnation, traditionality, backwardness and circularity, they play a crucial role in reducing the (investment) risks to acceptable levels and allow people to live in normalcy and continuity in flood prone environments. In doing so, a certain identity is created; a 'real' Sena, from the Zambezi delta for example, is expected to be a group person, living her/his life within a group interdependency system. She/he must share and expect others to share. It is also within this social and economic environment of limited accumulation, selective investments and re-distribution of resources including labour that people on the Zambezi delta and Cocorico in particular build their livelihoods.

Crisis in continuities: Earlier in this chapter I outlined different pressure factors which lead people to live in the 'physical unsafe' conditions of the floodplains. The Cahora Bassa dam, colonial heritage, policies after independency, civil war, drought, population growth, structural adjustment and limited investments are all part of the 'push' factors leading to settlement on the floodplains. Now I want to address how (some of) these factors, over time, have eroded continuities on the Zambezi delta and ultimately limited the adaptive capacity of the local actors. I will focus on the political trends, the development trends, population growth and environmental change, trends on flood risk management and on the role of churches. The main claim here is that due to these interlinked processes, the local physical environment is in degradation and the continuity of social structures have entered into crisis. As an emerging property neither the environment nor the social fabric are able to provide enough protection against disaster related hazards such as flooding.

Political trends. As already discussed above, following independence Mozambique has undergone considerable political transformations. One of the transformations that had great impact for disaster management at local level was the abolishment of the 'traditional' authorities. Traditional authorities have been over the history of the delta, the guardians of the group interdependency system which allowed some disaster risk reduction. They ratified and supervised the marriage alliances, the inheritance and the redistribution process and in doing so, they tended to reproduce or evolve the group interdependency system. Although the government is attempting to rescue the traditional authority and *Inhacuaauas*, *Sapandas* and *muenes* have now uniforms and subsidies provided by the government, their authority, as we shall see next, is being challenged and their relationship with the 'modern' structures of authority are, in some cases, conflicting.

Church and social trends. Not only do the political trends tend to marginalize the traditional authority but increasingly churches are also playing the same

role. For a long time churches have played a critical role in shaping people's behaviour. Similar to the *Nganga*, churches are an interface of material and spiritual life whose actions are directed toward normative socially 'acceptable' practices. In Mozambique as elsewhere in Africa, churches and religion were used as a domination tool. People were taught not to rebel against colonial rulers, to obey the biblical Commandments and be faithful, as great rewards would be received in heaven after death. This was a major reason for the Mozambican government to close down the Catholic missions and to persecute church leaders after independence.

However, after the democratization process took over in the 1990s, religion and churches are once again booming. Contrary to the *Nganga*, whose practices tend to perpetuate group interdependency, churches in rural Zambezi delta tend to break it. Most of the emerging churches are against drinking alcohol, witchcraft accusation and using the *Nganga* for whatever purposes. Although the line separating the two is thin and people jump in and out of the two, through these commandments churches attempt to create a new social order which challenges the traditional social ordering principles.

Socio-economic trends. During the colonial period the group interdependency system was indirectly reinforced by a lower governmental investment on the education and health care of the native population. This led the local people to have more contact with their non formal education system, which tended to perpetuate group interdependency and contact with *Nganga*. Currently, the government is investing in education and health care service to an extent that primary education is free of charge and basic health services are being provided in many villages.

In the meantime, during the colonial period 'development initiatives' were basically carried out by the private sector which tended to produce sugar-cane, cotton and rice on the Zambezi delta. However, profits of the private companies were made mainly through low salaries to the native employees (Head, 1980:331; Negrão, 2001:43). This fact allied to governmental taxes (*mussoco*) that natives had to pay, further limited capital accumulation by the local people and tended to reinforce the group interdependency system. Nowadays, however, 'development initiatives' are coming from multiple sources. For example, the government has started from the year 2006, to allocate seven million meticais (about USD 280,000) to each district for development initiatives. At the same time, different NGOs and private companies are promoting agricultural production, fishing, timber logging and livestock rearing. Moreover, most of the district main villages now have electricity, mobile phones can operate and people are also able to watch videos and TV.

All this brings local people into contact with many external actors and makes them open to new opportunities and lifestyles that challenge their perceptions of social ordering. As one fisherman in Cocorico said to me: 'I am going to save money so that next time when you come, you can bring me a camera like the one you have'.

In group discussions in Mutarara²⁸, Chinde²⁹ and Marromeu³⁰, people suggested that *kuphezhana* is becoming less evident nowadays as people become more individualistic and concerned with their own affairs. Increasingly people ask for payments for what used to be, in the past, a social activity.

Environmental trends. The physical environment of the Zambezi delta has been under continuous change. Dams upstream, population increases and related needs for crop cultivation plots and firewood as a source of energy, alongside with timber logging is driving deforestation and accelerating the erosion process. To illustrate, since the end of the civil war in 1992 up to 2001, the Chinde district, neighbouring to Mopeia district, lost about 20 percent of its mangroves (Silva, 2005:40) while the whole delta lost, due to river erosion, about 26 km² of its area from 1972 up to 2004 (Ronco, 2008:102). Nationwide, Mozambique loses about 220,000 hectares of forest every year (Marzulli, 2007:72).

During the group discussions mentioned above, people suggested that wood is becoming scarce and making canoes or buying them has progressively become more difficult and costly. Increasingly people make or buy small canoes which cannot withstand heavy floods or can hardly be used for fishing on the Zambezi River due to dangers posed by the high water currents. As a result, more people tend to do fishing on local lakes and lagoons seasonally nourished by the Zambezi River flooding leading, in some cases, to overfishing and reduction in catches and fish size.

Moreover, as deforestation occurs, the risks of reduced agricultural yields and of increased flooding increases. Trees hold soil together, help the soil to absorb water, increase moisture and reduce water speed and volume downstream. Deforestation has also consequences for making strong and thatched houses that can help withstand flooding. In Inhangoma for example, people claimed that there were no trees to make strong or thatched houses. Finally, deforestation tends to create a vicious cycle. People cannot make strong houses and every year they are obliged to repair or remake their houses increasing further the deforestation problem and flood risk.

Trends in government flood management practices. Government flood management practices shifted after independence. During the colonial period there was little coordinated attempt on flood risk reduction and where aid was provided it was done whenever the authorities found people secluded (see chapter 2). There were no attempts to resettle people and the traditional authority played a role in channelling and distributing aid amongst its people³¹. Nowadays indeed, flood management is anchored on the notion of living far from the floodplains; as shown from the Cocorico case, government

²⁸ In Inhangoma, September 10, 2008.

²⁹ In Luabo, October 23, 2007.

³⁰ In Chupanga, March 11, 2007.

³¹ Interview with *Inhacuaa* Chamanga, Mopeia- May 8, 2008.

has been discouraging people to live on the floodplains and 'forces' them to live in the resettlement centres.

In the new resettlements, government and NGOs play the role of channelling and distributing aid amongst the people, overriding in many cases, the local authorities thus marginalizing further their role. Moreover, in the resettlements people tend to (re)conceptualize the social order and to take different livelihood pathways. For some, adaptation is no longer related to flooding but increasingly to droughts and to market integration on the upper areas. In doing so, new social arrangements and power relations are crafted and the traditional conceptualization of collective social order tends to be eroded and substituted by a more individualist and market oriented lifestyle (see chapter 7 for further discussions).

CONCLUSIONS

Delta Zambezi hosts many people who, despite seasonal flooding, take advantage of the Zambezi River and its ecosystem for building their livelihoods. Although people may willingly choose to live on the floodplains, changes produced over the past 30 years, due to the construction of dams upstream, changes in political ideologies, droughts, civil war, displacement, resettlement and population growth have together pushed more people to live on the floodplains and to rely heavily on natural resources. In doing so, people become physically exposed to flooding and adaptation to flooding becomes a crucial element in crafting livelihoods.

On the Zambezi delta and Cocorico in particular, this crafting is done through different practices that include selective - flood related - investments and social institutions that forge a group interdependency system. Investment priorities focus on canoes, fishing nets, marriage, small poultry and radio as they respond to needs before, during and after floods. Investments in items whose dimension would jeopardize the evacuation process such as tables, beds, mattresses and big animals such as cattle tend to be discouraged. On the other hand, the group interdependency system tends to make individual households depending on each other through marriage, the sharing of gains and responsibilities and, within the household by the interdependency between females and males, elderly and younger people. Through group interdependency, individual households can expect help from others during crisis events such as extreme flooding. The traditional authorities, who in the contemporary context are being challenged and re-shaped by new developments, historically maintained this system.

From the discussion presented in this chapter it emerges that adaptation to flooding incorporates and binds together the physical, natural, political, socio-cultural, human, symbolic and economic assets and, a successful adaptation emerges from a delicate balance of these different elements. Such a balance is not possible any more due to rapid changes and different actors' interests along the delta Zambezi. Increasingly, the local

physical environment is in degradation and the social fabric is not helping matters. Consequently, neither the environment nor the social fabric nor economic opportunities are able to provide enough protection against disaster related hazards such as flooding. This may explain the increase in people being affected and killed by floods in the last 10 years that was discussed in the previous chapter.

The chapter shows as well that there are alternative discourses to climate change at local level. People attribute changes in rain patterns to the will of God, the ancestors and the wrongdoing of witchcraft. Various actors are involved in promoting each of these discourses and the result is a mixture of empowerment and disempowerment of some actors. Nonetheless, discourses that tend to produce social disorder such as claims on witchcraft are compelling the government to reach down its authority and provide local people with information and other tools regarding climate change. It appears therefore, that despite negative impacts, climate change is producing parallel (and positive) impacts by bringing upfront local voices and obliging the government to intervene at local levels.

The major lesson to be taken from this chapter is that addressing adaptation to climate related hazards is much more complex than focusing on the hazards alone. It requires looking at the historical and contemporary processes - beyond climate *per se*. This also means that measures to reduce vulnerability to climate related hazards such as flooding should be based on actors' everyday practices including their discourses, power relations and the many ways in which they socially negotiate and respond to the conditions of their lives.

CHAPTER 4

STRENGTHENING ADAPTIVE CAPACITY: THE CBDRM PROJECT IN COCORICO

The socio-political and environmental transformations on the Zambezi delta, as described in the previous chapter, mean that local people are less able to handle extreme weather events and disaster risks by themselves. Externally 'planned' interventions for strengthening the local adaptive capacity are being proposed and promoted by different actors including government and NGOs. These interventions aspire, as suggested under Hyogo Framework of Action (2005-2015), to be inclusive, proactive and bottom-up. Critics have suggested that lack of local participation in disaster management has resulted in ineffective disaster management measures and increased losses. It is argued by different scholars that local people are better placed than anyone else in understanding local opportunities and constraints. Their involvement in disaster management is vital and allows disaster reduction measures to be more effective and efficient compared to classical top-down disaster management approaches (Luna, 2001; Pearce, 2003; Heijmans, 2004; Thomalla and Schmuck, 2004).

Based on this perception, interventions on disaster reduction and adaptation to climate change worldwide are adopting community-based approaches either in practice or by endorsing it in their policy statements. Initially developed in the Asian context, especially around the Philippines' recurrent natural hazards, Community-Based Disaster Risk Management/Preparedness (CBDRM/P) became a worldwide approach that has been promoted in disaster prone countries in Africa, Latin America and the Pacific Islands. The approach involves engaging at-risk communities in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerability and enhance their capacities (ADPC, 2006: 17). CBDRM is, in essence, valued for its focus on local people's perceptions of disaster, their vulnerability and resilience. By engaging local people, the approach is considered to promote ownership of the process and outcomes by the local community which leads to empowerment and sustainability (Pearce, 2003).

Little knowledge has been produced so far on the challenges that planned adaptations and the CBDRM approach face at local level. There is little critical knowledge reflecting the process, achievements and lessons from the planned adaptation and CBDRM interventions. Several authors (cf. Mosse, 2001: 48; Twigg, 2005:64-65) have argued that much of the research hitherto published is a superficial description based on too much attention on the strengths of the community based approach and little on its limitations. Planned adaptation and community based disaster management do not occur

in a vacuum. It takes place in an arena of social relations where different and sometimes conflicting interests are ill researched or overlooked. The present chapter explores a CBDRM project by the Mozambican Red Cross (CVM) in Cocorico 'community', Mopeia district, Zambezia province. The focus of the chapter is on how local people interact with external interventions and appropriate, integrate or transform the interventions to make them suit their lifeworlds. At the same time, it unravels how implementing organizations attempt to make the project suitable to their organizations, and to their beneficiaries.

The uncritical promotion of local approaches is problematic for several reasons. One set of problems relates to the question whether the local level is indeed the appropriate level of disaster response. The concepts of the local community and participation are by themselves problematic under actual circumstances of globalization and increased frequency of disasters. Globalization tends to dissolve or reshape the locality. Disasters tend to render little time for local participation and to reinforce the perception, from the intervening organization, that enough knowledge has been accumulated from the past disasters and participation is no longer required.

The point to highlight is that community refers to things people have in common; that bind them together and give them a sense of belonging with one another (Day,2006:1); but, under globalized flows of capital, knowledge and information, increasingly this togetherness is being crafted without clear geographical boundaries (Nuijten, 2003; Ferguson, 2009). A focus on the local level rather than at higher levels where disaster situations are mostly produced and reproduced may also lead to ineffective outcomes. Interventions at local levels are more likely to bring real changes if accompanied by interventions which focus on policies and practices promoted at higher levels that tend to perpetuate or increase local vulnerability and reduce local capacity to face hazards. Chapter 2 and 3 have highlighted these aspects.

The second set of problems, which are the subject of this chapter, refer to problems with participation in the community. Genuine and real local participation would lead to empowerment of poor people and produce social changes. This means some power holders would have to give up or accommodate new demands, losing their gains and privileges which are likely to bring conflicts of interest and confrontation. A 'right' balance between the already privileged and unprivileged groups must be carefully examined if the desired effective and positive outcomes from the CBDRM are to be achieved and sustained.

When societies are highly differentiated, the concept of participation may be used, as suggested by Mosse (2001), as a beautiful and acceptable way of extending client-focused networks of patronage and for subordinating local people. Alternatively, as argued by Cleaver (2001), community participation may be used for reducing a project's transactional costs or for gaining popular acceptance and favours. In both cases, the participation label is used without substance, commitments and changes in the behaviour and attitudes required

to achieve the transformative process that would empower the most vulnerable and disaster prone people.

These kind of observations have led Nuijten (2003) to suggest that people at community level as active actors, may refuse to participate or be selective in their participation in order to avoid to be enrolled in interventions which might alienate their lives and reduce their freedom and flexibility to respond to different constraints and opportunities.

In sum, people do not always want to participate and if they do participate, they might actually be very selective in what they participate in and when and how they do so. Alternatively, while participating, people tend to reshape the interventions to suit their own present and/or future interests (Hilhorst, 2003).

Due to these complexities, it is therefore understandable that the CBDRM approach and its outputs are not linear, straightforward and predictable. If we want to understand what actually happens in the framework of CBDRM, we need to immerse in the everyday practices of its implementation. In doing this, we need to ask how planned adaptation and the CBDRM approach are perceived and acted upon by different actors (NGOs, government, donors and local communities). There is a need also to critically look at how the approach works or can work in practice to strengthen local capacity to adapt to climate related natural hazards and secure livelihoods. In the process, the project is invested by different actors' interest and as a result is transformed and unfolds in unforeseen ways.

Interestingly, this means that the project became neither strictly genuinely planned nor strictly autonomous. The distinction maintained by IPCC between spontaneous and planned adaptation may thus be of little relevance in practice. The project I studied became a hybrid form of planned actions that were transformed through social negotiations and compromises between different actors. The following sections discuss these questions at length.

I will start the chapter by providing the institutional landscape of the Mozambican Red Cross (CVM) - the promoting organization, and then I will tackle the project from its inception until its implementation and final evaluation. Rather than attempting to focus on what went well and what went wrong my focus will be on the interfaces between the different actors. I look at the challenges that emerged at the encounters and the different strategies applied by the actors present to secure a place in the arena and attempt to fulfill own interests. Accordingly, the chapter is analytical rather than evaluative. I strongly believe that there is no such thing like good or bad with respect to the interventions. As argued by Olivier de Sardan (1988) interventions are neither complete failures nor complete success stories. They are indeed reconfigured at the local level and may acquire different meanings and outcomes. In the case of the CBDRM project, I will argue that during the implementation, the project became a source of local power politics and was re-configured to respond to everyday needs rather than to infrequent extreme flooding events as initially planned by the outsiders.

CVM: CHANGES AND CONTINUITIES

CVM is a humanitarian organization created by the government of Mozambique in 1981 to replace the Portuguese Red Cross (CVP) that existed prior to independence in 1975. Following independence, the CVP stopped operating for different reasons. CVP had been directly linked to the Portuguese government. Some people that used to work for the Portuguese Red Cross were for example married to someone in the Portuguese armed forces or some Portuguese official. Racism was also evident in the ways the CVP undertook its activities. There were no black people in the organization (CVM, 1982:7). This tended also to clash with the Red Cross principles of independency and impartiality.

On the other hand, the Mozambican government envisaged a new socialist Mozambique that instilled fear in many Portuguese. Hence, even if there had been interest in continuing the CVP, in practice the staff that worked for the CVP had generally left Mozambique. This meant that a process of (re)structuration and (re)mobilization was necessary for the Red Cross movement in Mozambique. Hence, there have been both ideological and practical reasons for the creation of CVM.

Since its inception in 1981, CVM went through many metamorphoses. Originally, the government selected the candidates for leadership positions. The central committee of CVM was composed of representatives of the Ministry of Health, Education, and other government Ministries, as well as government linked NGOs like OMM (women's organization) and Youth organization (OJM), all appointed by the government. Furthermore, it was the government who dictated what Red Cross should be and do. This can be read from the speeches during its launching. First, the representative of the Red Cross Dr. Fernando Vaz, made it known that the organization was expecting guidance from the state. *'Como é nossa tradição, queremos pedir que nos indicasse os marcos fundamentais que nortearão as nossas tarefas, that is, as it is our tradition, we would kindly request you to show us the baselines which will guide our work'*.

In reply Joaquim Chissano, who represented the government, retorted that CVM was to serve the Party and the government *"quando tomamos a decisão de criar a CVM pretendemos consagrar os sentimentos humanitários que o nosso povo dirigido pela Frelimo sempre soube manifestar. A CVM é uma organização de voluntários ao serviço do povo; ... ela terá como funções principais participar activamente nas actividades sanitárias realizadas pelo Serviço Nacional de Saúde. Translated, 'when we decided to create the CVM, we pretend to establish humanitarian sympathy which our people led by Frelimo always expressed'. CVM is an organization made up of volunteers to serve the people... it will have to be actively engaged in the activities carried out by the National Health Service'* (CVM, 1982:43). This quote makes clear that the government saw the Red Cross as an extension of its own apparatus.

During the inception, CVM was assigned to work under the umbrella of the Ministry of Health. This Ministry provided guidelines, workload and budget to CVM. CVM was mandated to serve the government in promoting,

through voluntary staff, the national plans from the National Health Services, *Serviços Nacionais de Saude*. To undertake this, CVM was supposed to train voluntary staff in a broad range of basic health skills. These volunteers would then use their health skills in communal villages, factories and cooperatives¹.

The link with the government allowed CVM to access material and financial support from the government and to expand countrywide. In two years time (1981-83), CVM was represented in all but two provinces and by 1986 it had representation all over the country (CVM, 2006). Up to 1987, the government allotted to CVM buildings, warehouses and financial resources to run its duties. Under such a context, CVM became a part of the government apparatus in implementing its national socialist and Marxist ideology.

Although Red Cross societies worldwide have auxiliary functions to governments, both internally and internationally, CVM was perceived to be too close to the government lacking the principles of impartiality, independence and neutrality. This lack of core Red Cross principles hampered, largely, its inclusion into the international Red Cross family. CVM was not recognized by the ICRC until 1988 and was to become member of the IFRC only in 1989 - eight years after its creation (CVM, 2006).

Changes were indeed noticed from the moment CVM became part of the International Federation of the Red Cross movement. By the end of the 1980s (1989/1990), members of the committee board were no longer appointed by the government but elected within CVM, and increasingly CVM started to claim its autonomy and independence². This was, partly, a reflection of the growth of CVM in terms of programmes and staff. With drought and civil war in the 1980s, CVM became an international aid channel to assist the victims and the organization grew in financial, material and personnel terms. From an organization comprising a handful of people at its creation, providing first aid and sanitation campaigns in communal villages, factories and cooperatives, CVM became heavily involved in distributing humanitarian aid to drought and war victims. By the end of the war in 1992, CVM had about 500 employees³.

In 1992 the civil war ended in Mozambique and with this, the international funds for emergency response started to drop. This forced many organizations including CVM to start a restructuration process. CVM had to reduce its staff to nearly 130 employees, and approved by the end of 1990s, new statutes, vision and mission⁴. Moreover, CVM decided to shift from top-down interventions to bottom-up approaches. Within this approach, needs are assessed and decided at district and provincial levels while the national level is engaged in aggregating and producing a broader national intervention plan based on the inputs brought in from the local communities⁵.

¹ Interview with Respeito Chirindza, Head of CVM volunteer's network, Maputo June 14, 2007

² Interview with Fernanda Teixeira, CVM General Secretary June 8, 2007

³ Interview with Fernanda Teixeira, CVM General Secretary. Maputo, June 8, 2007

⁴ Interview with Luisa Mboana head of Human Resources Department 29 March, 2007

⁵ Interview with Ivete Dengo, CBDRM coordinator May 22, 2007; Rabeca Chalufu Head of the Department of Disaster Risk Preparedness June 06, 2007

Currently CVM has infrastructures and representations in all of the 11 provinces of Mozambique. At national level- the headquarters- there is a President and a General Secretary. Both are elected and have different functions. The President is a political figure with a political mandate while the General Secretary does the managerial tasks, coordinating the everyday activities from the different departments and projects all over the country. The headquarters comprised by 2007 six departments (Human Resources; Community Development; Disaster Risk Preparedness, HIV and AIDS; Administration and Finances, and Information Management and Marketing) and had five major projects underway on water and sanitation, HIV and AIDS, community development and disaster risk preparedness⁶.

At the provincial level, CVM has a Provincial Delegation comprising the president and provincial secretary with similar functions like that of the national president and secretary but downscaled to the provincial level. The departments indeed stretch and one administrative staff member runs the organization. They may employ some short-term staff to deal with a specific project during the period of its implementation. The structure ends at the district level where a District Commission is made up of seven members. They are headed by a district president of the Red Cross who represents and coordinates the Red Cross activities at the district and community levels including the recruitment and training of new volunteers. By 2007 CVM had 267 fulltime staff and about 5,000 volunteers nationwide. It had a district commission in nearly every district⁷.

A major challenge CVM is facing relates to sustainability. The organization can hardly pay staff salaries to maintain a professional and well motivated staff. The fierce competition for funds and qualified staff has been pressuring the organization to find alternative financing mechanisms and new partners. Amongst other processes, CVM has been approaching again the government of Mozambique for financial and material support⁸.

CVM: ARENAS AND THE POLITICS OF SURVIVAL

The history of the Mozambican Red Cross, described above, has to be understood within the broader national dynamics. The international recognition of the CVM from 1988 and its integration in the ICRC and IFRC movement is not a mere coincidence. It emerged from arenas where the national government, local and international actors deployed different strategies and attempted to fulfil different agendas. As I discussed in chapter two, the international community was very much interested in detaching Mozambique from the socialist block and in pushing the country towards market economy, democratization and structural adjustment programmes. In

⁶ Interview with Moises Inguane head of Information Management and Marketing Department on March 27, 2007

⁷ Interview with Luisa Mboana head of Human Resources Department 29 March, 2007

⁸ Interview with Luisa Mboana head of Human Resources Department 29 March, 2007

turn, in order to access the much needed western resources, the government of Mozambique started, from 1987 onwards, to implement different strategies which allowed it to gain western sympathy. Changes in leadership, implementation of structural adjustments, improvement on human rights records, Pope John Paul II's visit amongst others, helped, to ease relations between Mozambique and the West and provided room to manoeuvre for CVM.

Nonetheless, with the international acceptance, CVM had to place itself between international, national, and local demands. This brought in many challenges. While the Red Cross had to become sensitive to the western approach to 'profit' from the international sympathy, the government wanted to maintain its power and influence over CVM. In 1987, the government replaced reverend Isaías Fuzamo from the Presbyterian Church who had been the president of CVM since 1981 with a military commander, General José Moiane. To soften its approach the government appointed Janet Rae Mondlane, the American wife of former president Eduardo Chivambo Mondlane, to be the General Secretary of CVM. Janet was somehow strategically placed to divert criticism for the military command but also to allow western sympathy, especially the Americans, in channelling aid. Janet was welcomed but the Army general was rejected by the international community and was replaced by Dr. Sinai Jossefa Nhatitima in 1989.

The alliances with ICRC and IFRC allowed CVM to slowly detach itself from the government and by the end of the 1980s it was no longer receiving financial support or (strict) guidelines from the government. The organizational objectives have also shifted. While initially it was set to run activities related to health care under the guidance of the Ministry of Health and Frelimo Party, the objectives in the 1990s were to '*contribuir para prevenir ou aliviar o sofrimento sem discriminação de raça, crença religiosa, condição social ou opinião política da vítimas, meaning, to contribute preventing or alleviating the suffering of victims without discrimination of race, religious belief, social status or political affiliation*' (CVM, 2006).

Despite these changes, the umbilical link between Frelimo and CVM remains and its a valuable asset for CVM survival. Being affiliated to the government and to the Frelimo Party is crucial for individual and institutional survival in Mozambique (DFID, 2006). CVM still presents itself from time to time and is still largely perceived in Mozambique as a government apparatus. In practice, CVM finds room for manoeuvre in using and negotiating these different identities. Thanks to the humanitarian principles, CVM finds ground and has more weight in discussions with the government⁹ and by using a pro-government identity it can claim access to state resources. For instance, by presenting itself as a government apparatus, CVM claims tax exemption on its imports.¹⁰

⁹ Interview with Dra. Fernanda Teixeira, CVM General Secretary June 8, 2007

¹⁰ Interview with Dra. Luisa Mboana from Human Resources Department and with Jacinto Moiane from Administration and Finances Department on 28 of March 2007; Interview with Moises Inguane head of Information Management and Marketing Department on March 27, 2007

The relationship with the international community has also been taking place in arenas embedding different discourses and practices. In the 1980s when aid poured in to respond to the complex emergency described in chapter 2, international aid to CVM was channelled through ICRC and IFRC. In practice, CVM worked as a sub-contractor of these two international organizations. They had the financial means and CVM implemented the activities. It was the ICRC and IFRC through expatriates who planned, budgeted and reported to the donors. As the humanitarian situation degenerated, more resources were channelled and more international and local staff was needed nationwide. By the end of civil war in 1992 CVM had about 500 national staff, paid basically by the international community through ICRC and IFRC.

The voluntary base as well as the national capacity to undertake the core activities of planning, budgeting and reporting had been eroded, and as these activities were undertaken by expatriates, a certain perception of 'their programme' was established within the CVM. In the meantime, the international community had also developed the perception that CVM had little or no capacity to handle tasks beyond implementation.

The vision of CVM as 'their project' was coupled with an image of 'lack of capacity' within CVM. This produced a self-perpetuating vicious cycle. Local staff which, over time turned to be oversized and under-supervised, had low commitment and tended to use ICRC and IFRC projects to meet their individual interests. Up until the end of emergency activities in 1994 corruption, theft, misuse and misappropriation of organizational goods within CVM became endemic¹¹. This context tended to increase the international community distrust of the national staff and its capacity, and to trust and invite international staff for managerial positions.

With the end of the emergency, funding was reduced and staff numbers had to be downsized. CVM entered into a restructuring process sending off about 1/3 of the staff and shifting from emergency operations to development interventions. It is within this context that the organization started to claim for a better placement in planning, implementing and evaluating the interventions. In the meantime, a trend was emerging internationally that would substantially change the local realities of the CVM. A number of national societies from the North were no longer happy to channel their contributions through the IFRC. They preferred to work bilaterally. This was a response to a perceived ineffectiveness and bureaucracy within the IFRC, yet they may also be understood to have a desire to become more active and visible in international work¹².

By 2008 there were present in Mozambique the German National Society, the Americans; the Australians; the Belgians; the British; the Danish; the Spanish; the Finnish; the Norwegians, the Swedish and the Icelandic, all of them working with CVM in what is locally known as the *sisters societies'*

¹¹ Interview with Dra. Fernanda Teixeira, CVM General Secretary June 8, 2007

¹² Interview with Dra. Eunice Mucache, CVM Program Director. Maputo, June 7, 2007

*partnerships- parcearia de sociedades irmãs*¹³. The number of national societies shifts from time to time depending on projects being implemented.

The increase in the number of national societies leads to a number of new challenges. Each of the sister societies has its own programme managers coming mostly from its own country. They are ultimately the ones who report to the donors and do the planning. CVM still plays the same role as before- to get money to implement the projects and submitting reports to the expatriate programme manager.

There was an initial attempt to let local staff lead the process by allowing them to design the projects but the general response was poor. There are different claims on this. The national staff claims that donors are more willing to fund projects if their own national staff writes them even when the proposals are technically not superior to those produced by them¹⁴. On the other hand, the expats claim that CVM staff has limited capacity to write convincing proposals, do the planning and carry out adequate monitoring which can respond to donor's demands¹⁵.

In this arena, CVM has chosen to follow a 'soft approach'- the 'swallow the frog (*engolir sapo*) or sit back and take it approach'. The 'sit back and take it approach' means that one never argues, even if one does not agree. CVM adopted this strategy because they depend heavily on the sister societies' for its survival. CVM depends on the international community for about 60 percent of its needs¹⁶ and if funds were to stop flowing from the international community, CVM would virtually collapse. The government, as I said earlier, had long stopped funding CVM during the emergency phase when international influx to CVM started around 1988. The 40 percent comes from revenues based mainly on the rent of properties and some donations from national companies and individuals. The 40 percent is used to pay the housekeepers and the secretaries. The remainder of the staff, that is the large majority, depends on international funds¹⁷. Thus, 'sit back and take it' is a survival strategy in its own right.

The 'sit back and take it approach' has shown to be very complex and demanding. Different national societies had different projects, different planning, monitoring and reporting procedures and tended to work with a specific department which was handling its own project and was paying the salary of the staff. CVM became a compartmentalized or *projectamentalized* institution, with different departments not necessarily reporting to the CVM General Secretary but to each of its project managers. Each department or

¹³ Interview with Eunice Mucache, CVM program's director, June 7, 2007

¹⁴ Interview with Ivete Dengo, CBDRM coordinator May 22, 2007; Rabeca Chalufu Department of Disaster Preparedness and Response June 06, 2007; Interview with Respeito Chirindza, Head of CVM volunteer's network, Maputo June 14, 2007 Ataide Sacramento, Department of Disaster Preparedness and Response June 8, 2007.

¹⁵ Interview with Finish Red Cross Country Coordinator, May 9, 2007; with German Red Cross Country Coordinator May 2, 2007; with Island Red Cross Country Coordinator, May 10, 2007

¹⁶ Interview with Dra. Luisa Mboana from Human Resources department and with Jacinto Moiane from Administration and Finances Department on 28 March 2007

¹⁷ Interview with Dra. Luisa Mboana from Human Resources department and with Jacinto Moiane from Administration and Finances Department on 28 March 2007

project had its own budget, bank account, salary policy and was managed differently from the others. Staff within the institution was not communicating and it could happen that staff from two or more departments were going to the same place but each using their own cars and resources.

The situation was getting chaotic and an audit carried out by PRICEWATERHOUSECOOPERS (PWC) in 1999 found a number of problems. There were no formal written accounting procedures and procedures governing procurement. Field staff had no staff procedure manual, tax income deduction was selective and some employees had no contracts. There were no salary payslips, bank statements and accounting records at field level. Staff debts were not paid, assets were not registered or accurately recorded and there were no reports of incomes generated at the provincial and district levels. The overall evaluation on key areas such as procurement procedures, salary policy, cash and bank balances, disbursements, fixed assets, travel and per diem, computer information system, asset verification at project field level office and on income generation was weak (PWC, 2000).

Due mainly to the 2000 great flood in southern Mozambique and 2001 on the Zambezi delta, CVM was not able to implement the recommendations from the audit but from 2002 changes started to take place. A new human resources director was contracted and the finances were centralized at the Department of Administration and Finances (DAF). By July 2002, a uniform payment policy entered into force by which salaries were no longer paid by cheques but through bank account transfer. Moreover, a salary categorization procedure was implemented by which all project staff regardless of their department would be ranked accordingly and receive a salary based on the category. Thus, national project managers regardless of their project received the same salary and at the provincial level, project managers at provincial level got the same salary regardless of the province and of the project in which they were working. To meet the administrative costs CVM asked each project to allocate 10 percent of their budgets as administration costs¹⁸.

Response from national societies and donors were not straightforward. Although donors and national societies agreed on most of the changes, they were keen on their individual reporting formats and budgeting lines. Some had monthly reporting, others quarterly, per semester, annually or all of them. Moreover, there was less interest on funding administrative costs and salaries for non-programme staff (Moiane and Ingimarsdottir, 2006:4). This tended to squeeze CVM's financial capacity and to overload the staff at the Administration and Finances Department. Emerging from this, CVM called for a partnership meeting on November 16-17, 2004 to discuss the reporting problem. The aim of the meeting was to produce and agree on a standardized and harmonized reporting format, which would increase the efficacy, effectiveness and timely reporting of CVM. Moreover, it was thought that the standardized reporting format would reduce stress and pressure among the

¹⁸ Interview with Jacinto Moiane from Administration and Finance Department on 28 of March 2007

financial staff, which ultimately would restore the human rights and dignity to the financial staff (CVM, 2004:7).

Slowly, changes have been happening. But due to a constant staff turnover from CVM and also from the partners, the message and the procedures have to be repeated over and over again. Moreover, each partner still looks at each situation differently and power relations still play a role. For example, during the 2007 flooding I attended different meetings between CVM and its partners. One of these was the meeting on 28 March 2007. Here power relations surfaced sharply when discussions were held about how to arrive at a needs analysis and workplan for recovery in the disaster affected areas.

Initially it was agreed between the representatives of different national societies that the best way to do that was to look at what is already there- the existing tool for planning recovery. Therefore, it was suggested and agreed that partners would have to find tools and bring them for discussion next day. On the next day, a high ranking representative from the IFRC who had been absent on the last day disagreed with the methodology and with the assessment as such. *'We don't proceed with the assessment the way it was planned before. Most information is already available and there is no need to spend 2-3 weeks for extra assessment. My suggestion is to go straight to the plan of action. We bring representatives from the provinces, discuss with them and make plan of action. I want to apologize for not being here yesterday and for this inconvenience!'*

The representative of Iceland and most of the CVM staff looked disappointed. The Iceland representative told me that people had already spent a lot of time in planning the recovery from the bottom-up and attempting to find the right tools. She added that it was a fallacy to think that from Maputo and without a clear knowledge from the field, we could make a proper plan of action. She was also not enthusiastic about bringing the provincial representatives to voice their needs and properly fix them in space and time, as their analytical capacity was perceived to be low. A higher ranked member of CVM told me the next day that *'I was the first to look disappointed yesterday. I am concerned with long-term impacts; IFRC will be going and we will be staying to continue the job; we need a clear criteria for example to choose the areas where we will be working and I don't think that the representative will provide us with the right information; they will attempt to choose areas of their interest rather than using an objective and thoughtful analysis'*. When I asked why CVM did not voice against the proposal from IFRC she suggested that it was IFRC who makes the appeal!

In the end the IFRC had its way. The provincial representatives came to Maputo and based on a rule of thumb the plan of action was designed on April 13, 2007. Backstage, some CVM staff members were just laughing at the plan. *... '630 latrines in six months in just one province is unrealistic'; ... 'how can one make a recovery plan putting aside the livelihood component?' ... 'It is awful but let's use the six month recovery period to advance our life from the per diems!'*

These offstage comments and conversations tend to show that the 'sit back and take it approach' is not necessarily all about subservience and compliance. Overt and covert manifestations of disagreement occur and staff

from CVM do not necessarily fashion their experiences based on the donor's discourse. This may not be obvious at the headquarters in Maputo where a certain diplomacy is played but, as we shall see later in this chapter, down at local levels this is very much the case.

Besides the relationship between CVM and donors, there are internal dynamics within CVM that need to be addressed as well. CVM is still a large organization with nearly 5,000 volunteers and about 200 permanent staff. The relationship between the different staff members and departments at different levels from headquarters down to the local level is a hectic issue with hierarchies and status playing a critical role (Vonhof and Hilhorst, 2004:9).

Different departments tend to battle for donor's resources and to downplay each other. Departments that run hard interventions such as building schools, hospitals, water pumps, think themselves as superior compared to those who run sensitization campaigns and provide first aid. These processes tend as well to reinforce the 'compartmentalization' process, and to forge hierarchies and status. This has been reinforced by donors' behaviour over time; donors prefer to fund projects and departments that can provide hard/numeric indicators of performance rather than those whose impacts are hard to evaluate in a short time¹⁹. Although the organization had been attempting for an integrated approach, by 2008, departmentalization and 'projectification' was still the everyday institutional practice at the CVM.

The relationships between the headquarters down to local levels depend on several factors including the personality and character of the actors involved; projects being implemented; implementing and reporting capacity; personalized ties between individuals in different levels; the issues under the relationship; the capacity of the provinces or districts to mobilize internal resources among others. I will exemplify this in the next section when discussing the CBDRM project in Cocorico.

I followed the CBDRM project as part of the research setup, which involved, as mentioned in the methodology section, CVM, The Red Cross/Climate Centre in Netherlands, Wageningen University and Eduardo Mondlane University. My involvement aimed at building a case study that could document and learn from CBDRM approaches, revealing how CBDRM helps to reduce disaster risk, how it enters the lifeworlds of local people and how local people appropriate, transform and make use of CBDRM in their everyday lives. This was possible by living in Cocorico (see previous chapter) and by interacting with CVM staff at different levels, and volunteers at local level.

¹⁹ Interview with Ivete Dengo, CBDRM coordinator May 22, 2007; Rabeca Chalufu chief of the Department for Disaster Preparedness and Response June 06, 2007

DISASTERS AS AN OPPORTUNITY

Disasters are twofold events. They may bring along deaths, losses and disruption, but they emerge also as an opportunity. Disasters increase the attention on development failures and asymmetries, and force technical, policy and political changes (Pelling and Dill, 2009). Disasters have forced political changes in Dominican Republic, Bangladesh, Nicaragua, Mexico and Haiti (Drury and Olson, 1998) while humanitarian aid to Afghanistan has been used by donors as an instrument to fight terrorism (Atmar, 2001).

The magnitude and impacts of the 2000 'great flood' in the south opened up room for different actors to recommend and implement disaster risk reduction interventions in Mozambique (c.f. Christie and Hanlon, 2000; CVM, 2001; Moore *et al.*, 2003). Internationally CBDRM was an emerging and growing discourse on disaster risk reduction that made its way in Mozambique following the 2000 disaster.

The 'adoption' of CBDRM was eased by the fact that the Mozambican government had decided to embark on proactive and bottom-up approaches when it replaced DPCCN with INGC in 1999. On the other hand, many humanitarian and development organizations involved in rescue operations still had budgets available from the support generated to respond to the disaster and to contribute to the reconstruction process²⁰. Moreover, the fact that CBDRM was also a dominant international approach on disaster reduction tended to ease the funding process.

By April 2008, the government of Mozambique claimed to have created 130 CBDRM programmes while 28 others were in the pipeline²¹. CBDRM in Mozambique involves basically the setting up of a community committee to look after disaster risks within their community. The committee is expected to develop, with local engagement, vulnerability reduction interventions, to provide information on hazards and, in times of disaster, to help people evacuate and provide them with shelter. The committees comprises between 10-15 people each of them with a specific mandate (i.e. person responsible for evacuation; for shelter; for early warning). In the section that follows I will discuss in-depth the everyday life of a CBDRM in Cocorico community, Mopeia district.

²⁰ Interview with Claudio Jamal, World Vision CBDRM project manager, May 21, 2007; Interview with Ivete Dengo, CVM CBDRM project coordinator May 22, 2007

²¹ Interview with Dr. Ana Cristina from INGC, April 28, 2008

THE EVERYDAY LIFE OF A CBDRM: CBDRM PROJECT IN COCORICO

Project background

In the previous section, I highlighted that the 2000 floods opened an opportunity for the use of CBDRM approaches in Mozambique. The CBDRM project in Cocorico was part of this new approach of disaster risk reduction. Following the 2000 flooding IFRC and the Danish Red Cross (DRC) who were both heavily involved in humanitarian operations, decided to embark on a more proactive disaster management approach in Mozambique. They opted to support the CVM in implementing CBDRM projects in some disaster-prone areas.

In 2001, a pilot CBDRM project was carried out in two provinces. The DRC supported a pilot project in two districts of Inhambane province, while the IFRC supported a similar project in three districts of Zambezia province. DRC brought an expert on CBDRM from the Philippines while the IFRC brought in an expert from Latin America. Those experts trained senior CVM staff on CBDRM who, together with the experts, disseminated the knowledge to local volunteers who had the final responsibility of implementing the approach in their communities. This pilot project focused on flood and cyclone early warning systems. For the implementation, volunteers received broad-range training on issues such as first aid, Red Cross principles, logistics, boat rescues, early warning, latrine building, water chlorination and identification of safe and risk areas (IFRC, 2002; Vonhof and Hilhorst, 2004).

Based on the lessons learnt from the pilot project, the DRC decided to fund a four-year 1.7 million USD (about 10 million Danish Crown) CBDRM project. The project was to be implemented from 2002 to 2005 in the same provinces as the pilot project but with a larger number of communities. The project intended to assist 45 communities but successive evaluation led to new targets. The number was reduced to 30 in 2003 and 21 in 2004. In the end, 18 communities were reached by the project: 9 in Zambezia province and 9 in Inhambane. Cocorico was one of the 18 communities chosen for this follow up project.

Based on project documents, field visits and interviews, a final external evaluation was carried out by a consultant in July 2005 which brought 36 recommendations which altogether would lead to better performance of phase II or future CBDRM projects by CVM (Reimer *et al.*, 2005). The recommendations addressed a wide range of issues. It questioned the methodologies used in setting the project and selecting the community; the capacity building process; the partnerships developed during the implementation of the project. The recommendations also made observations on the administration and project management. Regarding this last point, the evaluator recommended to give primary responsibility and authority of the project to the national staff. However, there was no phase II and the recommendations have literally remained in the offices.

The following sections of the chapter, open up the different arenas and encounters between the different actors involved in the project. I attempt to disclose how the CBDRM project in Cocorico was perceived and acted upon by different actors at different arenas and encounters and how it strengthened local capacity to adapt to hydrologic natural hazards and secure livelihoods.

DISPUTING PROJECT OWNERSHIP

By the beginning of the year 2001, CBDRM and proactive disaster management were still very much a novelty in Mozambique. Most of the organizations working on disaster management including the CVM had accumulated a long experience of reactive humanitarian assistance but little or none on preparedness and risk reduction. Thus, when the project was proposed, CVM itself had to learn what it was and how to run it. The Danish Red Cross prepared the project proposal and all the proposed activities, methodologies, didactical material and budget. It was based mainly on experiences in the Philippines²². The DRC had two expatriates in Maputo and one in Inhambane coordinating the project. For Zambezia, one national technical staff was hired.

To link up with the project expatriates, CVM appointed, at headquarters level, one staff member from the recently created Department for Disaster Preparedness and Response who was also to learn about the CBDRM for future prospects. While national staff was still learning the approach, initial training, regulations and CVM institutional strategy for CBDRM were designed and promoted by the expatriates. Financial disbursement depended also on the approval from the expatriates²³. Thus, during the initial stages the project was largely owned by the funding organization and expatriates.

Nonetheless, over time problems around project ownership started to surface²⁴. CVM staff started to ask to be given primary responsibility and authority of the project. They questioned the expertise of the expatriates and the one based in Inhambane, a touristic province, was even labelled a tourist rather than an expert on the CBDRM. Passive and active confrontation between national staff and expatriates were recorded specially in Inhambane province²⁵. This was further amplified when training on CBDRM occurred in the provinces and districts. During the training participants complained that it was difficult to read and understand the materials and that it lacked adjustment to the Mozambican reality (Rios and Nicolson, 2002:4). There were also complaints that 45 districts was not a feasible scale due to distances and

²² Interview with Ivete Dengo, CVM CBDRM headquarter project coordinator May 22, 2007.

²³ Interview with Rabeca Chalufu, head of Disaster Preparedness and Response department at the CVM, June 6, 2007.

²⁴ Interview with Alfredo Chiosa, CVM Maputo provincial secretary. Maputo, 11 May 2007; interview with Ivete Dengo CVM CBDRM headquarter project coordinator May 22, 2007.

²⁵ Interview with Ivete Dengo, CBDRM headquarter coordinator May 22, 2007.

available resources. The target of 45 communities was seen as an outsider's ignorance (those who designed the project) of the Mozambican reality²⁶.

To settle the differences, a project review took place in April 2003. Amongst other measures, the project objectives were reformulated and the number of target communities reduced from the initial 45 to 30. These adaptations and the project review marked the initial claim of project ownership by the CVM.

Despite this attempt, implementation and coordination problems remained and a second project review was undertaken in September 2004. During this second review, the number of target communities was further reduced to 21 and DRC agreed on handing over much of management and decision-making tasks to the national staff²⁷. This new set-up remained up to the end of the project although by the end, the project managed to reach 18 rather than 21 communities.

Project ownership has, thus, passed through different stages by which different stakeholders shared different 'contested' powers. At the start, the project was to a large extent owned by the DRC who had resources - both knowledge and financial- and tended to guide most of the intervention practices. Over time, project ownership was contested by CVM who ultimately managed to secure a large share of decision-making. A power-sharing and less ambitious plan of action came to be the reconciliatory tool for different interests and contested powers. This shows that power is not absolute or constant over time. It shifts from time to time, depending on how the actors manage to assemble the critical factors of power yielding. It further stresses that the 'sit back and take it' approach is not all about subservience in order to survive. Contestation is part of the process, especially at local levels where projects are implemented.

THE POLITICS OF CHOOSING COMMUNITIES

Both organizations (CVM and DRC) have defined poor and vulnerable groups in highly disaster prone areas as their major criteria to define the project beneficiary communities (CVM, 2002:6; CVM, 2002a:4; CVM, 2002b:3; CVM and DRC, 2002:2). Thus, humanitarianism and altruism are evoked in selecting and working with particular communities.

Nonetheless, although these criteria were relevant they were finally not the determinant for the CBDRM project. For CVM, projects should be implemented in a district where the local CVM branch (i) has capacity to implement a project; (ii) is performing well, thus, rewarding it for its performance or, (iii) in a district where there is prospectus of new projects. Furthermore as the organization had decided to embark on an integrated approach (iv) projects should be implemented preferably, where there were

²⁶ Interview with Ivete Dengo, CVM CBDRM headquarter project coordinator May 22, 2007.

²⁷ Interview with Rabeca Chalufu, head of Disaster Preparedness and Response department at the CVM, June 6, 2007

already projects and capacity so that the overall impact and CVM visibility would be higher²⁸. For its part, DRC had been supporting relief and rehabilitation activities in Inhambane province since 1998 and was very much interested in linking up relief with long-term CBDRM projects in that province, especially in the communities, it had already been working (DRC, 2002:1). The choice of communities was thus less needs based but directed by internal organizational considerations.

At the local level, the government surfaced as a key player in choosing the communities. Project implementation either by NGOs or by the government tends to boost government prestige and it is used during electoral campaigns. In most of the country, it is widely known that NGOs and donors cannot present themselves as the front-liners of project implementation or funding. Government officials 'oblige' them and the local population as well, to acknowledge that projects are being brought in and run by the government. Backstage, various organizations supporting INGC were complaining in 2008 that they were not allowed to put their institution's name in promotional materials such as T-shirts, caps, etc. although they were the sponsors of such material; only the INGC stamp was allowed in such materials. In general, communities that are selected appear to go hand in hand with the political objective of boosting government visibility and prestige. In Inhambane, for instance the selection of districts and communities was highly determined by the government officials (Reimer *et al.*, 2005: 12).

In short, community selection involved different politics and interests by the different actors in the arena. At the end it appeared that vulnerability, poverty and risk were not the sole driving forces for choosing the communities for project implementation. The chosen communities appeared to be an emerging property of different agendas and social negotiation of the major actors in the arena namely, CVM, DRC and the government.

THE PROJECT AT DISTRICT LEVEL: EXCLUSION AND THE MYTH OF LACK OF CAPACITY

At the provincial level in Zambezia, the project hired a national manager, *técnico provincial do projecto*, whose duty was to supervise the project implementation in three districts of Maganja da Costa, Namacurra and Mopeia. The district and the community levels were the major implementation sites of the project. In this chapter I focus on Mopeia district where Cocorico is located. In Mopeia CVM has a local branch, *comissão distrial*, comprising, a 7 member district commission, a president, 50 active volunteers, a warehouse and an office which turned later to be a sort of guest houses for increasing CVM's revenues. The number of volunteers changes from time to time depending on multiple developments including humanitarian and

²⁸ Interview with Dra. Fernanda Teixeira, CVM General Secretary June 8, 2007; with Ivete Dengo, CBDRM coordinator May 22, 2007; with Rebecca Chalufu chief of the Department of Disaster Preparedness and Response June 06, 2007

development projects. For the purpose of CBDRM in Cocorico, 20 volunteers were involved. 15 of them were from the 3 areas (Mulamba, Sanguimbe and Cuara) where the project was implemented and 5 from the district level. The selection of the volunteers at the Cocorico level is an issue which I will discuss later. Now I will discuss the politics involved in choosing the volunteers at the district level and what impact it has for the CVM as a whole.

Volunteers are the backbone of the Red Cross Societies worldwide. The Red Cross movement has about 20 million active volunteers worldwide²⁹ but it is naive to suggest that volunteers everywhere do the job merely on a voluntary basis following the Red Cross principles. In Mozambique, due mainly to overwhelming unemployment, it appears that a significant number of the volunteers see their duties more as employment rather than voluntary work³⁰.

During fieldwork I accompanied volunteers on work trips, on training sessions and social events such as parties and soccer games. In these events we chatted about their occupations and how they perceived their jobs. After some time I started to observe some discrepancies in the capacities of volunteers. I had contacts with volunteers who were not in the CBDRM project but had considerable skills compared to those within the project. They were able to write proposals and successfully submitted them for funding and were funded. They did not expect provincial or national guidance to start new projects and interventions which seemed to boost CVM. Volunteers that came to me and asked me to help them improve their proposals or with vague project ideas which they needed to crystallize. I also interacted with volunteers involved in projects where they followed guidance from superiors without questions even in the face of glaring ambiguities.

As I attempted to understand the selection criteria I came to realize that selection depended heavily on the relationships that volunteers had with those who had the power to enrol them in projects. Developing good relationships with the chiefs allowed them to succeed in being enrolled without fuss. In turn they had to do different favours to the chiefs. They brought them gifts, bought them beers and never talked bad things about them especially to their superiors. In short, they need to 'polish the chief' in order to be enrolled. Like the 'sit back and take it' approach the volunteers could not present their own ideas or to contest the chief's decisions. They were not allowed to be smart, *esperto*, or attempt to be *esperto*. In the end, in most of the cases, it was not one's capacity to do the job, which was relevant for the enrolment in projects, but the capacity to polish the chief. This appeared to have been the major criterion in selecting the volunteers in Mopeia.

Most of those considered *espertos* were not welcomed in projects because they were not good polishers meaning, they were not a kind of 'yes boss'. In the meantime, the polishers that became involved interacted with other project actors and during these interactions, their limited capacity

²⁹ www.ifrc.org accessed November 20, 2010.

³⁰ Interview with Respeito Chirindza, Head of CVM volunteer's network, Maputo June 14, 2007

surfaced. In the end, the other project actors sustained the claims of lack of local capacity because they had been exposed to those without capacity rather than to those excluded but with considerable capacity required for the local levels. In this way, the image was perpetuated of Mozambican Red Cross volunteers lacking capacities.

I am not suggesting that there is always capacity at local level nor that in every situation qualified staff is marginalized and if marginalized it is due to clientelism relationships. There are a number of reasons why people may be marginalized including their social behaviour, health problems, and cultural worldviews, among others. Rather, what I am attempting to highlight is that the claim of lack of local capacity needs to be analyzed. The analysis needs to look at the politics involved in contracting staff, ascribing tasks, confronting chiefs and bringing new and innovative ideas, rather than merely looking at whether the staff has received enough training. Moreover, I want to stress the need to look beyond the gatekeepers and attempt to get a broader overview of the context.

But are we willing to do that? The system has become so well developed and rewarding for both external and local actors that lack of capacity is one of the 'begging' strategies and becomes instrumental to claim aid. Chiefs and their collaborators tend to close up contacts with those beyond their network of clientelism and under short term evaluation missions it is just impossible to go beyond their networks. But as the process crystallizes, the capable people may leave the institution and the institution is operated by people who expect guidance from national or international level. Otherwise, capable people close themselves in and their efforts become minimal as well. In both cases, the needed narrative of lack of national capacity is institutionalized, perpetuated and expats managers are sent in.

THE PROJECT AT COCORICO LEVEL: THE UNBUNDLING OF COCORICO COMMUNITY

As I described in the previous chapter Cocorico is a three site conglomeration of households about 15 kilometers from Mopeia village. Historically, Cocorico has never been labelled neither a community nor a village. It is a chieftaincy comprising scattered houses around the north Zambezi River bank in the South-West region of Mopeia district. Up to now Cocorico and many other chieftaincies on the Zambezi delta are neither termed communities nor villages but *regulados* or *povoados*. Most, if not all, of what are called communities right now in Mozambique are geographical areas belonging to traditional chieftaincies- the *regulados* or *Inhacuaauas* as they are called in the Zambezi delta.

External interventions brought the concept of community but also tended to use it according to the objectives. In 2007 humanitarian assistance to flood affected Cocorico's people tended to take the three conglomerations (Mulamba, Sanguimbe and Cuara) as one community- the community of

Cocorico. Nonetheless, during the CBDRM project implementation, CVM and DRC took the three conglomerations as three distinct communities, basically as a way to increase and achieve the targeted number of communities. In the project documents the three appear as separate communities and if this were not the case the number of communities would fall to 16 rather than the 18 achieved.

Floods tend also to unbundle Cocorico's geographical boundaries. There are 'small scale Diasporas' from Cocorico in each resettlement centre where people from Cocorico are living. As the government policy in resettlement centres is to place people coming from the same place together-attempting to recreate the origin- there is Cocorico in Mopeia village (24 de Julho resettlement centre); in Chimuara (Dzandza resettlement centre) and in Marromeu (Chupanga resettlement centre).

From all this, it seems that the concept of Cocorico community is being used differently by different actors and more importantly the community itself does not exist locally either as a concept or as a clearly geographically demarcated area. For intervention purposes it appears that Cocorico is being unbundled, merged or split according to the intervention objectives.

PROJECT CAPTURE BY THE LOCAL ELITE

Once the communities have been selected the next step according to the implementation plan, is to approach local community leaders, *autoridade comunitaria*, to ask for permission to start the project. The overall assumption is that local leaders are powerful enough to influence any project's outcome. If they cooperate and are fully involved then the project would succeed. Conversely, without their involvement the project would likely fail. This assumption does not take into account that local leaders have their own projects and may use external intervention in achieving them. This was the case with the current project in Cocorico and in this section I discuss the project capture by the *autoridade comunitaria*.

CVM approached the *autoridades comunitarias*, explained the project and asked them to create a local committee consisting of six local leaders or people selected by them, and to provide five to six people, selected by the community in a community meeting, to become CVM volunteers within the sites where the project would be implemented. In total each community should have between 10 to 12 people directly involved in the project including volunteers and local leaders³¹.

The selection process was not indeed as transparent as it should be. Community meetings were very restricted and most of those involved had some kind of strong links with the *autoridade comunitaria*. In Mulamba three out of the six committee members selected were sons of the local *sapanda* and the same people were also part of the CVM volunteers. In Sanguimbe, where the *Inhacuaua* lives, most of the committee members and volunteers appeared

³¹ Interview with Inacio Melo, CVM Mopeia district president, June 26, 2007

to be loyal to him. In Cuara the third conglomeration the story was the same. Overall, the selection criteria for the core implementing team at the community level involved loyalty relationships, elite capture and processes of exclusion. By the end, as we shall see, volunteers and local leaders who were supposed to be the vessel of the project implementation turned to be the major beneficiaries. This tended indeed to split the so-called community into beneficiaries and non-beneficiaries, producing power politics and contestation to the detriment of the concept of community as marked by unity.

CBDRM AND POWER POLITICS IN COCORICO

Traditional leadership such as *Inhacuaua*, *sapanda* and *fumos* are ascribed positions. Achievement and maintenance of the leadership depends heavily on the networks one is able to command first, within the close kin and then within the overall community. The positions may provide in most of the times, higher social status and prestige but it may also be used to secure material and financial gains. In Mozambique the *Inhacuauas* and *sapandas* do have salaries and entering and working in a community requires, as the CVM did, the approval of local leaders which may also mean accessing material and financial resources. When conducting my fieldwork local leaders would say things like: 'don't forget to bring me soap/a packet of cigars when you come back from the village/city' or, 'if you did not finish the oil/salt you are using for cooking may I have the remainder?' Or 'sorry I have a tremendous family problem to solve can you borrow me some money?'

To become *Inhacuaua* like for instance *Inhacuaua Cocorico* one needs to be appointed and approved within the *Cocorico* kin and then (to a lesser extent) from the community³². This process requires a lot of internal and external lobbying and conflicts for such positions have been noticed in different contexts in the south of Mozambique (Junod, 1996) and in the delta Zambezi (Negrão, 2001).

Conflicts over the position of *Inhacuaua Cocorico* were on the stage between two members of the *Cocorico* kin (*Fernando* and *Baptista*) when the CBDRM project started in *Cocorico*. The conflict started when *Cocorico* and other areas on the Zambezi delta were flooded in 2001 and most of the people evacuated to upper grounds. Most of the *Cocorico*'s inhabitants including the leader, *Inhacuaua Fernando Cocorico*, moved to *Chupanga* resettlement centre in *Marrromeu* district. In *Chupanga* *Inhacuaua Fernando Cocorico* was the aid channel to people of *Cocorico* and he managed as well to enroll as a CVM volunteer receiving double gains- as a chief and as MRC volunteer.

By March/April 2001, water levels had receded and some inhabitants started to go back to *Cocorico*. *Baptista Cocorico* was one of these people going back to *Cocorico*, but *Fernando Cocorico*, the chief, remained at the resettlement centre. Back in *Cocorico*, the returnees needed the administrative

³² Interview with chief *regulo* Chamanga, Mopeia village, May 7, 2008. Group discussion, *Cocorico*, September 24, 2007.,

structure for different reasons including resolving conflicts and for channeling their demands to the government. One of these demands was a need for seeds to restart the agricultural season. Fernando Cocorico was called to assume his position in Cocorico but he did not do so immediately; he only did it about six months later. The Cocorico kin found it necessary to fill the gap and Baptista Cocorico became the chief. However, not all the people welcomed the new chief. For most of the people whom I spoke to, he lacked some of the determinant characteristics required to be a good leader and a 'strong man'. Amongst them they include the fact that although Baptista was nearly 50 years old, he did not have any children. Moreover he did not drink, had only one wife and he was not an educated person.

In a 'macho' society such as Mozambique, the masculinity measured by the number of children and wives is a very relevant issue. Men in private would suggest that Baptista does not have the experience that the average local man has and therefore he could not solve properly social and other conflicts. Others have suggested that not drinking excludes Baptista from the average male's practices and from socializing with his people.

When there were negative responses from the government to their demands, this was largely attributed to the fact that Baptista was uneducated. In one group discussion with males in Mulamba one of those present claimed *'He does not know how to speak and convince the government. As he does not speak Portuguese properly, we even wonder if he actually managed to approach and speak to the government officials'*. In that meeting another person compared Baptista with Fernando and said: *'we have two primary schools and some water pumps thanks to Fernando; there is nothing from Baptista'*. In a meeting with fishermen some complained that Baptista used to be a good fisherman but since he came to power he ceased fishing and now asks the other fishermen to provide him with fish for his consumption. They coined him an 'old style leader like those that existed in pre-independence period', referring to the rent-seeking behaviour associated with the old leaders.

The district administrator and his immediate subordinate, the *Chefe do posto*, chief of the post, suggested that Inhacuaua Baptista was very fragile. In separate interviews they complained about the lack of obedience of local people to their chief. According to them from the overall district, tax collection was lowest in Cocorico. It also registered the highest refusal to the resettlement programme. On the 20th of October 2007 the district administrator visited Cocorico (in Sanguimbe) to have a meeting with the population and warn them about the forecasted flooding in 2008. Out of nearly 100 people expected, we were only about thirteen (13) at the meeting, mainly the local leaders. This was clearly attributed to his weak position. Due to his seemingly weak position Sapandas and Fumos commanded considerable power. People were more receptive to their commands rather than those of Inhacuaua Baptista. Problems were mainly resolved at the Sapanda and Fumos levels and sometimes people would jump to the district level at Mopeia village.

In order to rule it appeared that Inhacuaa Baptista needed the support of Sapandas and Fumos. He also needed external intervention to show that he was capable of capturing development intervention. The CBDRM largely, came in to fulfil this objective. The project did not only boost his image as capable of bringing external interventions but the project resources were also used to 'buy' Sapandas and Fumos' cooperation and loyalty. This included letting the Sapandas and Fumos appropriate the project and benefits at their own levels. Baptista intervention in selecting committee members and volunteers was very minimal outside his immediate surroundings in Sanguimbe.

CONTESTATIONS AND PROJECT APPROPRIATION BY ORDINARY PEOPLE

The assumption that local leaders are powerful enough to influence any project's outcome and that their full cooperation allows projects to succeed does not take into account that leadership may be contested and locals may have their own needs, understanding and the capacity to reshape interventions. In this section I discuss how ordinary people reshaped the project to fit their needs and understanding of the project.

Following the selection of committee members and of volunteers, CVM organized a training session in Mopeia village. In the training, CVM explained the objectives of the project which aimed at reducing the disaster risk, triggered by floods, in Cocorico. CVM explained also the role of committee members and of volunteers. Out of the six committee members, one had to listen to the radio and disseminate the information to a second person who was responsible for warning the chiefs and the whole community regarding an approaching natural hazard. The third person had the mandate to identify the escape routes. The fourth and fifth were responsible for identifying means of evacuation. The sixth member was responsible for shelter. The committee mandate was within flood response but the CVM volunteers had a broader mandate apart from assisting flood victims. In 'normal times' they were to assist in community health care through disseminating hygienic information, helping to build latrines and better granaries (CVM, 2005).

During training CVM announced that it would bring boxes containing flood preparedness material the *Kit de prontidão*. The rules for using the material were set out during the training. It was 'agreed' that the boxes would remain at the chief's houses (Inhacuaa and Sapandas) but the two keys to each box would be kept one by a volunteer and the other by a committee member, so that the boxes were not violated easily. At the end of the training, each participant immediately or afterwards received a free radio³³, rain jackets, rain boots, gloves and T-shirts with the project stamp. Besides that, each CVM volunteer received a bike and had incentives in kind

³³ Free play radio does not require battery to function. It accumulates energy by cranking.

(mainly food basket) in a trimester periodicity. These two latter incentives were not extended to the six-committee members.

Days later, the project delivered the boxes containing flood preparedness material. Each box contained megaphones, lanterns, kerosene lamps, life saving jackets, whistles, ropes and a stretcher. In total three boxes were delivered to Cocorico: one in Mulamba, another in Sanguembe and the third in Cuara. The boxes were so big that they did not fit inside the chief's houses. They were left outside (figure 4 below). This created overwhelming curiosity on the part of local population. Thus, if there was no widespread information regarding the project, the boxes had done a good job by themselves.

Figure 4: The flood preparedness box at the Inhacuaa Cocorico's house



Source: author

Back to Cocorico, after the training, the committees had to wait until the next flooding could come, which occurred in 2007 about two years after the project had finished. In the meantime, committee members asked for permission to use the megaphones and stretcher in daily life if needed. Stretchers were used to carry sick people and pregnant women while the megaphone was used to disseminate information such as incoming visits. Besides the tools contained in the kit, the volunteers asked for footballs and the use of whistles in football matches. This was actually an indirect way to open the box and evaluate what was useful for their everyday life.

In order to have access to the incentives, the volunteers were supposed to work about three days a week on activities related to sanitation and granaries. They were given forms to fill in their weekly activities. Records at the CVM district branch shows dozens of latrines and granaries made by the volunteers although in practice I have not seen latrines in Cocorico and none of the existing granaries were volunteers' work.

Once the project started, ordinary people largely realized individual gains but not really collective ones. They started to complain covertly and overtly demanding interventions that would benefit the whole community in

the short term. They mainly demanded a local hospital and canoes to evacuate sick people. This conflict tended to reinforce Fernando's prestige of being a good leader – who supposedly brought collective benefits- and to weaken Baptista's position. But the conflict over individual *vs.* collective gains went far beyond reinforcing/weakening each one's position. It has largely broken the Cocorico community into three new communities- Fernando's supporters who demanded his return to power; Baptista's supporters and the undecided.

Political labelling and mudslinging surfaced. Baptista and his supporters labelled Fernando and his supporters a gang of RENAMO³⁴ members and saboteurs of government development efforts. People's refusals to pay taxes and to follow Baptista's orders were blamed on Fernando and his followers. Labelling Fernando as a member of the opposition was, to some extent, Baptista's strategy to gain government support. Rather than being a tool for social harmony and cohesion, the project was politicised and became a weapon for contestation, conflicts and disintegration.

Following the contestations, the demands were channelled to CVM and it finally decided to build a hospital (a first-aid building) and buy a canoe. At last, the project was now owned by the common people not in the way it was designed by the intervening organizations but in the way the local people wanted it to be and fought in the arena to accomplish it. The project shifted from its initial focus on flood preparedness to people's everyday lives.

The appropriation of the project by ordinary people suggests that although local people may have appeared weak and voiceless in reality they had agency to an extent that they took the project to fit their needs.

THE PROJECT AND THE 2007 FLOODING

In the previous sections, I have discussed how the project was appropriated locally and responded to everyday concerns. But the major concern still remains. Was the project useful for real disaster situations? To answer this question I will take the 2007 flooding as the critical event to analyze if the project managed to strengthen local capacity for disaster risk reduction. For this purpose I will focus on three project intervention areas: (i) the dissemination of information about flooding, (ii) helping people to evacuate and, (iii) find accommodation.

Information on floods. Information on flooding may come from different sources including environmental cues, family, friends, government officials, radios, newspapers, local chiefs among others. In Cocorico 62 percent out of the 84 interviewed households got information from the radio and only 4 percent of them were informed by local committee members and 6 percent from local leaders (table 4.1. below). This suggests that local leaders and members of the local disaster management committee, especially the person

³⁴ By 2007 RENAMO was the major opposition party in Mozambique

responsible for warning, had little role in informing people. There are different reasons to explain this state of affairs. The committee was created just for the flooding period and 4 years went by without a flood occurring; there were no refreshing events and some members moved out of the community in the mean time. By the time the flooding period came to the fore, the megaphones had no batteries, making them useless.

Table 4.1: Major information source regarding the 2007 flooding

	Frequency	Percentage
Personal experience	2	2.4
Neighbors	2	2.4
Radio	52	61.9
Local disaster committee	3	3.6
Local leaders	5	6.0
Others	20	23.8
Total	84	100.0

Source: Author based on fieldwork data

When questioned which radios were used as a source of information, one third of the interviewed mentioned the Red Cross free player radios (table 4.2. below). Radios distributed by the Red Cross have thus played a role in informing people about the floods. People praised these radios essentially because of two things: (i) the radio does not require a battery, which would be costly, and (ii) they are made of sturdy components and are therefore durable—after all these years, most of the radios are still functioning. Nonetheless, despite early warning on flooding by radio, many people did not evacuate but some were forced to evacuate by the authorities meaning that the decision to evacuate is complex and beyond providing information (see chapter 6).

Table 4.2. Radio used as the source of information regarding the 2007 flooding

	Frequency	Percentage
Distributed by Red Cross	29	34.5
Personal/bought myself	27	32.1
No idea	28	33.3
Total	84	100.0

Source: Author based on fieldwork data

Helping people to evacuate. During the project implementation escape routes and safe places were identified. Members of the committee were supposed to help people escape safely from Cocorico to the identified safe places using the material from the provided kit. This is by and large how CBDRM appeared to work in the Philippines. I had about one month exposure and experience with disaster management practices in the Philippines from 30 October to 26 November 2006 (see methodology, chapter 1) and during this period I

attended a drill at Barangay Ilog, Infanta District. Before the drill, escape routes were set out and some people were assigned to help the evacuees to a safe accommodation point. The routes were well marked roads, large enough to allow cars to pass. The assistants that included local committee members and volunteers from the Philippine Red Cross had training on a broad range of issues including first aid and nutrition. But how does it apply to Cocorico's context?

To analyse it, we need to elaborate on three major assumptions supporting the approach. Firstly, the approach assumes that there are people in need of external help. Secondly, there is a need for an escape route and thirdly, that there is a need to identify collective accommodation/safe place. Analyzing how the approach applies to Cocorico's context, therefore, means looking at how these three assumptions are valid for that context.

Need for external help: In the previous chapter, I have described how a group interdependency system has evolved. This has been an adaptation mechanism which intermingles short and long-term interests as well as economic and social aspects of life saving and livelihood security. I have also outlined that the system is eroded and external help is increasingly needed.

However, external help for evacuation faces different challenges in Cocorico. Firstly, evacuation is a delicate process because people aim to secure both, life and livelihoods, in the short and long term (see chapter 6). Secondly, by the time of flooding in 2007, the committee had passed through different transformations including mobility of the members and it was no longer clear who was responsible for what. This added to the grievances between committee members and the volunteers. Committee members complained that volunteers had periodic incentives which they did not have themselves, as such they thought that volunteers should carry out the task of helping the people to evacuate. Thus, the conflict between the two groups produced a gap in the responsibility for evacuation. Thirdly, in contrast to the Philippines, where households live in close neighbourhoods, in Cocorico households are scattered in heavy shrub area. Thus, although people may have required help for evacuating, the physical environment made the task of helping each household evacuate almost impossible, if they had ever tried.

Need for escape route. In the Philippine context, escape routes are designed to facilitate the rescue operations. It is by following the escape routes that rescue teams help people evacuate quickly from the hazardous areas. People usually follow these routes which are, to a large extent, very visible tracks and are accessible by cars or other means of transportation. In the Cocorico case indeed, escape routes are much harder to define and to follow for different reasons. There are dozens of small tracks normally used just for walking. Moreover, some tracks are seasonal. During the dry season, there are plenty of tracks but most of them end up disappearing during the rainy season. Furthermore, some tracks in Cocorico have a socio-economic, symbolic and cultural meaning. There are female tracks, *dgira ya acazi*, which

women use when going to bathe and males are not allowed to use them. There are also male tracks, *dgira ya amuna*, used for what is considered to be uniquely a male business such as hunting for which women are not welcome. Some tracks cut across agricultural fields, backyards, sacred places and their use requires negotiation and permission. Some people - either males or females - have their own private tracks guiding them to still unknown (natural) resources which they do not want to disclose at household or community level. In such complexity, defining *the escape route* is not as simple as it seems to be in the Philippines.

To avoid confusing each other, people in Cocorico prefer to identify a meeting point rather than a specific route. This is what they also do during flooding periods. When this is the case, the local primary schools are the agreed meeting points when things turn for the worse. Finally, we should attempt to ask ourselves why people should be squeezed to follow one route. For rescue operations, it may pay off but one route tends to reduce people's freedom of choice and, in the case of Cocorico, their flexibility to respond to different socio-economic and cultural demands. A contextual analysis is therefore required and the CBDRM toolbox needs to be adjusted according to each context.

Need for transportation and collective safer places. Means of transportation and safe places are required during disaster periods. Nevertheless, what means a safe place and what and when to take transportation is a complex decision making process. Different factors play a role in choosing the means of transportation and the safe place (see chapter 6 for full discussion). In the meantime, it is worth to realise that in Cocorico a large majority evacuated using local canoes. The CVM project also helped people in the evacuation process. Locals suggested that the canoe bought by CVM was used to evacuate people from Cuara to the school in Sanguimbe, and then some people were also evacuated to Chupanga using the same canoe.

Concerning the safe places, they must not just accommodate people and be physically safe but they need as well to be economically and socially rewarding. Places are therefore chosen from an objective and subjective evaluation in terms of their relevance in saving lives and livelihood in the short and long term. The project identified different safe places within the communities and outside it - *Nhalubhanda*, *Nhamiala* and *Tchulu tchinampala* - but while the exercise appeared to fulfil the objectives of the project, it had no real relevance to disaster management at local level. None of the interviewed used these places during the evacuation. Chapter 6 will discuss at length the evacuation process and as we shall see, evacuation involves hierarchies and people tend to choose the means of transportation and the safe place.

To conclude this section on the project and its relevance for the 2007 flooding, it appears that radios and canoes played a positive role. Radios provided information and canoes means of transportation for evacuation. Nonetheless, these tools are part of a complex process of decision making involving

different actors, interests, expectations and contradictions. Their availability is not in itself a guarantee that people will make use of them. Further, it appears that projects have to take cognisance of the everyday local practices and attempt to link normalcy with crisis if that distinction is to be made. In Cocorico radios and canoes played a positive role partly because, as discussed in the previous chapter, they are part of the everyday life either in times of normalcy or crisis.

CONCLUSIONS

This chapter started by questioning how planned CBDRM is perceived and acted upon by different actors at different levels and how it works or can work in practice to strengthen local capacity to adapt to climate related natural hazards and secure livelihoods. From the evidence presented throughout the chapter it is undeniable that CBDRM is a complex and dynamic process, embedded in different politics, narratives, interests and power relations. To understand the process and outcomes we need, on the one hand, to disclose the project from the viewpoint of its implementing agency, to unravel the (re)definition of the project among staff to fit their understanding and, on the other, to disclose the project from the perspective of community dynamics.

Within CVM, the project was welcomed mainly as part of their survival strategies. But once a project starts, it does not exclude internal power relations, contestations and project redefinition. In the chapter, I have detailed how CVM staff contested ownership and used different overt and covert strategies to show their disagreement to the funding agency. Nonetheless, project outcomes are also heavily related to the internal processes of staff recruitment, training, and the competition between different departments for funding and showing the outputs. In particular, I have highlighted processes, which tend to perpetuate the image of CVM as having lack of capacity for designing, implementing and evaluating projects.

Overall, it appeared that CVM survival over time depended on a balanced relationship with the national government, local actors and with its international donors. With the national government CVM places itself between dependency and independency. Depending on the context CVM may call upon the Red Cross principles of humanity, impartiality, neutrality, independency, voluntariness, unicity and universality or claim its role as state supporter and its umbilical link with the government to access government support. With the international donors, CVM has mainly applied the 'sit back and take it' approach in that less criticism is levelled at donors and in doing so, donors keep pouring in the financial resources which CVM needs for its survival. Nonetheless, the 'sit back and take it' approach does not necessarily mean lack of contradiction and contestations. Overt and covert contestation is part of the everyday interaction of donors and CVM, especially when one gets

far from the headquarters in Maputo. What appears is a process by which contestation is kept at levels that do not hamper funding.

At the community level I have shown the following processes: firstly, the definitions of communities may be squeezed, enlarged or split depending on what external actors want to achieve. As such, perceiving communities as defined by clear geographical boundaries is misleading. Moreover communities are not homogeneous and people do not share similar values and objectives. Thus, the concept becomes a virtual label relevant mainly for intervention purposes.

Secondly, there is no universal CBDRM. It appears that in Cocorico the blue print experience from the Philippines was not fully applicable. Escape routes and identified safe places were, to a large extent, useless for the local context. This suggests that before carrying a CBDRM a critical evaluation of the local context and of the approach to follow is highly recommended.

Thirdly, external interventions such as CBDRM may disaggregate the community and reinforce power inequalities. By empowering some groups and excluding others either overtly or covertly the CBDRM, instead of working as a unifying tool, may disaggregate or produce conflicts within the 'communities' where it is being implemented.

Fourthly, tools for everyday use such as canoes, radios and stretchers were the most relevant compared to those designed just for the disaster event. Parallel to that, due to its 'flood' character, the committees ended up being useless for people's most pressing and everyday needs. This suggests that disaster reduction interventions which focus on everyday risks are more likely to be relevant if compared to those designed just for the disaster events themselves. Thus, long-term support needs to be accompanied with short-term benefits and everyday needs. Although people have long term objectives, under extreme poverty conditions such as in Cocorico, people are, to a large extent, looking for everyday needs and interventions that may respond to them.

Fifthly, we need to be cautious on the assumptions that local leaders are the key for interventions success. This assumption ignores that the leaders may have their own agendas that may be contested by the locals. Further, it ignores that any intervention is subject to local (re)configuration and power relations. This chapter has shown the process of project capture by the local elite and the process of contestation and project reconfiguration by local people.

Finally, the impacts of the planned adaptation and CBDRM depend not much on how the proponents designed and fed it with appropriate resources but on how the different actors appropriate or misappropriate the approach during its implementation. The critical point lies therefore on a proper, critical and open mind monitoring of the process and outcomes over time. The classical linear planning- implementation and evaluation cycle seems to be inappropriate in highly disaster-prone, diverse and complex regions such as Cocorico.

CHAPTER 5

THE 2007 FLOODING ON THE ZAMBEZI DELTA AND THE HUMANITARIAN ARENA

In the preceding chapters, I have discussed the adaptive capacity of local people on the Zambezi delta, their limitations and the interventions aiming to strengthen it. How does the adaptive capacity work in practice and how do actors from the different domains of disaster response interact in a real 'disaster' scenario? This chapter and the next two address these questions for the 2007 flooding on the Zambezi delta. When I started my research fieldwork in January 2007, it coincided with the beginning of flooding on the Zambezi delta. The Mozambican Red Cross (CVM) – research partner – was involved in relief aid and we took this as a research and learning opportunity to document CVM interventions in disaster contexts. However, I took the flooding as an opportunity to follow different actors (beside CVM) across different encounters of disaster response.

Over the past years, humanitarianism has undergone considerable shifts worldwide. Most remarkably, the number of humanitarian actors has grown exponentially. From 1997 to 2005 the total amount of field based aid workers has increased by 77 percent with UN growth of 54 percent, IFRC by 74 percent and international NGOs by 91 percent (Borton, 2009:8). On average, the humanitarian fieldwork population has increased by approximately 6 percent per year over the past 10 years (Harvey *et al.*; 2010:18). This has partly happened because many organizations, created and conceived with other purposes in mind, have taken on some form of work related to humanitarian action.

Regardless of their motivations which may include the search for public legitimacy, pure image, simple opportunism, or the diversification of the supplies of resources, these shifts mean that the subject of humanitarian aid has increasingly become more complex. It has become characterized by competition, fluid roles and interests, confusion, the squandering of resources, power relations and even the questioning of basic humanitarian principles such as neutrality and the respect for national sovereignty (Rey, 2001; Leader, 2002; Hilhorst, 2007; Harvey *et al.*, 2010). In this context, the question is what emerges out of the interaction between that amalgam of actors with different worldviews, interests and power relations?

The present chapter discusses the interaction between the national government, UN agencies and NGOs (with a focus on CVM) while providing humanitarian aid to the affected people. I leave for the time being the local actors and their response for the next chapters. In doing so, this chapter is built around the two major domains of disaster response (the international

domain and the domain of disaster governance) conceptualized in chapter 1. Throughout the chapter, I claim that humanitarian assistance to the 2007 flood affected people was, in practice, an arena where different actors with different and sometimes diverging interests interacted. In this arena of contestations, power conflicts and negotiations, neither the process nor the outcomes followed in a straightforward manner the blueprint of project programming or the humanitarian guiding principles. The process and the outcomes, as put forth by Hilhorst and Jansen (2010), depended much on how different actors in the arena viewed and interpreted the context including how they perceived each other.

As we shall see, in responding to the 2007 flooding in Mozambique, the international community attempted to take the leadership and the coordination of the humanitarian response. This was related to different factors, including their 'crystallized' perception of lack of national and local capacity discussed in chapter 2 and the desire to try the newly reformed 'Cluster Approach'. This brought in contradictions and power conflicts between the different actors in the arena. There were contradictions and power conflicts between the national government and UN agencies, within the UN agencies themselves and, between UN agencies and NGOs in general.

Nonetheless, despite the attempts by the international community to take the leadership, the national government led the humanitarian response. Government leadership appeared indeed as an emerging property from the processes of contestation and social negotiation in the arena, especially following attempts to implement, for the first time, the Cluster Approach. Finally, I analyse the responses of the CVM and claim that its response was conditioned on the one hand by the multiple demands and limited resources to respond to them and, on the other, to internal dynamics between the different layers of the organization.

The present chapter sustains the claim that the processes and the outcomes of humanitarian response cannot be taken for granted. The processes and the outcomes of humanitarian response emerge from the interfaces between different actors in the humanitarian arena and their social negotiations. This is so, because during the humanitarian response different actors with different roles, power and interests meet, dispute and negotiate the processes in a permanent flux of covert or overt contestation leading in most of the cases to unforeseen outcomes. To unlock these everyday practices this chapter follows the actors in the arena.

THE ARENA: THE 2007 FLOODING ON THE DELTA ZAMBEZI AND ACTORS INVOLVED

In 2007 the rainy season was marked by heavy rainfall in central Mozambique and in some of the neighbouring countries forcing, to some extent, the opening of the Kariba and Cahora Bassa dams upstream of the Zambezi delta. The combination of rainfall, dam management and environmental degradation on the Zambezi basin resulted in a rise in the levels of the Zambezi River and eventually flooding downstream. On February 8, the water flow peaked at 10,404 m³/s, submerging considerably, low-lying areas along the Zambezi River. The flooding was gradual and there were no casualties. According to the government of Mozambique, the flooding affected up to 285,000 people and displaced approximately 163,045 on the Zambezi delta (INGC, 2007).

Floods are, as presented earlier, a common feature of the Zambezi delta and the 2007 flooding was not the worst in the Zambezi delta history (see chapter 3). Although flooding may cause human suffering through displacement and loss of assets, they may also bring a bonanza. The importance of flooding in terms of agriculture, livestock and fishing purposes are widely mentioned in the literature. Seasonal flooding deposits alluvial soils rich in nutrients that allow the growth of a variety of crops and the maintenance or improvement of livestock and fishing grounds. These factors, which were the basis of the Egyptian civilization, have been already pointed out to explain settlement patterns along present-day lowlands (Rahman, 1996; Rita-Ferreira, 1999; INGC, 2006)

Due to that ambiguity of suffering and bonanza and the amalgam of factors involved there has been a long debate between two competing approaches on flood management in Mozambique. Some scholars and practitioners defend what I call the 'living with floods approach', which stresses the need to develop flood management practices that allow people to live in flood prone areas and to take advantages emerging from the flooding events. This includes the development of early warning systems and awareness, means of evacuation and the mapping of safe zones. The major argument from the defendants of this approach is that in contexts such as Mozambique where living in the flood-prone areas is not so much a matter of choice but rather a matter of poverty which allows people few other choices it is hard to suggest alternative options. In Mozambique, the UN-HABITAT and some donors such as DFID have promoted this approach.

On the other hand, there is what I call the 'flood free approach' which stresses the need to resettle people living on the floodplains. The argument is that living on the floodplains poses higher risks on human life and impinges higher costs for the government and international community on assistance. Moreover, the defendants of this approach argue that allowing people to live on the floodplains promotes the moral hazard. People play down the risks expecting that the government and international community will come to their aid. The government of Mozambique has followed this approach. It is

keen on resettling flood-affected people (see chapter 7). As we shall see, the 2007 flood offered a testing ground for these different claims to re-surface.

The 2007 flooding appeared as an arena where an amalgam of approaches and interests from different actors surfaced. At the height of humanitarian assistance, about 50 NGOs (international and local) and 19 other key actors were directly involved in humanitarian aid, influencing, to a greater or lesser extent, the processes and the outcomes (see annex 4). In their interactions, as we shall see next, contradictions and social negotiations become part of everyday practices of humanitarian assistance. It is within this arena of different actors that the humanitarian response to the 2007 flooding in Mozambique has to be conceptualized and analysed. I will now turn to a comprehensive discussion on responses by the government of Mozambique, by UN agencies and by the Mozambican Red Cross. I focus on these actors for practical reasons¹ and due to their relevance for the present thesis which attempts to understand disaster response from the domains of governance, international and local actors. The local domain appeared to be rather too complex on its own, deserving as such a different chapter (next chapter).

GOVERNMENT RESPONSE TO THE 2007 FLOODING: LEADERSHIP AS AN EMERGING PROPERTY

The response by the government of Mozambique evolved around two distinct but interlocked processes. The first relates to processes within the government and the second to processes of interaction with other actors in the arena.

(1) government agency in responding to the 2007 flooding

The government of Mozambique is, as presented in chapter 2, portrayed as very weak and, largely, unable to manage by itself the natural hazards and disasters affecting the country. This perception, as we shall see, was evident during the 2007 flooding and led to the UN agencies' attempt to take the leadership in coordinating the humanitarian response. Nonetheless, current practices seem to challenge that perception.

From the beginning of 2005, the government started to strengthen its political and financial commitment for disaster management. As discussed in chapter 2, the government approved, in 2006, a Disaster Management Master Plan outlining major strategies and activities for disaster risk reduction. It also undertook administrative and financial reforms within the National Institute for Disaster Management (INGC). It hired new staff including a new national director of the INGC and tended to allocate more financial resources.

In October 2006, the government released a disaster contingency plan for the year 2007 amounting to 20.2 million USD and allocated nearly 5 million USD for it- a record amount ever disbursed by the government for

¹ It is just impossible to follow, at length, each individual actor. The idea of domains is proposed to avoid following single actors involved in humanitarian aid.

contingency plans. Expecting flooding, INGC undertook a flood-response drill exercise on October 6 involving its staff, military forces, police forces, fire fighters, staff from CVM, staff from GTZ and local people. By early 2007, the government had established three regional Emergency Operative Centres (CENOE) and furnished them with staff and equipment. This strengthened the early warning system and communication lines considerably. Moreover, different agreements with different partners were signed to oversee specific tasks. For instance INGC has an agreement with military forces and CVM to oversee rescue operations under the umbrella of the National Unit for Civil Protection (UNAPROC-*Unidade Nacional de Protecção Civil*). UNAPROC undertakes rescue operations while CENOE oversees the general emergency operations involving primarily communication lines and decision-making process. All these reforms were put into action during the 2007 flooding.

The 2007 flooding started to affect badly the country by mid January and became worse in the Zambezi delta by the beginning of February when the threshold level for evacuation was reached on the river gauging stations. On February 4, the government issued a red alert and people living or working in the low-lying areas along the Zambezi River were advised to evacuate. As part of the red alert, the government started deploying a large number of staff from INGC and other government institutions, such as the Ministry of Health, to oversee the situation in Caia district where the humanitarian response was to be coordinated. Caia, along the Zambezi delta, hosts one of the CENOE and became the hub of the humanitarian response. On February 7, the country's Prime Minister visited the Zambezi delta and had a brief meeting with INGC and other staff present in Caia. The following day she ordered that, in order to save lives, the army should forcibly evacuate people who had continued to defy instructions given on February 4. UNAPROC forces were sent on a coercive search and rescue mission.

To accommodate the evacuees, the government created 54 accommodation and resettlement centres. To oversee the situation, highly ranked staff from the government including ministers and the general director of INGC, moved from the capital city of Maputo and settled in Caia district to speed up decision making processes and reinforce the government's commitment to disaster management. Finally, on February 27, 2007 the government lifted the red alert and moved to resettlement and recovery (discussed at length in chapter 7).

The overall response by the government was highly praised by the national and international community to an extent that some authors (i.e. Foley, 2007:2) and donor agencies (i.e. USAID)² proposed that the Mozambique's disaster management system could become a model for development of disaster response strategies by other countries. To many observers, contrary to previous disaster events in Mozambique, the government had been able this time to take the leadership and coordinate the humanitarian effort with success. It was acknowledged that this was the result of the recent changes, improvements and commitments by the national

² Jay Knott, USAID representative in Mozambique, March 6, 2007

government, especially the leadership of the INGC general director (Foley, 2007:28).

(2) Interfaces and leadership as an emerging property

In the preceding paragraphs, I have outlined structural changes that took place within the government which contributed to some extent to the general positive governmental response to the flooding. However, to claim that the response could be attributed to the national government agency would overlook processes in the arena of disaster response where the government response was contextualized. In this section, I will discuss three major aspects which allowed the Mozambican government to emerge, as the key, central and leading actor for the first time in the history of disaster management in Mozambique. These comprise:

- a. The new national discourse on self-reliance and self-esteem
- b. The introduction of the UN Cluster Approach
- c. The everyday practices at field level

a. The 'new' discourse on self-reliance and self-esteem

One of the most striking practices during the 2007 flooding and interface between government and the international community was government's refusal to officially appeal internationally. Contrary to previous disaster events where issuing an international appeal was a common practice, this time the government decided to appeal for national solidarity and self-reliance. This was a discourse brought in by the new president elected in 2005.

The president and other senior governmental staff appeared on television and radio during the flooding, to ask for national humanitarian action, stating that Mozambique needs to learn to deal with disasters by itself. A nation-wide 'civil society' campaign called Mozambique for Mozambique *Moçambique por Moçambique* was launched and songs, advertisements and talk shows appealing for national solidarity and self-reliance were broadcasted almost everyday by the mass media (see annex 4 for details). Different 'humanitarian' organizations, private companies and individuals participated in solidarity activities to mobilize material and financial resources in an unprecedented manner. The collected resources were largely deployed to INGC³. Thus, to withhold an international appeal tended to foster national solidarity.

The lack of an international appeal produced dubious but positive results for the national government in its interaction with international actors. On the one hand it created confusion amongst donors on how to best respond to the flooding leading to different donors responding independently from one another and at different times (Foley; 2007:29). That indeed pushed further the need of a coordinating entity and national government was called in to play a central role.

³ INGC General Director interview to a local television station (TVM), February 22, 2007

On the other hand, the lack of a governmental international appeal opened a window for (national and) international ‘humanitarian’ organizations to mobilize funds from donors and implement interventions. For example, based on a country analysis IFRC made a flash appeal, on February 16, for nearly 6 million USD. By February 20, the European Union pledged 2 million Euros and up to the end of February the UN country office had mobilized 8 million USD⁴. By March 12, about 19 organizations had appealed for more than 26 million USD (table 5.1 below). On March 13 the government was claimed that national and international response to the flooding totalled nearly 15 million USD excluding its own contribution⁵. Hence, even without launching an international appeal, the international community ‘pumped’ in resources that were used by the appealing organizations to implement interventions and, to some extent, strengthen them.

As different actors-the civil society, (I)NGOs and UN agencies- were already making appeals and mobilizing funds the government was released from the need to make an international appeal and from the burden of fund mobilization⁶. This gave the government the space to focus attention on coordination and leadership.

Table 5.1: Appeal by organizations

Organization	Amount appealed (in US\$)
Actionaid	75,000
Concern	144,870
CVM	100,000
Daikonie Emergency Aid	738,714
DWHH	432,400
FAO	2,942,929
FFHI	111,000
IOM	1,812,000
MDM	120,000
OCHA	157,000
SC Alliance	987,670
UNDP	1,120,834
UNESCO	356,370
UNFPA	931,872
UN-Habitat	393,030
UNICEF	7,128,968
WFP	18,888,812
WHO	1,547,472
WV	690,000
Total	26,582,033

Source: OCHA financial tracking service in: www.reliefweb.int/fts accessed March 30, 2007

⁴ Notícias newspaper March 1, 2007

⁵ Government of Mozambique, Press release March 13, 2007

⁶ The scale of the flooding, considered by some as small (i.e Cosgrave *et al.*, 2007) influenced as well the need for official international appeal.

b. The introduction of the United Nations' (UN) cluster approach

The United Nations' response to crisis has been under constant criticism and metamorphosis. By 1990, 23 different Humanitarian instruments were codified, ratified and institutionalized by the UN (Weiss and Collins, 2000:19). Nonetheless, it was not until 1991 that the UN council under the General Assembly Resolution 46/182 of December 19 approved the general guiding humanitarian principles. In June 1992, the UN established the Inter-Agency Standing Committee (IASC) with the mandate to oversee the 46/182 Resolution, develop humanitarian policies, identify and address gaps in humanitarian response and agree with different agencies on a clear division of responsibilities for humanitarian response. Under the IASC, humanitarian reform was initiated leading to the setting up of the Office for the Coordination of Humanitarian Affairs (OCHA) in 1998 and a number of evaluations on UN Humanitarian response to crisis.

Overall, the lack of clear and decisive authority to coordinate the UN response appeared to be one of the major weak points on the UN global Humanitarian response (Rey, 2001: 104). This was very evident during the UN response to the 2004 tsunami in Asia where the unprecedented resource flows led to dispersed and uncoordinated interventions with donors and their partners competing to spend money more quickly with little attention being paid to national and local capacity, to issues of social inequalities, exclusion, marginalization and hierarchy (TEC, 2006).

In order to overcome, at least in part, this lack of leadership and authority within the UN Humanitarian response, IASC established, in 2005, a Cluster Approach and a Central Emergency Relief Fund (CERF). The major objective of the Cluster Approach and CERF funding mechanisms is better coordination of the international humanitarian aid, in so doing making the international humanitarian response faster, efficient, accountable, and predictable and with clear leads (IASC, 2006:2). In September 2005 IASC agreed on cluster leads⁷ and in November 2006, IASC released a guidance note on how to use the Cluster Approach. In short, the guidance recommends wide-range consultation nationwide and internationally:

⁷ By 2005, 9 clusters were rolled out with the following leads: Nutrition- UNICEF; Logistics- WFP; Health- WHO; WASH- UNICEF; Emergency Shelter- UNHCR/IFRC; Camp Management- UNHCR/IOM; Protection-UNICEF; Emergency Telecommunications- OCHA/WFP/UNICEF; Early Recovery-UNDP

'In the event of a sudden new emergency requiring a multi-sectoral response with the participation of a wide range of international humanitarian actors, the Cluster Approach should be used from the start in planning and organizing the international response. The Humanitarian Coordinator should consult all relevant partners at the country level and make proposals regarding the designation of any new cluster/sector lead, if possible within the first 24 hours. Following the consultation with the Humanitarian Coordinator, the Emergency Relief Coordinator should consult global cluster leads and other lead agencies at the global level on the designation of the country level cluster leads for the emergency in question. The Emergency Relief Coordinator is responsible for ensuring that agreement is reached on appropriate country-level and that this decision is communicated without delay to all relevant Humanitarian partners as well as donors and other stakeholders. The Humanitarian Coordinator should in turn inform the host government and humanitarian partners at the Country level of the agreed arrangement (IASC, 2006:6).

The UN response to the 2007 flooding was largely based on these later developments, especially on the use of the Cluster Approach and CERF funding mechanisms, even though, as we shall see, the core recommendation of broad consultation was poorly implemented. Chronologically and in brief, the UN response may be outlined as follows: On January 26, a team from WFP visited the Zambezi delta and based on their inputs, OCHA issued the first flood situation report. The OCHA report warned against potentially heavy flooding on the Zambezi delta and the need for international actors to be ready to respond (OCHA, 2007).

When the water level continued to rise, UNICEF, which has a country office and had been following the event informally, discussed with INGC, on February 1, the potential use of the Cluster Approach. When the government issued the red alert on February 4, the UN Disaster Management Team (UNDMT) met on the following day (February 5) and decided to recommend to the UN Country Resident Representative – the Humanitarian Coordinator– a CERF funding application and the adoption of the Cluster Approach in Mozambique (Cosgrave *et al.*, 2007:62).

On Thursday, February 8 the United Nations Country Team (UNCT) met to analyse the UN response to the flooding and the recommendations from the UNDMT were approved. To initiate the Cluster approach, a CERF application and to set up a Humanitarian Country Team, the UNCT requested OCHA-Geneva for support. On Saturday, February 10, an OCHA officer arrived from Geneva and on Sunday, February 11, the OCHA officer met with the UNDMT to establish the Humanitarian Country Team, the Cluster Approach and for preparing the CERF appeal. On Monday, February 12, the OCHA officer and the UNICEF representative briefed the Cluster Approach to NGOs in a meeting held at the UN office. In the meeting, 11 clusters and leads were rolled out (table 5.2 below). Finally, on February 14, the UN

Humanitarian Coordinator- presented, officially, the Cluster Approach and the leads to the donors and, to the government of Mozambique⁸.

Table 5.2: cluster roles and leaders during the 2007 flooding on the delta Zambezi

Cluster	Leader	Enrolled participants later on
Nutrition	UNICEF	Save the Children, WHO, FAO, WFP, Care, World Vision, FHI, World Relief, Samaritan's Pursue International Relief, UNAIDS Medicins Sans Frontieres
Logistics	WFP	UNICEF, UNDP, IOM, IFRC, Africare, , Cafod, CEDES, Care, Jacana, CUAMM, CVM, EC, FHI, Humedica, German Agro Action, LWF/ACT, Samaritan's Pursue International Relief, Save the Children, UNOCHA, USAID, World Vision, HelpAge, Kulima, Oxfam, Italian Embassy, INGC, CVM
Water, Sanitation and Hygiene	UNICEF	Oxfam, Samaritan's Pursue International Relief, Medicins Sans Frontieres, IRD, FHI, Concern, IFRC, CVM, Spanish Red Cross, World Vision, German Agro Action, USAID
Health	WHO	Medicus Mundi, World Vision, NAFEZA, TRIMODER, UNFPA, UNICEF, UNAIDS
Shelter	IFRC/CVM	Habitat for Humanity, German Agro Action, Samaritan's Pursue International Relief, UNICEF, Kulima, IOM, UNDP, UN Habitat
Protection	Save the Children/UNICEF	World Vision, UNFPA, Unesco, WFP, Africare, Samaritan's Pursue International Relief, ActionAid, Concern, Halo Trust, ASADEC, ASVIMO, CVM, HelpAge, Terre des Hommes, Rede Came, Rede da Criança, FHI
Education	Save the Children/UNICEF	World Vision, Concern, Unesco, Africare, Samaritan's Pursue International Relief, ICS, ActionAid
Food Security	WFP/FAO	IRD, SCA, World Vision, World Relief, CEDES, ADMR, FHI, German Agro Action, Caritas, IMVF, CVM, Kulima, ActionAid, Africare, Concern, Cafod, Fewsnets, IRD, Oikos, USAID
Emergency Telecommunications	WFP	Télécoms Sans Frontières, Oxfam, Unicef, SRSA
Camp Management	IOM	INGC, CVM, IFRC, UN Habitat
Early recovery	UNDP	All partners

Source: OCHA (2007a: 5)

⁸ Compiled from Cosgrave *et al*, 2007; Foley, 2007; UNCT, 2007; OCHA, 2007, Sasin, 2008

The implementation of the Cluster Approach in Mozambique raises a number of issues:

(i) A solution waiting for a problem: from the description presented above, it appears that the Cluster Approach was looking for an opportunity to be implemented. Even before the government judged the situation as critical and declared the red alert, the UNICEF representative was already looking for prospects to implement the Cluster Approach. Further, the easy and quick way the UNDMT recommended the approach on February 5, the following day after the red alert was issued, stresses the pre-existing intention to apply the approach. The endorsement on February 8 and the quick call to Geneva for OCHA support in implementing the approach without proper consultation with national humanitarian partners and the government further underpins this claim of an existing solution awaiting a problem.

(ii) Continuities in practice despite changes in discourses. As seen above, the Cluster Approach was envisaged by the UN country team without prior consultation with the national authorities. The government of Mozambique was formally informed about the decision to implement the Cluster Approach only after the UN had requested support from OCHA in Geneva and had rolled out the Clusters. According to the UNCT (2007:10) the need to respond quickly to the flooding led to lower awareness raising and to a poor understanding of the approach by the partners. Hence, events overtook the process of communicating the objectives and modalities of the Cluster Approach (ibid).

By 'jumping' into the response and rolling out the clusters, the international actors displayed their perception of the disaster management of the national government as very weak. This attitude cannot be blamed entirely on the UN system. The representation of 'weak disaster victims in a weak state' is often consensual among national and international organizations and donors to enter the arena of humanitarian relief and proclaim their legitimacy. However, the result is a return back to similar problems which called for the set up of the cluster approach such as little attention being paid to national and local capacity, ownership, to issues of social inequalities, exclusion and marginalization as noticed in the UN response to the Tsunami in 2004. Further, in the case of Mozambique it did create resentment with the implementing agencies of the government. One high-ranking staff member from the INGC put his dislike to the UN approach in the following terms:

*'Lets suppose that the Mozambican embassy in the United States decides to help the Americans fight terrorism and, decides to create its own structure over there. Finally when the structure is ready it goes to the US government and informs it had created a parallel structure to fight terrorism in US. How do you think the American government would react to that? Is this a wise and responsible way of dealing with other nations' problems?'*⁹

⁹ Interview in Caia, February 18, 2007

The UN approach did not only bypass the government but it also resulted in double lines of command and coordination. In Caia, international organizations were coordinated by UN agencies at what was known as 'the UN house' while national government and non-governmental institutions were being coordinated mainly by INGC at the CENOE office. The participation of national organizations including of the INGC at the UN meetings was a complete disillusion; they hardly appeared in the UN meetings (Foley, 2007: 19). As double lines emerged, contradictions and contestations surfaced not only from the part of the government, as the staff member quoted above, but also from an array of other actors. In so doing, the government of Mozambique slowly came to a position where its leadership was called for.

c. The everyday practices at field level

The implementation of the Cluster Approach brought about new dynamics and processes to the overall response of the flooding. On the one hand, the institutionalization of Cluster Approach and the CERF grants made the humanitarian response quicker than it would have been otherwise (Cosgrave *et al*, 2007:37; UNCT, 2007:10). However, it also brought out different contradictions, contestations and power relations at the field level (see annex 4 for details). In this section, I outline three major sets of contradictions and contestations that emerged at field level.

(i) Contradictions and power relations between the government and the international actors. Contradictions between the government and the UN agencies and (I)NGOs tended to be overlooked by the scholars who have reported the flooding. The Inter-Agency Real Time Evaluation mentioned only one contradiction which related to the holding of simultaneous HCT and INGC briefings (Cosgrave *et al*, 2007:51). The other (Foley, 2007:21-22) mentioned two contradictions. One was related to the government's intention to implement 'communal kitchens' which was not welcomed by the international community and another one related to Save the Children's intention to implement a 200,000 USD Cash Transfer project which was not welcomed by the government.

In everyday practice, however, I could observe many contradictions between the government and the international community emerging and in many issues (covert) negotiations were undertaken. To give an example, on February 14, I attended a meeting at the INGC, CENOE office in Caia, that was also attended by a team from OCHA. In the meeting OCHA was requested by INGC to state what could be expected from them. The OCHA representative said they would first make an assessment and later would be able to clearly point out what they could do. The INGC director did not agree with that approach. He said the government had already made the assessment and knew what was needed and where. Despite that, the OCHA

team visited Caia and Mutarara districts the next day and came up with their report.

The second contradiction on the February 14 meeting emerged when the WFP delegate announced that WFP had distributed millet in different resettlement centers. This upset the INGC team because on the previous day it was decided by INGC that affected people needed ready to eat meals, rather than cereals that they would still have to mill. The WFP delegate said they were lacking ready to eat meals.

A third contradiction emerged when the delegate from the Save the Children Alliance stated that they would provide a school tent to the Caia administration. When this was announced, INGC voiced its disapproval. INGC stated that it was not an individual organization's choice. Rather, the INGC knew where specific goods were urgently needed. Therefore, goods should be channelled to the INGC, which would dispatch them accordingly. In the final part of the meeting INGC asked for a harmonization meeting with WFP and other cluster leads. Finally, INGC advised other actors interested in the logistics to join a meeting the next day at 9AM.

In the backstage, national staff members from different organizations were in favour of the INGC approach. Some however criticized INGC for its practices which gave room for manoeuvre to international actors to act independently. INGC staff was, in many cases, accused not to have strong voice over the international organizations and to act like a subordinate institution. For instance, one noticed that there were no chairs in the room in the meeting of February 14, but when the OCHA team arrived, the INGC staff managed to find chairs for them.

There were indeed few open disputes, but to the everyday observer it was apparent that irritation and much contestation over approaches and leadership occurred. This was not only between the government and international actors but also between other actors, including among the UN agencies themselves.

(ii) Contradictions and power relations among the UN agencies.

Contradictions among UN agencies started at the early stage of the humanitarian intervention. The WFP and UNICEF designed the CERF proposal with little input from the other UN agencies and cluster members (Actionaid, 2007:16; Cosgrave *et al.*, 2007:37). Although no open disputes ever surfaced between them, it was clear in the field that WFP and UNICEF were most visible and commanded much power among the UN agencies. The international response to the flooding totalled about 35 millions USD of which 40 percent was allocated to WFP; 20 percent to UNICEF; 20 percent to the Red Cross (Sasin, 2008:195) and the remainder to other agencies and NGOs such as IOM, WHO, FAO, UNAIDS, UN Habitat, Actionaid, Care, Oxfam, World Vision and eventually to the government¹⁰. This created considerable competition and power conflicts between the UN agencies themselves. For

¹⁰ Foley (2007:26) suggests that non of this funding was supplied directly to the government of Mozambique, but was instead channeled via humanitarian organizations

example, the 'UN house' in Caia as well as the helicopter provided by the UN system had only the UN and WFP logos (see figure 5.1 below). Backstage, staff from the 'smaller' UN agencies such as IOM and UN-Habitat contested this and complained sometimes about the way WFP treated them. At one occasion UN Habitat staff wanted cars for an urgent matter. He sent a request to WFP and UNICEF but it was turned down on the basis that the cars were busy at that time. He was very upset by this episode¹¹.

Most of the disputes among the UN agencies were related to control over means of transport, especially the helicopters. Although the helicopters were supposed to work for a collective agenda, in practice they were managed by WFP who tended to fulfil its own interests first. On February 17 for instance, WHO had an urgent medical kit to be dispatched to Mutarara district but WFP gave priority to food distribution and left the medicine for later. The WHO staff in Caia were disappointed.

Figure 5. 1: helicopter with UN and WFP logos



Source: Author

(iii) Contradictions and power relations between UN agencies and NGOs. Contradictions between UN agencies and NGOs in general were more overt than those amongst UN agencies themselves. Disputes between UN agencies and NGOs were derived from different sources. To start with, during the emergency operations not all NGOs knew about the Cluster Approach and those who knew, not necessarily agreed with it. Furthermore, those who agreed with the approach did not necessarily share similar views with the cluster leads that were mainly UN agencies.

Access to funds became another issue of contradiction. NGOs were not allowed to apply directly to the UN-CERF funds. According to the CERF rules, which have now been modified, NGOs could not get funds directly from the CERF but they could apply for funding via UN agencies. Some NGOs followed the CERF rules and applied for UN-CERF funds through

¹¹ Interview, Caia February 19, 2007

WFP. However, only the WFP application was funded leaving out the NGOs¹² (Cosgrave *et al*, 2007:37). The double role of the cluster leaders (coordination and implementation) appeared in the eyes of other cluster members as unfair competition. Some argued that the cluster leaders used their coordination position to favour themselves¹³. This raised a number of contestations to the UN system and their agencies in the field.

For the majority of cluster members, prospects for CERF funding created two major expectations. Firstly, that proposals to CERF would be prepared in close collaboration between them and the cluster leads and, secondly that funds mobilized by cluster leads would be channelled to them to implement the activities on the ground. The second expectation was one of the major stimuli for small national NGOs to participate in the clusters¹⁴. Both expectations failed; CERF proposals had little input from other cluster members and the cluster leaders themselves were heavily involved in the implementation (Cosgrave *et al*, 2007:33). This limited the role the small NGOs could have played as well as the role of UN agencies as cluster leaders.

Besides the funding disputes, there were considerable setbacks within the clusters. The relationships between cluster participants were not always smooth. WFP and World Vision had a tense dispute over leadership of the logistics cluster, which ended in Geneva (ActionAid, 2007:14). Cluster leaders tended to produce press releases and reports that failed to mention, or minimized the role of NGOs. Others managed the cluster in a more directive than participative manner and some NGOs tended to perceive a lack of transparency and fairness on the cluster management (Cosgrave *et al*, 2007: 32).

For the national NGOs there were two additional limitations. First, some clusters held meetings and circulated minutes in English, a language they were not familiar with. Second, there were just too many clusters and meetings. Contrary to the UN agencies that had specific teams for each cluster, most of the local organizations relied on one or a few flexible fieldworkers to carry out activities in a range of domains. Attending cluster meetings, meetings with the government authorities and, at the same time, implementing and monitoring activities became just impossible to reconcile.

All these setbacks and contradictions between UN agencies and NGOs in general tended on one side to reinforce the government's position as the leader and, on the other, to limit participation in the clusters. Participation in clusters was in practice limited to the UN agencies themselves. Only two clusters namely logistics and Water, Sanitation and Hygiene (WASH) had considerable involvement beyond the UN agencies (Cosgrave *et al*, 2007:26). The authors claim that logistics and WASH had broad participation because their cluster lead's staffer was already well known to many of the cluster

¹² Some NGOs complained that they were given short notice to prepare their proposals and this may have affected the quality of the proposals (ActionAid, 2007: 15)

¹³ Interview with ActionAid representative, Caia, February 16, 2007; with FHI representative, Caia, February 18, 2007

¹⁴ Interview with representatives of the NGO CEDES, Caia February 15, 2007; interview with the representative of the NGO Kulima in Caia, February 20, 2007.

members and a kind of trust and personal relationship had developed over time. Although this may have helped I think that the fact that both clusters were 'service clusters', financially more robust, and WFP and UNICEF (the cluster leads) commanded resources such as helicopters, which other actors needed for implementing their own activities, played a big role for a broader involvement.

CVM RESPONSE: POWER, CONFLICTS AND NEGOTIATIONS

NGOs response to disaster situations depends on how they are able to mobilize different material, human and financial resources. Also it depends on how they are able to allocate them effectively and efficiently in time and space vis-à-vis other actors in the arena. CVM response can be analysed from that perspective within different layers of response from the headquarters in Maputo down to the field level. In this section, I analyse CVM response at three different levels: (1) the headquarters in Maputo; (2) the provincial level in Sofala province and (3) the local level in Caia district. The section is based on participant observation in following CVM actors in different encounters at these three different levels.

At the headquarters: multiple demands and challenges to the humanitarian principles

CVM headquarters in Maputo had been following the flood hazard since the start of the rainy season in November-December. Based on the wide network of volunteers nationwide, CVM headquarters was supplied with information almost on a daily basis. The department of Disaster Preparedness and Response worked as the focal point in collecting and disseminating information coming from the field. Cell phones and fax machines facilitated the gathering and dissemination of field information. Nonetheless, a national and more coordinated response to the flooding took shape after the government announced the red alert and ordered coercive evacuation on February 8. Following the announcement of coercive evacuations, CVM met with partners at the headquarters in Maputo the following day, Friday, February 9 to plan its humanitarian response. It was during this meeting, which I attended, that CVM announced its plan and made critical decisions.

Fourteen people attended the meeting. It included delegates of the national Red Cross societies from Germany, Belgium, Iceland, Spain and Norway. The General Secretary of the CVM chaired it. She started with an overview of the flooding in the Zambezi delta and government measures. Regarding the government response, the General Secretary said that the Prime Minister reinforced government position, after her visit to the affected area, that it would neither declare the state of emergency nor make an international appeal. Nonetheless, the government asked CVM to help in the humanitarian actions.

At the field level-she said- CVM was already taking actions. Red Cross boats and volunteers were working on rescue operations and some volunteers were already providing first aid. Nonetheless, the overall CVM response was hindered by different constraints. Volunteers urgently needed tents in order to provide first aid and also to shelter victims. They needed T-shirts or other kind of identification like the Red Cross volunteers to make CVM visible at field level. Some were working full time so they were asking for some kind of financial or material incentives. Victims on the other hand were asking for first aid, food and shelter.

At this point it is clear that CVM had to strategically manoeuvre different demands: from the government, from the volunteers and from the local people. Response to these different demands required primarily resources either human or financial and material.

The General Secretary announced that the Cahora Bassa dam company (HCB) provided 150 thousand USD and the Aluminium Company (Mozal) provided 100 thousand USD. HCB wanted about 1/3 of the fund to be spent in the flood-affected areas in Tete province - the province where the company is based while Mozal wanted much of the money to be spent in Zambézia province. Both wanted a press conference to announce their donations. Hence, another layer of demand was added to the previous one. By this time, the companies had put their own demands including the definition of areas of interventions, which, once followed, would influence, to some extent, who would get the CVM aid. Further, these demands to a Red Cross organization put to the test its inner principles of impartiality and independency.

Balancing principles and the need for funding and, donors interests became a hectic issue. CVM accepted and organized press conferences but, through negotiations and diplomacy, left fund allocation to their own evaluations. For an immediate response CVM allocated (using the principle of impartiality) 10,000 USD to each of the four provinces affected by the flooding (Sofala, Tete, Manica and Zambezia). Teams were deployed on the same day (Friday 9) to the affected provinces with the mission of helping the affected provinces to assess the real needs. Based on the assessments CVM would allocate resources accordingly rather than follow a company's imposition. Now, the humanitarian principles have been negotiated by CVM giving room to both their institution and the donating companies. It was through this negotiations and diplomacy that they could work in line with the principles.

But is this always the case? The General Secretary suggested in an interview on June 8, 2007 it was possible to manoeuvre around with HCB and Mozal as they are long standing partners of CVM. Nonetheless, in some cases CVM has to 'swallow the frog' in order to access the funds. In most of the cases indeed, there are win-win solutions. The general secretary suggested that during emergencies a lot of companies and individuals want to be seen as practicing humanitarianism, which gave CVM room for negotiating a win-win solution. In overall it appears that, depending on the other actors involved, CVM uses three major responses: *accept, deny or negotiate*.

At the provincial level in Sofala

Competing claims on flooding

On February 10, I flew to Beira, Sofala province on a journey to Caia. The CVM officer deployed from Maputo to Sofala province had arrived the previous day and I learnt later that he had joined in the morning of February 10 a group of international organizations that flew over the Zambezi River to assess the situation. I arrived in the mid-morning and went to the CVM office. Most of the preparation and activities in Sofala were still not done yet. Although funds had been released, it was already weekend.

On February 12 (Monday) we started the day with a briefing given by the officer that flew over the Zambezi River. According to him, the situation was not as bad and the number of affected, if taken from the inundated area, was not as high as was being broadcasted. People in most of the affected areas seemed to live their normal lives. There were still quite considerable areas not yet inundated and they saw some people fishing and others trying to harvest their crops. This was clearly a different perception from what was evolving in the media and what was being claimed by the state and many NGOs.

The perception of 'non critical flooding' was to some extent shared by the provincial staff. The provincial secretary of CVM did not welcome the team from Maputo. In an interview on February 13, he suggested that the provincial staff was still able to deal with the actual flood levels and make assessment without the intervention from Maputo. He suggested that rather than sending teams to the province to do the supervision, the headquarters should have sent financial resources. In this respect, Sofala had submitted days before a budget of nearly 20,000 USD for immediate relief. But rather than receiving the requested funds they got supervision instead.

Funds, power and agency

Intervention at local level depended, to a large extent, on available funds. The province was provided with 10,000 USD rather than the asked for 20,000 USD. A lot of activities and goods that the province thought was relevant for the immediate relief had to be cut off and allocations changed. Further, access to funds at the bank became another constraint to run the interventions. The financial manager was told on February 12 that the bank had limited USD in cash. She was told that a lot of international organizations and government institutions were withdrawing money for emergency operations. When there is a shortage of cash, the bank policy gives priority to the 'big' clients such as donors, international organizations and government institutions. However, using her personal network (within the bank) she managed to have the money by late afternoon. With the available funds, the province bought some goods, paid loaders, transport and per-diem to the staff to be deployed to the field. Payment to the truck owner and loaders took long negotiations and a considerable amount of time. They wanted more than CVM could offer. When

the deal was finally struck, the truck left for Chimoio, in Manica province to be loaded with other merchandise not available in Beira.

In the afternoon of February 13, I joined two officers from CVM (one from Maputo and another from Sofala province) on their journey to Caia. The truck that was loaded on February 12 arrived in Caia three days later. The driver said he had experienced mechanical problems and he also avoided driving during the night for security reasons. The provincial secretary of CVM said he knew that the truck was quite old (figure 5.2 below) but given the limited funds and higher demand for trucks he could not compete with the World Food Programme and other organizations that were paying much more. When the truck arrived with the goods, one of the local fieldworkers claimed: *'It is too late now for our visibility; other organizations have taken over our areas of intervention'*.

Figure 5.2: the truck with the goods in Caia



Source: Author

CVM response at the field level

CVM response at the field level involved preparedness and response. As seen from the previous chapter, as part of preparedness and disaster risk reduction CVM implemented a CBDRM project which, to some extent, helped in early warning and on evacuation and resettlement processes. During the response phase CVM undertook a number of interventions. About 17 staff from the headquarter, 74 from provincial and district level and more than 740 trained volunteers were involved in distributing relief items, providing basic health care, collecting epidemiological data and, conducting hygiene campaigns to prevent the outbreak or spread of water borne and other diseases. The organization was actively involved in search and rescue operations, potable

water provision, health care, sanitation and provision of non food items¹⁵ to about 18,000 families in 35 accommodation centres (CVM and IFRC, 2007).

This response was possible thanks to the support of different 'sister' organizations present in the country and of IFRC. The regional delegation of IFRC in Harare sent, by the middle of February, staff and equipment to support the relief operation. An IFRC hub flood response was settled in Caia involving five Emergency Response Units (ERUs) in areas of Health care, Water and Sanitation, Relief, Logistics and Telecommunications. The overall response by CVM was remarkably good with volunteers, some of them also affected by flooding, working for long hours under very constrained conditions such as limited training, food, transport and equipment.

Nonetheless, as discussed in the section above, the response was in some aspects problematic. As the number of actors involved in the CVM response increased, the response became increasingly complex with different actors claiming different stakes. Of particular relevance, I will now discuss the emergence of multiple lines of command and the reshaping of the interventions by the volunteers at the local level.

The emergency of multiple command lines in Caia

Red Cross societies work under the principle of unicity. That is, in each country there should be only one Red Cross society that extends its activities all over the country. To extend its activities countrywide, national societies of the Red Cross use different modalities. In the case of Mozambique, CVM has provincial delegations *delegações provinciais* and district commissions *comissões distritais*- the lowest level. National societies from other countries may support other societies either by bilateral support or through the IFRC. In case of disaster events, depending on the magnitude and existing capacity at each level, the response may be confined to district level or may go up to provincial, national or international levels through ICRC or IFRC. In any case the call for other levels depends on the critical evaluation of what is happening in the arena and the limitation of each level to intervene as desired.

During the 2007 flooding the links between these different levels was problematic. Within CVM, the officer sent from Maputo to help/supervise the province in assessing the situation in the field was not welcomed. As mentioned earlier, while headquarters perceived the capacity at the provincial and district levels as limited, this was not the perception from the province in their own capacities. The province had settled its communication lines using radio communications and cellphones and, if needed, could send their staff to the local level. They did not consider at the time the need for national staff¹⁶. This prevailed and the officer from Maputo had little support from the province and district levels. In Caia, data sharing was difficult and interaction between the Maputo officer and the provincial and district staff was very

¹⁵ This included tents, kitchen sets, jerry cans, buckets, sleeping mats, mosquito nets, soaps.

¹⁶ Interview Custodio Giro, CVM Secretary Sofala province, February 13

limited. Sofala collected and sent to Maputo its own data while the officer from Maputo collected and in parallel sent his own data to Maputo.

In meetings where the two teams were present, the gap between the national and the provincial/district staff was noticed. On one of the occasions Tim, a staff member from the UNICEF, voiced his concerns that he did not know with whom to work because CVM appeared to have different lines of command. Volunteers were also getting confused. For example, the staff officer from Maputo requested an evaluation meeting with volunteers everyday around 5 PM but this was not accepted by the provincial level. The provincial level claimed that the volunteers were too busy to have meetings everyday. Furthermore, they thought that the district senior staffer was able to get into the field where the volunteers were working and collect the information without a need for a meeting which would overburden the volunteers.

To settle these differences CVM headquarters decided to deploy an emergency coordinator to Caia who would harmonize data and make everyday field decisions. Nonetheless, in everyday practice there remained clearly to be two clusters - one composed of Sofala province staff and another of staff from headquarters. Volunteers tended to obey the Sofala leadership rather than that from headquarters.

The linkage between CVM and IFRC was also limited. While CVM staff reported to Maputo, IFRC staff reported to Geneva. Staff from the two hardly interacted and although IFRC was in the field from mid February, the only common gathering between staff from the CVM and IFRC happened by the end of March (CVM, 2007:7). As a corollary, CVM and IFRC had little idea on how much aid the other one was distributing. In April 12-13, 2007 I attended a seminar convened by CVM and IFRC to plan the recovery interventions. In the meeting, the IFRC provided information on how much of aid had been distributed to the flood affected people. The presenter, who was the IFRC logistic manager in Caia, made it clear that the information represented aid channeled through IFRC logistics. It did not include CVM logistics. Thus, the interventions in Caia were based on different command lines, which did not communicate with each other.

The reshaping of the interventions by the volunteers

Volunteers are the backbone of the Red Cross societies. As pointed above, CVM and IFRC interventions were made possible through nearly 740 trained volunteers. Among other duties, they undertook search and rescue operations, distributed relief items, provided basic health care, chlorinated water, collected epidemiological data. They also conducted hygiene campaigns to prevent the outbreak or spread of water borne and other diseases. In doing so, they became the major face of the Red Cross societies in the eyes of the affected. To secure 'proper behaviour' volunteers are trained and expected to work under the Red Cross principles. In practice, principles are permeated by different, other factors including volunteers' needs to secure

livelihoods and the emerging constraints and opportunities arising in the arena of intervention.

During the relief operations, a considerable number of volunteers who had training on Red Cross principles some time ago, had lost knowledge on the principles and quick re-training on Red Cross principles had to be done. This meant that extra budget was needed for training which was not available¹⁷. Moreover, the principle of voluntary work was challenged in the field. For example, in the second week of February volunteers refused to work in *Sena* region due to lack of payment and many others, mostly well trained staff, shifted from CVM or IFRC to work for OXFAM, MSF and other organizations that offered better material and financial incentives (CVM and IFRC, 2007:10).

CVM did compensate the volunteers involved. During the emergency operation CVM had a policy of monthly payment for those involved. This is different from the 'normal' situation in which volunteers get incentives (mostly food baskets) in a trimester period when funds are available. During the 2007 flooding volunteers received about 2,500 Meticaís per month (about EUR 75 by the 2007 exchange rate). But this payment did not satisfy the volunteers. Many of them complained of poor working conditions and the money being very little. They accused their superiors of lack of consideration as they overloaded them but made cuts on their allowances without clear explanations.

Although not much was noticed by outsiders, different contestation practices evolved such as refusal to work mentioned above. Usually, however, volunteers tended to pursue non confrontational contestations. This included reducing the number of working days or hours, using complaint jokes and metaphors and in some cases stealing working equipment or goods supposed to be for the affected. This information makes clear that as the interventions entered the lifeworlds of the volunteers they acquired different meanings and had different responses.

CONCLUSIONS

This chapter has focused on the interfaces between aid providers and has addressed how the government, the international community and CVM responded to the 2007 flooding on the Zambezi delta. I started by discussing government practices in responding to the flooding. In doing so, I have shown that it evolved around two major blocks. On the one hand, government response was better off due to the strengthened INGC. On the other, it was leveraged by the processes taking place in the arena which pushed for a leading role by the national government.

The response from the international community especially from the UN agencies was based on an established view that Mozambique is so poor and, like in the past, unable by itself to withstand the impacts of the flooding.

¹⁷ Interview with Respeito Chiridza, Head of CVM volunteer's network, Caia February 16, 2007

Under such premise, they by-passed the government and created parallel structures through the Cluster Approach and CERF funding. Hence, despite changes in the discourse for stakeholder engagement, in emergencies through the Cluster Approach, everyday practices revealed much continuity in ways UN agencies operate at field level. This had impacts on how the clusters were perceived and operated at local levels. Although some of the clusters such as on logistics and water and sanitation worked reasonably well and helped for a quick humanitarian response, others had hardly any relevance and a range of misunderstanding and contradictions emerged. There were contradictions between the government and the UN agencies, amongst UN agencies themselves and between UN agencies and the NGOs.

The CVM intervention during the 2007 flooding has to be analysed by looking at different layers of interventions and the different power politics, interests and strategies involved in each of them. From the headquarters up to the field level CVM had to deal with internal and external power conflicts and interests. The ultimate outcome of their intervention was not merely the result of what the headquarters intended neither was it what the donors aimed to be. Rather, the outcome emerged from continuous contestations and social negotiations on a number of issues. To implement the intervention, CVM had to attempt to secure the 'right' balance between donor demands, government demands, its own staff's demands and local demands.

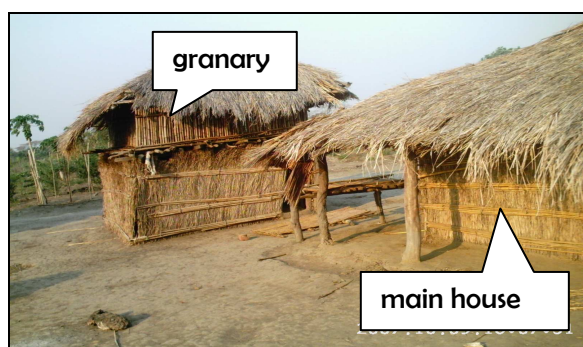
CHAPTER 6

SAVING LIVES AND LIVELIHOODS: THE LOCAL RESPONSE TO THE 2007 FLOODING¹

Tomé Gole was born on 01.06.1984 in Mopeia village. He grew up in Mulamba-Cocorico and now he is living between Mulamba and 24 de Julho resettlement centre located in Mopeia village. He is the first out of 9 children (five boys and four girls) from his father's second wife. Two of his sisters are already married; one is living in Chupanga and another in Mopeia village, both upper lands.

Tomé married in 2006, but continued to live with his parents in Mulamba waiting to move to his own house after the agricultural harvests of 2007. It is a local practice that the couple remains at the groom's household up to the harvest in order to get food which they will need in their new house. However, in early 2007 there was flooding and they had to evacuate. The flooding was gradual and at its highest level, it mainly inundated the floors or the houses. 'Tomé's household' started by moving the agricultural and fishing implements from the fields located on the lowest and riverine areas to the main house in slightly upper areas within Mulamba. When waters continued to rise, his father asked him to take care of the household while he went to look for his other wife in one of the local Islands. Water continued to rise and Tomé's mother moved valuable assets to the granary which is elevated on poles (figure 6.1 below).

Figure 6.1: The granary and the main house



Source: Author

When waters continued to rise and military force got involved in the coercive evacuations, Tomé's 'household' decided to evacuate. This was around February 20. They evacuated to Chupanga resettlement centre in Marromeu district. Tomé chose Chupanga for different reasons. Firstly, he has a sister living over there so she could come in handy when support (generally food) was needed. Secondly, as they evacuated using a canoe they preferred, for security reasons, to go to a nearby place

¹ A previous version of this chapter was presented at the 2009 World Conference on Humanitarian Studies, Groningen, The Netherlands, February 4-7 with the title: The victimization of non-victims and the development of an emergency aid culture on the lower Zambezi

and Chupanga was a primary choice since it was in the nearest upper area outside Mulamba. Thirdly, during the 2001 flooding they had evacuated to Chupanga and got support from aid organizations and it seemed reasonable to return to the same resettlement centre.

To evacuate, Tomé's 'household' preferred to use the canoe. Tomé said that the canoe allowed them to carry whatever they wanted to bring along with them while rescue boats from the military force did not accept belongings. He also complained that rescue teams tended not to transport all the household members at once. Military forces disapproved of their negative attitude towards voluntary evacuation and in some cases the military beat up people who rejected to get into the boats.

By April, when the flood had receded they went back to Mulamba. Nonetheless, they were once again caught up by another flooding- the 2008 flooding. This time, Tomé and his father decided to split up. Tomé, his wife and one brother went to 24 de Julho resettlement centre in Mopeia village while his father and the remainder of the household went to Chupanga. Amongst other reasons for this split was their memory of the 2007 flooding when they were all enrolled as one household but in reality Tomé and his wife rightfully constituted a separate household. Due to that, they had received less aid. Tomé also argued that all household members could not live in Chupanga under one roof as this would place a huge burden on his sister. She would not be able to provide enough food to supplement the handouts or aid allotted to the household. This had been the case in 2007. Furthermore, looking at the 2007 flooding, Tomé's 'household' perceived that in Chupanga people received more food than (saleable) tools so, splitting up was likely to provide them with different types of humanitarian aid.

In the meantime, during both the 2007 and 2008 flooding Tomé and his father worked shifts to protect the granary. The granary was not inundated but they could not take all the items remaining in the granary to the resettlement centre. Instead, they had to watch out for thieves in Mulamba. The granaries housed the fishing tools, a bike, agricultural utensils, and livestock, among other things. Most of the households in Mulamba did the same and those who had not enough household members, used friends and neighbours to look after their granaries. Friends and neighbours took shifts to look after each other's granaries or to look after the household members in the resettlement centres.

Tomé and his father were also heavily involved in fishing and attempted to build a network of direct buyers in different markets. Rather than sitting in the market to sell their fish they had people who came to the river to collect the fish and sell them in the market while they concentrated on fishing. This division of labour made their fishing business a very profitable activity during the flooding coupled with the fact that there was a sudden high demand for fish in the upper areas, especially with the arrival of aid organizations.

By 2009, Tomé was a member of the Local Committee for Disaster Management at 24 de Julho resettlement centre (Comité Local de Gestão de Desastres). This was possible thanks to his relationship with the local chief who enrolled him. As member of the Comité Local de Gestão de Desastres he developed disaster awareness campaigns, and was involved in the construction of houses of the most destitute groups taking place in the resettlement centre- a governmental initiative. By developing these activities, he expected some compensation from the state. By October 2008, members of the Comité Local de Gestão de Desastres were promised material for building their own houses at the resettlement centre. Nonetheless, Tomé now divides his time between Mulamba-where he does fishing

and helps his wife in agriculture- and at the 24 de Julho resettlement centre where he plans to build a brick house and to develop other livelihood activities.

The previous chapter focused on the interfaces between aid providers during the 2007 flooding. I disclosed contradictions, power conflicts and strategies emerging from their interactions. This chapter focuses on the local domain of disaster response and analyses local responses to the flooding vis-à-vis aid providers. It asks how local actors, such as Tomé, responded to the flooding? What factors lay behind their responses? How did they perceive the actors from the other domains of disaster response and what can we learn for future interventions? I start the chapter by presenting the setting of the local response which was marked by contradictions between local actors and aid providers.

Local response to the 2007 flooding was remarkably shaped by the government decision to undertake coercive evacuations on February 8 (see chapter 5). Although the operations helped to save lives, it was in contradiction to the perspective of many people. While government focused heavily on life saving alone, local response, as illustrated by the Tomé case above, tended to focus on saving both lives and livelihoods. At the interface, refusal to evacuate and returns after the coercive evacuation became part of the local everyday practices and were widely recorded by different field staff and media². Television reporters interviewed and broadcast stories of people refusing to leave and the military forcing people to abandon flooded areas. In the fourth week of February a local leader was imprisoned after being accused of instigating his people to abandon resettlement centres and moving back to the flooded areas. To explain such local responses, government officials tended to use pejorative terms such as stupidity, irrationality, reluctance, 'cultural trap' and backwardness³.

However, as put by Harrell-Bond (1986:283), these *blanket terms* tended to hide rather than reveal the complex setting of disaster response and this led to wrong diagnoses and inevitably to wrong interventions. The Tomé case, the widespread refusal to evacuate and the defiant return of locals despite floods proved indeed the complexity of disaster response and reinforced the need for empirical reality checks. I decided, then, to focus on the perceptions and knowledge about the social, economic and response structures of the afflicted in order to have a better understanding of their responses.

² See for example Noticias newspaper February 7; BBC February 8; Washington Post February 14; Reuters February 15

³ Interventions at the CENOE meeting in Caia on February 15, 2007; Interviews on STV television March 8, 2007

RESPONSE TO HAZARDS AND DISASTERS: A LITERATURE OVERVIEW

Factors influencing local response to events such as flooding have been approached from a wide range of disciplines. Amongst others, physiologists state that *healthy* and fit individuals are better placed to resist disasters and respond quicker to emerging opportunities compared to others. Bearing this in mind, special attention tends to be provided, in disaster situations, to children, elderly people, and pregnant women and to physically or mentally handicapped individuals.

Psychologists, in turn, have highlighted our understanding of human behaviour in risky situations by describing how cognitive processes such as *perceptions* shape individual appraisal of threat and coping capacity and, mould the behaviour (see i.e. Fishbein and Ajzen, 1975; Rogers 1975). Economists have also developed explanatory models such as the utility rationality. According to this, people respond better to disaster risk situations if there are *material and financial gains*. For many economists adequate financial and material compensations can mitigate the disrupted productive activities and encourage people's willingness to take actions such as evacuations and resettlement (Downing, 1996:35)

Sociologists and anthropologists alike have also looked at different determinants of people's responses to disasters. Among others, they suggest that *previous experience* plays a critical role in responding to hazards. Past experiences tend to heighten the awareness of future events and have a positive contribution to the awareness of future hazards and adjustment measures (see chapter 3; Walmsley and Lewis, 1984:115; Blaikie *et al.*, 1994:64). They also suggest that *attachment to a place* plays a role in how people respond to disaster risks.

Place plays an important role in individual and collective identity formation, reproduction and, influences to some extent moral and behavioural ordering (Oliver-Smith, 2005: 48). Changing space may force people to reassess their moral and behavioural patterns as well as how they set their priorities, gender and age relations and how they position themselves vis-à-vis others. Thus, changing space may lead to a re-examination of individual and collective identity and raises fundamental questions, which are not routinely considered, or that people are not willing to challenge. Above all, displacement tends to constitute a loss of control over one's physical space, bringing along an acute expression of powerlessness and this can mean a removal from life itself (i.e. death) (Downing, 1996:33; Oliver-Smith, 1996:78; 2005:48).

Attachment to a place was used for instance to explain the continual settlements along the Nile, Tigris, Euphrates, Ganges, Indus and Hwang Ho rivers. Tuan (1974: 114) in Haque (1997:74) points out that the flood hazards posed by these rivers have been formidable. However, the economic advantages of living there, and the cultural significance with which these places are endowed, outweigh the negative features. In living under such

risky environments, people tend to construct a non-risk thesis, play down the risks, and attempt to find supportive elements or others to reinforce the desired behaviour (Pain, 2002: 69). In doing so, sacred beliefs take centre stage and the uses of ethos like 'what must be will be' or 'what will be must be' are applied (ibid: 71). Risk avoidance and changing practices and lifestyles can increasingly be seen as bringing more risk.

People's response to hazards may also reflect the state-society relationship. It may represent dissatisfaction with the existing political, social and economic order. In some societies, people may be tired of social, economic and political injustices and living on the edge. They put their lives in danger through such acts like terrorism which may represent their best option with which to claim their dissatisfaction. Others may respond based on their *expectations* and perceptions of what is likely to be the state's response. For instance, people in western countries tend not to anticipate disasters because they expect government to bear the costs (Naess *et al.*, 2005; Van Koppen *et al.*, 2008).

Others indeed, may live in risky areas and respond in certain ways not because of attachment to the place or their previous experience or dissatisfaction and expectations but simply because there are no options. The existing order has produced *social stratification* which has pushed them to live in unsafe conditions (Blaikie *et al.*, 1994). Thus, social stratification influences, to a large extent, how actors respond to disaster events. There is enough evidence suggesting that ethnicity, gender, education, age, income, kinships and networks influence how people respond to hazards (Hewitt, 1997; Lewis, 1999; Griffin *et al.*; 2004).

It is my understanding that all the factors discussed above play, in different degrees, a role in responding to disasters and may well be captured in the concept of livelihoods. As I discussed in chapter 1, livelihood goes far beyond merely making a living. Livelihoods are defined here as embedding identity, status, life style, power relations and value choices (Long, 2001; Noteboom, 2003; Kaag, 2004). It is from this framework that I now turn to local responses to the 2007 flooding on the Zambezi delta.

LOCAL RESPONSE: SAVING LIVES AND LIVELIHOODS

The Tomé case presented at the introduction of the present chapter illustrates how the different physiological, psychological, economic, socio-cultural, political and environment- related factors influenced the local response to flooding. The sections that follow make it clear that, in responding to flooding, people attempted to save themselves (life) and those things that kept them alive and gave meaning to life (livelihoods). This process was permeated by the different but intertwined factors discussed above.

SECURING LIVELIHOODS THROUGH PREVIOUS EXPERIENCE

As discussed earlier in chapter 3, the 2007 flooding was neither the first nor the worst in the history of the Zambezi delta. The Tomé case and also the Inácio case at the introduction of the present book illustrates that previous experiences with flooding played a role in responding to the 2007 flooding. For example, choosing different resettlement centres and moving assets around different geographical locations reflects people's experience with flooding and evacuations.

Based on my fieldwork observations and interviews with local actors such as Tomé and Inácio as well as group discussions along the Zambezi delta, I could identify the hierarchy of measures that people tend to take in case of floods. This hierarchy starts with people moving their belongings (i.e. utensils used for cooking, agriculture and fishing tools) and themselves from lowland agricultural fields and improvised shelters close to the riverbed to the main houses located in the upper lands. This is also the period in which most of the women practicing agriculture in lowlands and small islands move and stay longer in the main houses. Men, who practice fishing, may bring some of their fishing tools to the main house. They come frequently to the main house to make sure everything is fine and to replenish food supplies. Kids may cease going to school if the school is located far from the home. If waters recedes they may go back to their 'usual business', fishing, agriculture or schooling, but if flood levels continue to rise, a next level of measures is adopted.

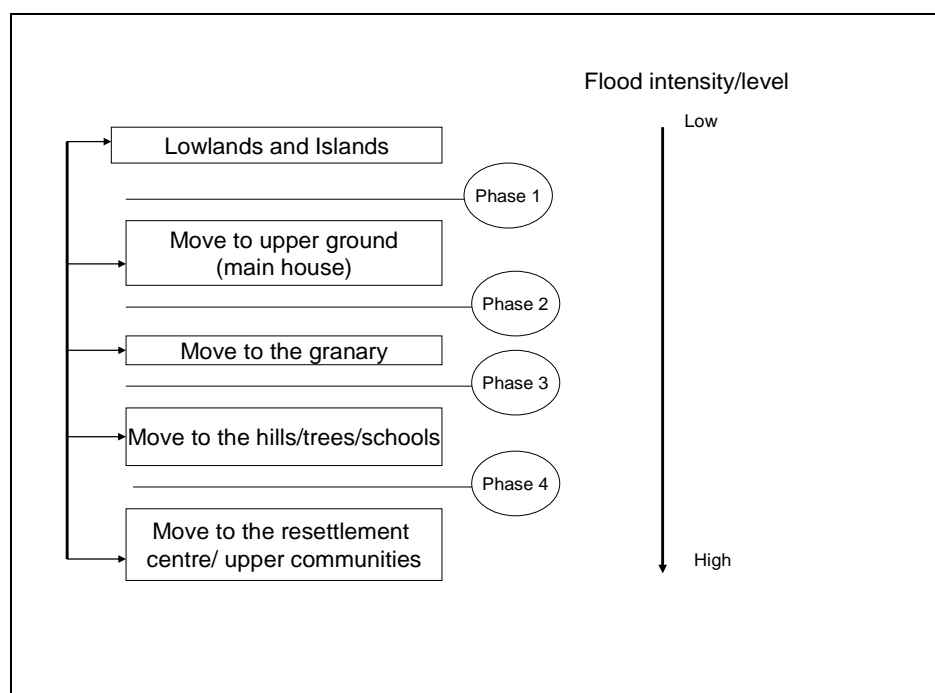
In this next phase, households who have an elevated thatched granary (a common practice along the Zambezi delta see figure 6.1 above), move their belongings from the main houses to the granary and they may eventually start living in the granary. The height of the granary depends on the materials people lay their hands on at the time of construction. In most cases, the height is adjusted to the level of the worst flood ever experienced by the household.

When water levels threaten the granary and their lives, they may move away from their homestead. However, most of the times, people tend to find accommodation close to the homestead in the local hills and other places they consider as safe. Most of the 'communities' in the Zambezi delta have at least one safe place for floods. In Cocorico, where I focused my fieldwork the two local primary schools are considered to be safe places and there are three other hills considered much safer namely *tsuluchinampala*, *nhamiala* and *nhalubhanda*. Images of people sitting on houses/granaries, hills and trees surrounded by water on the Zambezi delta have been widely disseminated by the international mass media and evoked a humanitarian response.

When water levels go beyond local 'safety levels' people move away from their community. They move either to resettlement centres or to people within their social networks living in the upper lands. These networks have historically been developed and encouraged through different means (see chapter 3). Marriages between people living in the lowlands and upper areas, such as Tomé's sisters, are promoted because of the mutual benefits that can

be gained from this. In 'normal' times, upper land communities get food supplies from the lowlands where food production is relatively higher because of the fertility and humidity of the soils. During floods, those living in the lowlands can find refuge with relatives in the upper areas. Living on the lowlands is thus, part of a much larger network of mutual support between lower and upper communities. This process goes back and forth depending on the flood level and intensity or whether the household has an elevated thatched granary and other factors such as aid distribution and business opportunities that emerge. Schematically the process may be represented as follows:

Figure 6.2: The hierarchical response



Source: Author

This hierarchy of measures appears to be based on prior experience. Such a complex arrangement of adjustment measures levelled around different flooding levels and different responses in different places can best represent people's experience with flooding.

Even though the tendency to be around the homestead and 'community' as the first resort may well suggest attachment to a place, this needs, however, to be unpacked as attachment to a place is not a stagnant attitude. Instead, attachment to a place is an emerging property of life experiences. People have invested in their places economically, socially, culturally and politically and in doing so they mould perceptions, attitudes, behaviour and practices. For example, when rescue teams arrived, just after the red alert had been issued⁴,

⁴ Red alert is issued when water levels reach five meters at the hydrometric stations. Five meters has been established during the colonial period and it is questionable whether it accurately represent the

they found a considerable number of local people going about their normal business. Basing on their experience the locals viewed the situation as near normal and not yet alarming⁵ as seen by the government.

In most of Cocorico, the flood had mostly inundated the floors of the main houses, that is, between phase two and three of the hierarchy of measures pictured above (figure 6.2). Hence, most of the households were still not ready to move, as most of their long-term assets had not yet been taken care of or packed. During interviews and group discussions, some people complained about being separated from their household members during the coercive evacuations and not being able to save or bring their livelihood assets (*piombo*⁶ and *pifwio*⁷). Helicopters and rescue boats had strict orders to evacuate people only. Not chickens, not goats!⁸

'We are not allowed to carry our belongings but we are taken like belongings; I do not know where my husband is and my son'- complained a woman just after arriving at the Amilcar Cabral resettlement centre in Caia on February 14, 2007. What emerges therefore is a local response which clashed with the perspective of the aid providers who were interested in saving lives alone.

SEARCHING FOR TOGETHERNESS

In the previous section I have discussed how previous experience played a big role in local behavior and practices during the 2007 flooding. Based on their experiences people were not yet ready to leave their homesteads and communities. This led to clashes with the government when it undertook coercive evacuation. The flooding became an arena of contradictions and conflicts between state authorities and a considerable number of people on the Zambezi delta. In this conflicting arena it appeared that local people were particularly keen on securing their togetherness which was being endangered by the coercive evacuations.

Most of the times helicopters and rescue boats rescued people at random not whole families and this tended to separate household members. In order to rescue a complete household two to three trips were necessary. However, local people were not sure whether there would be a second or third trip. In addition, they hardly knew the pilots and they were not given information on the whereabouts of the other household members who had been evacuated first. People were reluctant to take 'unknown' means of transportation. It has been observed in a number of evacuations that households tend to cluster during a crisis and are more likely to accept

current river geomorphology and is the best and the only threshold for the coercive evacuations on the entire lower Zambezi.

⁵ In Caia District, Journalists were told by a 'reluctant' women the following: "*when its no longer possible to cross that bridge you passed to come to this side because waters have overflow it, that will be the time to move out*". STV, January 13, 2008

⁶ Household tools

⁷ Livestock

⁸ Group discussions in Cocorico in July 2, 2007; Group discussions at the 24 de Julho Resettlement Centre, Mopeia May 8, 2008 and interview with pilots in Caia, February 15 2007.

evacuation if all members are taken together or at least if they know where the other household members are being accommodated (Raphael,1986: 47). Moreover, it has been observed that lack of information is one of the factors that diminish people's understanding and control to reassert satisfactorily the process and the changing context and this tends to reduce the environment of trust and increase people's refusal to move (Oliver-Smith, 1996:79).

To add to the complexity, polygamous households such as the Tomé household, have much more difficulties to evacuate. Before evacuating, a husband must be sure that the wives, their corresponding children, and other relatives are safe and together. This is not just for affection reasons but, on the Zambezi delta, a wife may also use this as a basis to seek divorce of a husband's negligence⁹ or the children would use this later on as a reason for not supporting their father. Polygamous males, in most of the times, have to move from one wife to the other and make sure that the family is safe and together.

This attempt to secure togetherness of the family brings out the relevance of physiological, psychological and socio-cultural elements embedded in local responses to flooding.

SECURING ASSETS

The '*people only approach*' used by the rescue teams meant that livelihood assets such as livestock, fishing nets, food, farming tools and seeds relevant for short and long term livelihoods were neglected. These assets represent, on one side, a buffer from starvation in times of emergency before food aid is supplied and on the other, they represent the future stream of income that will sustain the household over time. Moreover, as argued by Lautze (1997), for assets whose accumulation may have taken a long time span and effort, their disposal may represent a big loss and in some instances disaster affected people might prefer to go hungry or even die in order to preserve their assets and future livelihoods.

On the lower Zambezi, asset security can determine marriage breakdown. If productive, costly items are left behind and are lost or robbed, husbands may eventually ask for divorce citing their wife's negligence. Negrão (2001: 230; 241) suggests that even adultery known elsewhere as the major reason for divorce, is not a fundamental reason in the Zambezi delta. Agrieved husbands normally ask the other male to pay a given amount as compensation. Divorce may be asked if a wife loses productive items (mostly bought by a male's savings from fishing and trading), perceived laziness of a wife and a woman's inadequate house and childcare. This being the case women may sometimes wait to be coercively evacuated in order to have a plausible explanation as to why they left some items behind. Moreover, if flooding takes place just around the harvesting, as happened with the 2007

⁹ Negrão (2001:230,241,261) and field interviews suggests that husband's negligence is one of the most plausible reason for women to ask divorce on the delta Zambezi.

floods, women may fight or refuse to leave the flooded areas until the last moment in order to protect their production and fulfil their duties as food producers and providers. On January 26th, 2008, the national public television (TVM) showed household members (especially women) refusing to leave flooded areas because they wanted to finish harvesting their crops.

KEEPING POWER AND CONTROL

Flooding and evacuation tends to reshape power relations. In some cases, those in power may be replaced by new actors and contradictions and conflicts may emerge. At the government level, one of the most striking problems the government faced was to convince the local chiefs to be the first to evacuate. The government suggested that they should be the first to evacuate to set the example for the remainder of the population.

However, local chiefs saw it as a sign of weakness. Their position and power would be enhanced if they were the last to evacuate because earlier evacuations, where a chief had been evacuated first, conveyed an image of a fearful chief with limited interest and concern for his people. These perceptions tended to diminish their power with local constituencies and to weaken their status in the end. At the household level males tend also to see their power enhanced when they are the last to evacuate rather than being the first to 'run'. For many males who I spoke to, to gain respect and dignity from the household members and fellows at the community level, one has to show high resilience helping, if possible, others to evacuate or saving their livelihood assets.

In the meantime, local people, especially males, suggested that evacuation using outsiders' means over which one commands little or no control brings a sense of powerlessness and this is destructive in terms of self-confidence and respect. As one put it in group discussions '*Ine sine Nkuku para kwatiwa - I am not a chicken to be carried*'. In these group discussions, it appeared that this was not simply a psychological issue. It also encoded power relations between those who gave and those who received the help and tended to shape livelihoods in the long term. In interviews two distinct 'saviours' emerged. The coercively evacuated labelled their rescuers as 'evil saviours' who used their power to disrupt their long term livelihoods. In contrast, the voluntary evacuees (mostly using local canoes) tended to appreciate their deep indebtedness to those who saved them.

NOT AGAINST OUTSIDERS BUT NEED FLEXIBILITY

The interaction between local people and external actors is both conflicting and harmonious. Local people are not against external aid. Table 6 below shows that there is much fluidity in the decision process and there are moments in which external boats and helicopters would be the first option.

People expect flexibility which enables them to move around different evacuation options depending on developments in the area. Perceived harshness of flooding is one element which brings the need for flexibility. Priority concerns between life saving and livelihood security vary according to the level and speed of the flooding and the resilience of the existing local capacity. This shifts the preference for the means of transportation. When flood level and speed is perceived as manageable using local knowledge and means, people would prefer their canoes. Nonetheless, when the flooding level outstrips local capacities and threatens lives, outside boats and helicopters are likely to be accepted.

Table 6: Preferred transportation mean

Transp ortation	Reasons for accepting it in first place	Reasons for rejecting it in first place	Overall Ranking
Canoe	<ul style="list-style-type: none"> - 'Allows to carry household belongings' - 'I can choose where and when to go' - 'I can always go back to see what is left' - 'Nobody insults or beats me' 	<ul style="list-style-type: none"> - 'When water speed is too high' - 'When water level is too high' - 'When canoe is too small or has structural problems' 	1 st
Red Cross boat	<ul style="list-style-type: none"> - 'When water speed is too high' - 'When water level is too high' - 'When canoe is too small or has structural problems' 'We know the Red Cross from long time' - 'The rescue people do speak local language' - 'They do not judge our attitudes' - 'Do not bring guns' - 'Sometimes allow us to carry our belongings' - 'They bring life saving jackets' - 'They have 1st aid training' - 'Boats are faster and safer compared to canoes' 	<ul style="list-style-type: none"> - 'Too soon and water levels still manageable' - 'Not allowed to carry items that canoes normally do' - 'Most of the time do not take the whole household members at once' - 'Do not know where I will be accommodated' 	2 nd
Military /INGC boat	<ul style="list-style-type: none"> - 'When water speed is too high' - 'When water level is too high' - 'When canoe is too small or has structural problems' 'Boats are faster and safer compared to canoes' - 'If the first two options are not available' 	<ul style="list-style-type: none"> - 'Too soon and water levels still manageable' - 'They threaten us. Some bring guns, insult and judge our attitudes' - 'We do not know them' - 'Do not allow what canoes normally to do' - 'Most of the time do not take the whole household members at once' - 'Do not know where I will be accommodated' 	3 rd
Helicop ters	<ul style="list-style-type: none"> - 'When water speed is too high' - 'When water level is too high' - 'When canoe is too small or has structural problems' 'If the first three options are not available' 	<ul style="list-style-type: none"> - 'Similar to Military' - 'Pilots are mostly white people and definitely do not allow more than just yourself as a person' 	4 th

Source: Author [compiled from 4 group discussion in Inhangoma (Mutarara district) September 10, 2008; Cocorico (Mopeia district) September 24, 2007; Luabo (Chinde district) October 23, 2007 and Chupanga (Marromeu district) March 11, 2007]

BUILDING AND STRENGTHENING SOCIAL NETWORKS IN THE MIDST OF FLOODING

One of the reasons for 'quick' intervention by the relief agents is the assumption that due to the hazard, social networks break down and this hampers local response¹⁰. Given the local heterogeneity, this may be particular in the case of some households. Notwithstanding, the Tomé and Inácio cases illustrate that during flooding there are practices that keep, build or strengthen social networks. Looking after granaries in the lowlands and after the household members on the resettlement centres, while at the same time engaging in fishing and trade is a taxing responsibility. It involves a network with neighbours, friends, kinship members and others. The cases illustrates as well that social networks shape the decision as to where and when to evacuate. The 'Tomé household' evacuated to Chupanga expecting support from kinship members.

In everyday practices, it appeared that social networks were in constant flux, emerging, disappearing, re-emerging and being re-shaped by different circumstances and actors. Marriages between evacuees and locals emerged as one of the practices where networks were built around. Cajojo, a Red Cross volunteer in Mopeia village, married an evacuee and moved to Zona Verde resettlement center. Domingos, an evacuee married a local lady in Chupanga and moved outside the resettlement centre.

Aid distribution involved different networks among the affected population; between the affected and host communities where resettlement centres were located, and between aid providers and beneficiaries. For example, when aid was not provided by humanitarian organizations, evacuees tended to build and strengthen networks and relationships with locals around the resettlement centres with, amongst other motivations, to get some aid. During relief aid distribution some of the affected would shift their focus and attempt to build or strengthen relationships with local chiefs and officers from the relief organizations in an attempt to secure aid.

Under such conditions, building and strengthening social networks to secure livelihoods is a constant endeavor before, during and after flooding. Thus, it may be too limited to assume that networks disappear due to flooding. Although in some cases the networks may turn fragile due to the hazards, in other cases indeed, as the Tomé case, networks are strengthened or reconfigured in time and space to respond to particular needs and opportunities.

¹⁰ Interventions at the planning meeting, CVM headquarter in Maputo, February 9, 2007

EXPECTATIONS AND GENDERED EVACUATIONS

During evacuations, men were very busy. They were searching for and helping relatives, neighbours and friends to evacuate as well as guarding the granaries and belongings that were left behind. In the meantime they carried on fishing and trading. This resulted in a gender-skewed evacuation on the Zambezi delta. Mostly women and children were evacuated to the resettlement centres. This was widely broadcasted in the media and astonished the Mozambican minister for Youth and Sports present at the CENOE meeting in Caia, on February 15, 2007. He said, after visiting resettlement centres in Zambezia and Sofala provinces that *'I was surprised to see mainly females in the resettlement centres'*.

Lower male presence in the resettlement centres demonstrated, amongst other aspects, local expectations of how the government and relief organizations operate. In group discussions, people suggested that the faces of women in need were more appealing to humanitarian agencies than the faces of men. Thus, putting women and children upfront was more likely to produce international mercy rather than male faces. Further, polygamous men argued that aid organization registered them with just one wife. This reduced their ability to represent different households with different wives and could provoke complaints by other wives that the husband was focusing attention on just one of them - the most loved. This, according to them, had future negative social consequences including breaking up of marriage. To avoid such consequences some men opted not to register, leaving their wives to do so.

BUILDING LIVELIHOODS THROUGH EMERGING OPPORTUNITIES

Once the evacuations have taken place and people have been moved either freely or coercively, a new development takes place. The evacuation is taken as an opportunity to secure livelihoods either by making business or by savings on spending and in most cases, by doing both. As humanitarian interventions bring many people together in a particular place, the demand for food products becomes higher and a market develops¹¹. This offers a good opportunity for economic gains. In February 2007, fish prices in Caia district had almost doubled. In Mopeia during the flooding period in March, I witnessed a similar pattern. Fish that used to be sold for about ten Meticaís¹² (Mozambican currency), were now being sold for double the price. Remaining in the resettlement centres would then jeopardize the lucrative emerging business opportunities.

¹¹ In Caia, the price of chicken has gone down during February 2007 while cereals and mineral water price's increased. According to vendors this was due to the fact that a lot of flood affected people were selling chicken and using the money to buy cereals before the food aid distribution started. Mineral water price was explained by the presence of many external aid relief fieldworkers coming from the cities who preferred mineral water to local 'non potable' water.

¹² About 30 cents USD in 2007

One of the reasons given by the government to lift the red alert and cease rescue operations by the end of February was that there were no more people in need to be rescued. The 'new' evacuees were the same people who repeatedly went back to the lowlands to find products to sell in the markets¹³.

Apart from doing business, many saw relief aid as an opportunity to reduce their spending on sustaining their households. Humanitarian organizations were taking care of them on the resettlement centres. When I asked a group of men affected by flooding, whom I used to interact with in Caia, why they spent money on drinks instead of household items, some just laughed at me and one said: *'ta tambirisswa dzulo -the distribution took place yesterday'*. During flooding different jokes were being spread around via email and mobile phones on the issue of humanitarian aid. One of these reflected these practices and it had the following message: *'I was affected by the floods and I lost everything. Could you please send me some beers and snacks. Do not worry about food, water and clothes. NGOs are taking care of that. (Fui afectado pelas cheias e perdi tudo. Peço por favor que me envie umas cervejas e petiscos. Não se preocupe com comida, agua e roupas, as ONGs já estão a ajudar-nos nisso)'*.

Humanitarian aid thus provided double gains to some of the affected households. On the one hand, they earned money from the emerging business opportunities, while on the other hand, as they were 'victimized' or victimized themselves they used the strategic narrative of *'we lost everything'*, and they received humanitarian aid part of which ended up on sale.

Nevertheless, in order to have this double gain and build livelihoods through emerging opportunities one needed more than just going to a resettlement centre. There was a need to be sure that there would be a distribution of humanitarian aid. Thus, which centre to go and the moment became relevant. *'If you move quickly you may end up staying weeks before the distribution starts and if you go too late you may find the distribution already finished'*¹⁴. For example, although the red alert was issued on February 4, in the majority of the resettlement centres, food aid distribution started after February 14. This gap may well explain why local people needed to move with their assets and why the 'people-only approach' clashed with local people who needed to secure livelihoods as well. This brings me to my analysis on saving lives and livelihoods in disaster situations.

¹³ The same happened in 2008. See Noticias newspaper, February 14 2008

¹⁴ Interviews with Chief Nhanswimbo, Cocorico, July 8, 2007; and with Tomé Gole, September 22, 2008

ANALYSIS: SAVING LIVES OR LIVELIHOODS?

The present chapter intended to answer three major questions: (1) how local actors such as Tomé responded to the 2007 flooding; (2) what factors lay behind their response and (3) how they perceived the other domains of disaster response and what could be learnt for future interventions.

Throughout the chapter, it became clear that when natural hazards such as floods strike, governments and non-governmental (humanitarian) organizations are confronted with what Hilhorst and Warner (forthcoming) called the securitization and non-securitization dilemma. For a matter of (life) security, 'responsible' governments and (I)NGOs would, as done in the delta Zambezi delta, advocate security reasons and try to save many lives as quickly as possible. This is done in most cases using a top-down approach with little concern over local people's livelihoods, perception and participation. The major premise is that lives are in danger and a life saving approach is needed.

Beyond these philanthropic claims, many stakes may play a role in applying the life saving approach. Action or inaction during 'crisis' may reshape political legitimacy and power relations (Drury and Olson, 1998); humanitarian agencies may use the 'crisis' as an avenue to open up new charity markets and areas of interventions while the military may use the event to legitimize their existence (Hilhorst and Warner forthcoming). Whether the intervention was based truly on philanthropic claims or to promote other interests or even both is out of scope of the present chapter. In the previous chapter, I outlined the different national and international agendas that the flooding attempted to fulfil.

The discussion as to whether humanitarian organizations should focus on life saving or on the livelihood/development relief started a long way ago. By the 1990s, IFRC argued in their World Disaster Report of 1997 that the two were irreconcilable.

'While it is possible to debate which approach is right or better, the problem is that many in aid try to practice both- development agencies take on relief work and humanitarian agencies are unable to ignore the causes of suffering. It is not impossible to have both approaches in one organization, just as a government has ministries of both defence and health, but it is profoundly wrong to mix the two operationally in situations where lives are at risk' (IFRC, 1997:141-142).

Duffield (2000) is another example of scepticism regarding livelihood-oriented relief programmes. He argues that turning conflicts and disasters into an opportunity for development has contributed to an erosion of welfare and security. This is so, because development relief tended over the last years to raise the threshold of tolerance for emergencies making people rely on dangerous and unsustainable coping strategies and highly exploitative economic relations (p. 119). In some cases, he argues, the approach has led to

a complete disappearance of the beneficiaries with devastating humanitarian implications such as higher rates of mortality (p.116-117).

In the last years, on the other hand, different scholars have regarded the distinction as artificial and unnecessary. Weiss and Collins (2000:143) suggest that people need both- short term relief for the acute stages of the crisis and long term assistance in reconstructing their lives and communities. In a recent paper, Hilhorst argues that it is not a matter of one or the other. Both have advantages but also bear particular risks thus, there is a room for complementarities between the two. What is needed is a strategy to have a life saving approach where and when it is needed and, encourage livelihood relief where and when it is possible (Hilhorst, 2007:10).

The present chapter shows that, under gradual flooding, affected people on the Zambezi delta attempt to secure both- lives and livelihoods. Regarding lives, they are not only interested in saving their lives but most of the times they are also interested in saving (for love, affection, control) the lives of others. Regarding livelihoods people attempt to save their long-term productive assets, power positions and to take advantage of the emerging livelihood opportunities.

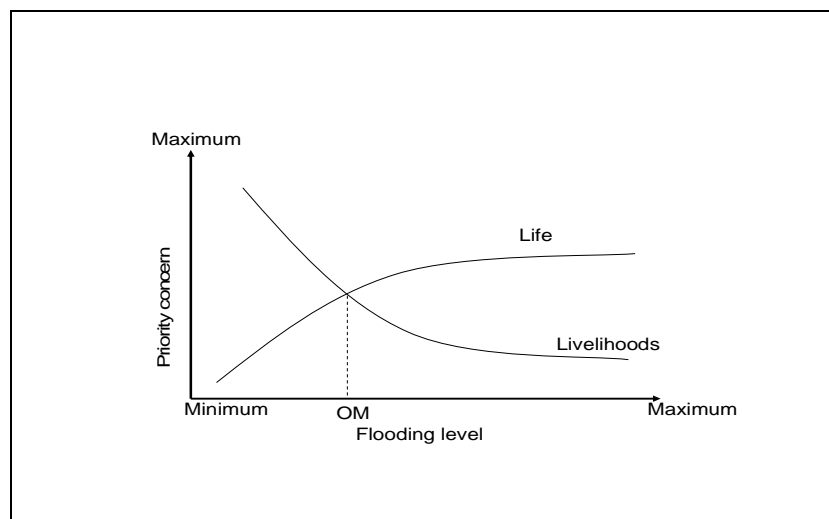
Moving people earlier rewards in terms of life saving. The likelihood of life damage and material losses increases as water levels and flooding increase. In contrast, early, rushed evacuations in a gradual flooding tend to break the social capital and people's saved assets. These are both very important in reducing their vulnerability and improving their well-being. Keeping togetherness, networks and saving food, livestock and other assets that are relevant for immediate and long-term livelihoods may not be possible if one moves very soon. If one moves early, one may also end up in a 'wrong' accommodation centre either in terms of aid relief distribution or in terms of business opportunities. Thus, people are reluctant to move until the optimal moment is reached.

In responding to (gradual) flooding people on the Zambezi delta tend thus to find the right *moment* for evacuation. At the beginning of the flooding, most people are concerned in securing their short and long-term livelihood assets and the flood risk is down played. During that period, people will attempt to rescue their belongings, search for family members, friends, and neighbours and make sure that togetherness is maintained. This process encodes different social relations and responsibilities and as discussed earlier, males have to make sure that household members are safe. In the meantime, as the females are responsible for food production, distribution, the granary and domestic duties, before evacuating they have to make sure and distinguish which item to leave behind (in the granary) and which ones to carry during the evacuation.

It appears therefore that, the optimal evacuation moment in a gradual flooding represents the time in which life saving and livelihood security intersect and neither life nor livelihood interests are jeopardized. From an abstract and academic reflection, we may devise that point of intersection as

the optimal moment (OM) (graph 6 below). The OM is a product of dynamic objective and subjective evaluation of actors' vulnerability and capacities.

Graph 6: Life, livelihood and the optimal moment for evacuation



Source: Author

From the discussion presented throughout this chapter, it is clear that people refusing or postponing evacuations are not necessarily based on attachment to neither backwardness nor stupidity. It is based on experiences of floods and evacuations, the present situation (including opportunities and barriers) as well as future livelihood security and aspirations.

By implementing coercive (earlier) evacuation with little knowledge of the local context and dynamics, relief providers and disaster managers have shown on the one hand the power relations involved between local people and external actors in relief operations. On the other, they have wittingly or unwittingly contributed to the impoverishment and long term vulnerability of those who, due to coercions, lost assets, networks and had limited abilities to capture emerging opportunities. This is not an argument against evacuations and humanitarian aid. Food, medicines, shelter, seeds and tools were needed because some people became destitute either due to the flooding, due to coercive evacuations or due to both. The problem indeed, as put by Harrell-Bond (1999) is the kind of aid that the affected receive, the way it is provided and the role they are supposed to play to get it. Evacuations that lead to the disruption of livelihood assets make people dependent on humanitarian aid, brings powerlessness and tends to develop or perpetuate a 'dependency culture'. In such a situation, the helper becomes the major threat and not the hazard itself.

In chapter three, I argued that the social and natural environments of the Zambezi delta have undergone degradation over time and have become limited to support local people's response to flooding events. Now, although humanitarian aid expands the room for manoeuvre of some affected and non affected actors, it also reduces the room for manoeuvre of others and, in so doing, contributes to the degradation of their responses to flooding events.

Thus, reluctance by local people to evacuate is then to be perceived, on the one hand as their weapon against their long-term impoverishment and vulnerability. On the other, it responds strategically to their perception of how humanitarian assistance is done and what sort of short and long term rewards and punishments they may eventually face. It is a creative form of securing long established livelihood assets at the same time that they take advantage of newly emerging opportunities brought in by emergency discourse and logic.

CHAPTER 7

RESETTLING THE EVACUEES: IN SEARCH FOR SECURITIZATION AND DEVELOPMENT

Following the evacuation process, discussed in the last two chapters, the government of Mozambique released in a donor meeting held on March 05, 2007 a reconstruction plan of 71 million USD. The plan was centred on the objective to resettle the affected population. The overall claim was that by implementing the resettlement programme the government would, on the one hand, provide them with (physical) security against flooding while, on the other hand, it would provide development through infra-structures such as schools, potable water, health care, new modern brick and cement houses, modern seeds and tools, and market integration.

To encourage people to participate in the resettlement programme, the government planned a number of interventions. A decision was made that humanitarian relief should be channeled to those willing to be resettled. Public and private investments were discouraged in the flood-prone areas while encouraging investments in the resettlement centres. A total of 55,809 displaced households were provided with materials (cement, roofing material, doors, windows, etc) for building houses (INGC, 2008:3). It also designed and implemented, in partnership with (I)NGOs, donors and the private sector agricultural seed vouchers for distribution to the affected. Fairs (*feiras de insumos agrícolas*) were organised and the affected were advised to form associations to link up with markets, with different governmental and NGO interventions and to take advantage of expected opportunities.

Hence, security and development were used as two interrelated 'marketing' narratives for undertaking the resettlement. The country's Prime Minister stressed this in a press conference in April 5, 2007:

"...the resettlement process must take into account the expansion of economic activities that can be explored by the resettled, a careful selection of the resettlement sites out of the disaster-prone areas and the establishment of infra-structures. ...the intention is to transform the resettlement areas into small towns with attractive conditions". ("...o processo de reassentamento deve obedecer a ampliação das actividades económicas que podem ser exploradas pelos reassentados, escolha cuidadosa das zonas de reafixação fora dos locais propensos a risco de calamidades naturais e estabelecimento de infra-estruturas. ...o que se pretende é a transformação das zonas de reassentamento em pequenas vilas e com condições atractivas..."

(Noticias Newspaper, April 6 and April 11, 2007).

Throughout the chapter I disclose how local actors perceived, appropriated, integrated or transformed these resettlement narratives and interventions in

building their everyday livelihoods. From a theoretical perspective, resettlement processes have for a long time been a field of much debate. Despite the amount of literature and recommendations, 'successful' resettlements worldwide remain an exception rather than the rule (Asthana, 1996: 1475). Emerging from this, researchers and practitioners from different disciplines point at each other for the failure of resettlement projects, and each attempts from their own disciplinary or institutional stand to offer guidelines for 'successful' resettlements (i.e. Coburn *et al.*, 1984; Cernea, 1988; World Bank, 1991, 2001; Kinsey and Binswanger, 1993; The Sphere Project, 2004).

This chapter is built around the arguments provided in chapter 4, that interventions neither fail completely nor are they a complete success story. In the process of implementation, as we shall see in the present chapter, interventions are shaped by different actors and acquire other meanings. Interventions such as those related to resettlement are arenas where different actors with different understandings and objectives interact and the outputs cannot be taken for granted and do not follow predefined objectives. Interfaces between different actors tend to produce outputs that were unintended. This chapter, then, follows intervention practices around the resettlement programme and analyzes how these are shaped as the result of actors' encounters.

The chapter is organized as follows. First, I reflect on current academic debate on resettlement. This is followed by a historical overview of resettlement processes in Mozambique. Then, based on the Harrell-Bond (1986; 1999) distinction of resettlement stages, I discuss the 2007 resettlement on the Zambezi delta. In doing so, I analyze actors' interfaces and local responses during the process of registration and provision of seeds and tools, and when aid was 'withdrawn'. The last section provides the conclusions of the chapter. Empirical data for this chapter were collected through participant observations, group discussion, life stories and semi-structured interviews in two resettlement centres in Mopeia district (at *24 de Julho* and *Zonas Verdes* resettlement centres). By 2008, Zona Verdes had about 500 households while 24 de Julho had about 1290 households¹.

RESETTLEMENT THINKING: THEORETICAL PERSPECTIVES

Resettlement perspectives

Following years of studies on displacement, the subject of resettlement has so far generated inconclusive and contradicting evidence. On the one hand, politicians and development practitioners are in favour of resettlement. From the point of view of development, resettlement provides opportunities for the reconstruction of systems of production and human settlements that represents a development in the standard of life of those affected, as well as in the regional economy of which they are part (Cernea, 1988:19). In most of the cases, the negative impacts resulting from resettlement activities are often

¹ Interview with Alberto Ismael, chief *24 de Julho* resettlement centre September 23, 2008

justified as the costs borne by some people for the greater public good (Dwivedi, 1999:44). Resettlement often finds additional support in a securitization discourse. When displacement results from natural hazards and conflicts, an amalgam of actors will use notions of danger and security to strengthen the case for resettlement and in doing so access legal, financial, informational, and institutional 'security resources' (Warner, 2008: 13).

On the other hand indeed, many authors have been arguing that the costs of resettlement outweigh, in most of the cases, the benefits. When resettlement policies are *ad hoc* or absent, displacement often exacerbates rather than mitigates economic, physical and social securities. People are removed from an environment in which they have evolved centuries of adaptation (Oliver-Smith, 1991, 2005; Asthana, 1996; Hammond, 2008). In many cases, this leads to landlessness, joblessness, homelessness, marginalization, morbidity, food insecurity, loss of access to common property and social disarticulation that altogether produce or aggravate impoverishment and vulnerability (Cernea, 1996).

As a third position, some scholars argue that the relationship between displacement and impoverishment is rather complex and fluid. Displacement is a historically specific process embedded in particular institutional and political arrangement and interpreted through particular discursive frames (Feldman *et al.*, 2003: 8).

Thus, resettlement means different things to different actors involved in the process. For example, for a farmer depending heavily on the soil moisture and fertility along the floodplains for agricultural based livelihoods, displacement from the floodplains and resettlement in higher grounds may result in a dismantling of his/her production system and of his accumulated knowledge of farming floodplains. For a young person looking forward to a new life of opportunities the same process may actually represent a window of opportunity and he/she may welcome the process. For the government resettlement may be the best option to reduce vulnerability to natural or man made hazards and to offer (physical) security to its constituents. But it may also play into the hands of other politically motivated goals such as population concentration and control, land reform, attempts to provide public services more cost-effectively, induce development or to shift power relations and to include or exclude some social groups (Warner, 2008). Private companies and NGOs may look at the resettlement process as an opportunity to expand their interventions, increasing their portfolio and profits.

I position myself in this latter body of literature, and look at resettlement processes as an arena where different actors with different motivations and power relations attempt to reach their goals. This is based on the actor oriented approach (Giddens, 1981; Long, 2001) which defines social life as a continuous negotiations of different and sometimes competing projects of individual or collective actors. In this process the outcomes can not be taken for granted but emerges from actors interfaces and their social negotiations.

Resettlement typology

Resettlements are initiated by different types of actors and follow different paths. MacAndrews (1979:117) provides an often-quoted typology of resettlement. The author distinguishes four types of resettlements. First, the type created by spontaneous migration with virtually no government input. The second, created by spontaneous migration but facilitated by government agencies who provides site and service facilities. Third, are government sponsored and controlled resettlements. The fourth type is resettlements created by compulsory relocation, which is usually a by-product of large-scale national development programmes, or resulting from natural disasters.

Most of the scholars tend to agree that spontaneous or voluntary resettlement (type i and ii) are more likely to be successful than the forced or involuntary ones (MacAndrews, 1979; Chambers, 1982; Cernea, 1988; Oliver-Smith, 1991; Kinsey and Binswanger, 1993; Jacobsen, 2002). The levels of anxiety and insecurity are much higher among the involuntary resettlers as the relationship of the involuntarily resettled with their old environment tends to be severely disrupted and the relationship with the new environment is, mostly, 'an obscure and stinking encounter' (Asthana, 1996:1468). From this point of view, some scholars claim that involuntary resettlement should be minimized or avoided if possible (Palmer, 1974:241; Cernea, 1990:26).

This typology provides, however, an incomplete view of the dynamics involved in resettlement processes. The line dividing voluntary and involuntary resettlements is, in most of the cases, very thin and the relationships between them very complex and fluid. For a policy of largely involuntary resettlement to be successful, a minimum number of settlers must volunteer to be part (Hammond, 2008:520). In other situations some people, although not approving of the resettlement process, may temporarily enrol voluntarily in order to access resources. Others may coercively be resettled by the authorities for political reasons of visibility and international assistance but allowed to voluntarily resettle elsewhere once the objectives have been accomplished or disappointingly unaccomplished.

Hammond (2008) claims that in Ethiopia poverty and food insecurity are used by the government to send people voluntarily or involuntarily into resettlement programmes in remote areas under the promises of a better life. The new areas have few access roads, most NGOs are expressly forbidden from operating and the local conditions such as farmland are not immediately useful. The operation seemed to be an attempt of making these people invisible from the gaze of the public, government and international donors concerned with food security. This has been coined by the author as the *invisibilization* process.

Lubkemann (2008) has described processes of '*involuntary immobilization*' in some contexts such as civil war. He claims that some war victims are forced to remain in the same place although they may desire to resettle elsewhere. Those affected are mainly women, children, conscripted young men and the elderly.

From all of the above, it appears that resettlement needs to be approached as a multiple process with multiple outcomes. The dichotomy of voluntary and forced resettlements masks the complexities involved and hides different forms of settlement emerging from different policies or from the same policies but leading to multiple outcomes. A focus on the dichotomy tends to create an illusory ideal form of settlement and fictitious notions of failure and success. In reality, resettlement may evolve in hybrid forms which emerge from the (re)combination of voluntary and involuntary resettlement.

Resettlement stages

Some scholars have stressed the need to follow the resettlement process itself and identify its critical stages. This requires unbundling the resettlement process and looking into its different stages. Scudder and Colson (1982) distinguished four critical phases where actors seem to interact and (re)shape the resettlement process that is, recruitment, transition, adaptation and incorporation.

In the initial stage, people are recruited through a process of filtering to determine who may be entitled to the resettlement and under which conditions (*the recruitment stage*). Second, there is a process of transition from their old environment to a new environment. In this *transition stage* people go back and forth and a high level of risk aversion is developed. People tend to conserve their previous practices and they are skeptical about new housing arrangements as well as new land tenure patterns and new cropping techniques. In the third stage, the resettled are more acquainted with the new environment and are more willing to take risks and more open to new alternatives and to take advantage of new opportunities. This represents the *adaptation stage*. Finally, the new forms of knowledge and social organization become part of everyday life. They are applied routinely without much questioning. This is labelled the *incorporation stage*.

In a similar conceptualization but taking humanitarian aid as the focus of analysis, Harrell-Bond (1986; 1999) suggested that the resettlement process involves three stages. The first stage consists of *registering* the concerned people and, if required, to transport them to the resettlement sites and provide them with immediate relief. This resembles stages 1 and 2 of Scudder and Colson's model. In this stage, the resettled are expected to build their houses or inhabit houses built for them. In the second stage, the resettled receive *seeds and tools*. They may also get plots of land for agricultural production and be provided with primary education. This resembles stage 3 of Scudder and Colson. In the third phase, *aid is withdrawn* under the assumption that by that time, the resettled are self-sufficient and integrated into the local economy (Harrell-Bond, 1986:9; 1999: 147). This resembles the last stage of the Scudder and Colson model.

This research adopts the Harrell-Bond distinction and I will analyze actors' interfaces across these three 'stages'. Nonetheless, rather than taking them as stages, I see them as critical events where different actors interact and

attempt to fulfil their goals reshaping, to a large extent, the lives and livelihoods of the actors involved.

RESETTLEMENT IN MOZAMBIQUE: A HISTORICAL OVERVIEW

Mozambique has a long history of resettlement processes. In chapter two, I mentioned shortly the villagisation policy engendered by the government following independence in 1975. This has probably been the most ambitious resettlement plan ever recorded in Mozambique and the one that has attracted much academic and policy debate. Up to 1982, the villagisation policy displaced nearly two million Mozambicans who went to live in 1,360 resettlement villages supported by the government (Coelho, 1993:345). This process occurred either through government leadership and coercive measures or in a 'voluntary' way. In addition, it is likely that thousands or even millions of others who were opposed to the process may have migrated to areas and countries out of reach of the national authorities and statistics. But, the villagisation process was just one amongst many other experiences of resettlement in Mozambique.

Colonial policies have shaped settlement patterns as well. The *prazo* system envisaged in the eighteenth and nineteenth centuries where large portions of land were expropriated from the natives by the Portuguese, led to the resettlement of thousands of Mozambicans on the Zambezi delta (Newitt, 1969). In the early 1970s, attempts by the colonial authorities to block the advance of Frelimo during the liberation war led to the creation of six hundred resettlement villages *aldeamentos* where nearly one million Mozambicans were concentrated (da Silva, 1994:18).

Following independence in 1975, other resettlement processes besides the villagisation policy were also implemented. One such process was the resettlement of liberation fighters. The government sought to compensate the liberation fighters by allocating them large agrarian farms abandoned by the Portuguese farmers and turned them into what was known as the production centres, *centros de produção*. The government provided agricultural inputs to about 7,000 ex-combatants and their families to settle in apparently isolated areas and operate 23 production centres for the liberation fighters, *centros de produção dos antigos combatentes* (Taju, 1992:5). Another resettlement project was directed at 'marginal' people- '*os marginais*'. In 1983, the government launched a policy of resettling the unemployed, 'petty' criminals and those considered against the revolution, on state farms in the underpopulated northern provinces of Niassa and Cabo Delgado. The Operation Production, *operação produção* as it was known, relocated nearly 50,000 people from all over the country (Vines, 1996: 59).

The Civil war, 1976-1992, displaced millions of Mozambicans who resettled temporally or permanently in different parts of the country and in neighbouring countries. By the end of the civil war in 1992, nearly 4 million Mozambicans were internally displaced and about 2 million were living

across the borders in Malawi, Zambia, Zimbabwe, South Africa, Swaziland and Tanzania (UNHCR, 1996:15).

In the meantime, natural hazards such as droughts, floods, cyclones, epidemics and development interventions such as dam construction have altogether- wittingly or unwittingly- forced people to resettle elsewhere. Due to drought situations, millions of Mozambicans countrywide moved and resettled elsewhere from 1823 to 1831 (Newitt, 1988). Because of Cahora Bassa dam construction, thousands of people had to be resettled in poor areas in the central province of Tete (Filipe, 2003:4). Government has also taken advantage of floods to resettle people in the Limpopo and Zambezi basin (see chapter 2). In overall, resettlement has been a part of the history of many Mozambicans.

The 2007 resettlement can thus be viewed as the continuation of a history where floods have repeatedly influenced resettlement policies in Mozambique. Flooding was used to legitimise resettlement policies in the 1970s and 1980s - the era of villagisation - and the issue continues to be raised after each new flooding. Following the 2000 Limpopo river floods in the south of Mozambique, massive resettlement processes were undertaken in Chokwe, Guija and Xai-Xai districts and in 2001 similar interventions were carried out in the districts along the Zambezi delta. The 2007 flooding and resettlement process follows therefore a long history of the flood-related resettlement policy, which is motivated as seen at the introduction of the present chapter, by the use of a combination of security and development narratives. Hence, (permanent) resettlement appears to be a routinely proposed solution to the flooding 'problem'. But how did it work in practice during the 2007 flooding? How did local actors perceive, appropriate, integrate or transform these resettlement narratives and interventions in building their everyday livelihoods? The remainder of this chapter deals with these questions.

ACTORS' INTERFACES IN THE IMPLEMENTATION OF THE RESETTLEMENT PROGRAMME

This chapter focuses on the implementation of the resettlement programme and, as explained earlier, highlights three critical moments of interfaces between local actors and the external/aid providers that are derived from phases distinguished by Harrell-Bond. These are registration, provision of modern seeds and tools and aid withdrawal. Nonetheless, as the process of building the houses appeared to be a rather hectic arena on its own, I add 'installation' as an intermediate phase.

INTERFACES AT REGISTRATION

Cheating and facelessness

Registering the people to be resettled and assisted with humanitarian relief is not an easy task and has been a question of debate in humanitarian studies for a long time (see Telford, 1997; UNHCR, 1998; Crisp, 1999; Kibreab, 2004). During the 2007 flooding there was no generally accepted statistic on the number of flood 'victims'. The government estimated that 285,000 people were affected and 163,045 displaced (INGC, 2007). But different organizations have produced other statistics. USAID suggested that 331,500 people were affected while WFP put the figure at 140,000 displaced people (Foley, 2007:9-10). To explain the inconsistencies in numbers, different actors referred to cheating practices of the flood-affected and surrounding population.

Government and humanitarian organizations blamed local people for pursuing so-called opportunistic practices² or cheating practices as stated by Kibreab (2004). The 'cheating' practices included inflating sizes of households, splitting the household members between different resettlement centers, and registering as victims while not 'affected' by the floods. These practices illustrate the challenges in the registration process but also the fluidity between voluntary and involuntary resettlement discussed above.

There are different reasons why people undertake cheating practices. Gaim Kibreab (2004) points out four major reasons. Firstly, for local people government and humanitarian organizations are faceless entities that cannot be subject to harm, suffering or injustice. Interacting with such entities without any moral principle is not condemned and as such, it does not generate any sense of guilt. Secondly, the rules and norms that regulate government and NGO activities do not incorporate elements of informal institutional rules that regulate access, control and use of resource among the locals. Thirdly, most of the agencies are managed by people who share little or nothing with the local people in terms of ethnicity or religion. So, they do not feel any sense of loyalty to those people and exercise no moral constraint in dealing with them. Fourthly, locals do not know how the organizations raise the money or commodities they distribute to them. Further, as the officers tend to show a relatively lavish lifestyle, local people tend to develop a perception that the resources of agencies are inexhaustible and resorting to cheating behaviour is considered to have no negative impact on agencies' wealth.

Others have suggested that cheating practices may be promoted, tolerated or restrained as part of the 'political economy' of the country. Inflating numbers may be relevant to target international aid, media attention, for state control and to feed clientelism and corruption (Crisp, 1999; Jacobsen, 2002).

During flooding, moral issues played a role for both cheating and not cheating. Cheating outsiders was not condemned much and people tended

² Interview with Salomão from the Save the Children; Melo and Aginaldo from the Mozambican Red Cross, Damiro and Renço from the INGC and Carolina from the GTZ

not to feel guilty in resorting to such practices. '*Pintho pya B'homa*' (government relief) '*Pintho pya azungu*' (white people's or wealthy people's relief); '*Pintho pya calamidade*' (disaster relief) were the statements used to describe the distributed goods. These labels bring out the faceless image of humanitarian aid.

Nonetheless, cheating was also faceless. Although people used to cheat, the locals would hardly disclose anyone as a cheater. Being reported as a cheater would lead to withdrawal from the lists, imprisonments³ and would render re-registration almost impossible. Some claimed that they did not disclose the cheaters because they feared witchcraft if they did so⁴. The fear of witchcraft (not witchcraft itself) was therefore invoked as a social mechanism to stay loyal to the cheaters rather than the cheated.

For not disclosing each other and protecting each other from withdrawal, imprisonment and witchcraft people would, in some cases, prefer to use 'redistribution strategies'. Instead of some being excluded or jailed, they would suggest that aid should be distributed to those who could accomplish to become eligible and the others would get their chance during the next distributions. Nevertheless, beyond the humanitarian gaze recipients were expected to redistribute the aid to the others. In other cases, all households or those with larger households were advised by the local chiefs to reduce the household size to allow aid to reach all households⁵. In one of my discussions with a manager⁶ of Save the Children Livelihood Recovery Programme in Mopeia, she complained why they had to carry out the registration of the most vulnerable for aid when at the end almost everybody would get aid.

There were, however, also exceptions. Some people would not resort to cheating because of their moral concerns with others that eventually would not get any aid. This was particularly the case of church leaders that showed their concerns with the elderly, orphans and handicapped.

Overall, it appeared that cheating was, to a large extent, a community endeavour and depended on the compliance of others to be realized. Group interdependencies discussed in chapter 3 turned out to be equally relevant for cheating practices. Furthermore, it appears that although people had little moral concern for the humanitarian organizations, they had indeed moral concerns for their fellowmen, especially by practices of redistribution and for some by advocating against cheating. This suggests that their morality did not decay with the resettlement process and that there were attempts to maintain continuity in their social fabric.

³ In the second week of February 2008, three people were arrested in Mopeia

⁴ Interview with Carlos Froi, chief *Zonas Verdes* resettlement centre Mopeia, September 24, 2008 and Alberto Ismael, chief *24 de Julho* resettlement centre September 23, 2008; interview with Tomé Gole, September 22, 2008

⁵ Interview with Carlos Froi, chief *Zonas Verdes* resettlement centre Mopeia, September 24, 2008 and Alberto Ismael, chief *24 de Julho* resettlement centre September 23, 2008; interview with Tomé Gole, September 22, 2008.

⁶ Sophie Shottard from Save the Children.

Alternative narratives to cheating

In the humanitarian field, cheating is a linguistic and functional representation which aid organizations and scholars alike use to describe (and condemn) deceiving practices undertaken by aid receivers. But how do the aid receivers themselves perceive cheating? On the Zambezi delta, aid receivers tended to develop alternative narratives to cheating. As far as they were concerned they were not making any misrepresentation. It was ultimately the relief organizations and the government that misunderstood, misinterpreted or misrepresented their lives. For them, government and NGOs norms and rules had little resemblance to their everyday lives.

To start with, the registration guidelines required, for different reasons, that the household members should be listed by age, education, gender, physical fitness, pregnancy, vulnerability, etc. (... *idade, homem, mulher, idosos, deficientes, crianças vulneráveis, crianças não acompanhadas, nível de escolaridade, mulheres grávidas...*) and had to get a registration card (INGC, 2007a). This process was for some of them intrusive and non-practical. To disclose in public whether a woman is pregnant (at an early stage) is a taboo. The superstition is that witches can provoke abortion at will once they are in possession of such knowledge. Further, as a considerable number of people have little formal education and hardly speak or write Portuguese, questions on age, education, vulnerability tended to embarrass or humiliate them. Keeping the registration card in the tents and improvised shelters was a 'nightmare' as some people were losing them.

Second, in the view of some people, government and NGO officers had wrong assumptions and did not understand their concept of the size of a household. In the Zambezi delta, polygamy resulted in multiple households often with large numbers per household (far beyond the national average of 5 members) but government and NGO officers had a different view; they suspected loads of cheating. Further, young couples like that of Tomé (previous chapter) were denied registration as a household because they looked quite young. Thus, for local people they were not cheating but rather they were being short changed. There was a misrepresentation of them.

This local 'misrepresentation narrative' prompts us to raise questions which are seemingly taken for granted by aid providers. Registration rules are the technocratic requirement of a relief operation, and seem in the eyes of the aid agencies neutral or evident. The question to be asked is, what are the assumptions involved in the registration process and what are the socio-economic and cultural implications of the registration practices?

INTERFACES IN THE BUILDING OF HOUSES

The resettlement process was designed to lead to a better life for the resettled. This was to be achieved by a range of government interventions in public services, market integration and urbanization. In this section I focus on the urbanization process and the building of the houses by the resettlers at the 24 de Julho and Zonas Verdes resettlement centres, in Mopeia district where I spent about one year out of my one and half years of fieldwork in Mozambique. I decided to focus on these centres mainly because most of the people who left Cocorico (see previous chapters) were resettled there. In these resettlement centres, as we shall see below, contestations and the reshaping of the planned development marked the building of the houses.

Development lacking resources

24 de Julho and Zonas Verdes resettlement centers are located between about five and three kilometers respectively from Mopeia village. Both were involved in resettling people affected by the 2001 flooding on the Zambezi delta. In order to settle people affected by the flood of 2007, the government decided to expand these pre-existing resettlement centers by clearing the surrounding bushes and demarcating new plots (size 30x40 metres). In the development vision of the government, the new areas were supposed to be urbanized and would have roads, plots for infrastructures and for habitation. The plan was to resettle people according to their areas of origin in order to provide a sense of socio-cultural continuity but also for better control. To oversee and undertake the marking of plots the government granted authority to the Ministry of the Environment (MICOA).

During the implementation, however, the process of clearing and allocating plots to the affected did not go as the government had planned. Nationwide, the government needed 3,325,000 USD but MICOA did not manage to mobilize that amount (MICOA, 2007). Donors were generally very skeptical about funding the resettlement process and it was ultimately the government with its limited funds that attempted to pursue the process⁷. Up to early 2010, dozens of houses that had started to be built in 2007 along the Zambezi delta were still unfinished due to limited funds⁸.

Due to financial constraints deployment of technical staff to the field was limited and in most of the cases delayed. Hence, plans were changed, instead of deploying technical staff from the cities to undertake the process in the villages, which was costly, the government decided to deploy a few staff and to train 10 to 15 local volunteers to do the job. This brought new challenges. There were few volunteers interested in the training demarcations of the plots. Moreover, some areas were impenetrable forests with high trees and doing demarcations was almost impossible without equipment and financial resources (MICOA, *ibid*). This further hampered the process and

⁷ Interview with Dr. Higinio Rodrigues, director of reconstruction program, Maputo, May 5, 2009

⁸ Mozambican Television (TVM), February 8, 2010.

people started to settle wherever they could find a place, regardless of their area of origin, plot dimension and demarcations.

Contested layout and the emergence of mixed areas (*zona mista*)

Demarcation challenges pushed the local government to follow new plans. It approached WFP and asked it to use its *food for work* programmes for clearing bushes, making demarcations and other services. WFP came on board and devised a *food for work programme*, later called, *food for development programme*. In the programme some people were selected to carry out the clearing and marking of plots and they received food for their participation.

When clearing and demarcation succeeded, people who had resettled 'arbitrarily' were advised or forced by local authorities to reorganize themselves and live according to areas of origin. 24 de Julho had sections for people coming from Cocorico, from Massankara, from Muriua, from Dombe and Madogoro among others. The same thing happened at the Zonas Verdes. Nevertheless, this recommendation was contested and hardly followed. People who had settled close to water pumps, the school or close to roads did not see the wisdom in this so they stayed put and in 24 de Julho an area called *zona mista* (mixed area) emerged around the school and the market.

Contested plot sizes and the emergence of differentiations

According to the envisaged resettlement plan, each household would get a plot of 30x40 metres, following the Sphere guidelines. At the implementation, however, people contested the plot allocation. For most of the people, these plots were too small for building a house and a latrine leaving adequate space for rearing livestock, a playground and a garden. Further, polygamous or larger households found it nonsensical to allocate to a household of one person a plot of similar size to that of a household of 10 members or more. Similarly, chiefs thought they deserved bigger plots. These claims led to different plot sizes within the same resettlement centre. The Sphere guidelines were literally put aside. Those people selected to carry out the cleaning and the plot allocation applied other criteria such as household size, marital status and social status. In the end some got plots bigger than 30x40 m while others got smaller ones⁹. The emerging differentiation was further reinforced by the government's policy to provide designs for the new houses.

⁹ Interview with Carlos Froi, chief of the Zonas Verdes resettlement center; 25 July 2007 and 23 September 2008. At 24 de Julho, for example the *Regulo* Cocorico was given 2 plots.

Exclusion and differentiation. House designs for the elite and for the ordinary people

At the introduction of the present chapter, I mentioned that the government decided that it would provide material for building 55,809 'modern' houses. For these 'modern' houses, the government provided two designs; a three-room design which required slightly more space and became known as the *chief's house design* and, a two room design or what came to be called the *public's design*. It had never been clear whether the government had truly decided on that distinction but in practice, the process appeared as such. Chiefs had a three-roomed houses and the remainder of the population who managed to build had two roomed houses. By September 2008, there were 23 'modern' houses at the Zonas Verdes. Only two were three roomed and these belonged to the chiefs. Similarly, 24 de Julho had 36 houses of which 6 had three rooms each and they belonged to local chiefs. At the 24 de Julho, one 'ordinary' household attempted to build a three-roomed house but it was partially demolished by the authorities. They claimed that this would open space for others to do the same and the government did not have funds for so many three roomed houses.

Elite capture and the invisibilization of the poor

The process of building the houses was designed to be participatory. The government would provide materials but the resettlers were supposed to produce their own bricks. If bricks were made far from the construction site, the government would provide transport. Making bricks was not an easy task. According to local calculations, a two roomed house required about six thousand bricks and three rooms about ten thousand. This was a labour intensive activity. On average it took about three months (for a household of five members) to make the required amount of bricks for one house. This was also subject to weather conditions. During the rainy season (October-March) people almost stopped brick moulding completely. During the dry season (April-September), brick production was more feasible. To have the bricks as soon as possible households devised different practices. Some people contracted labour for making the bricks, others bought ready made bricks whose cost ranged between 1 to 1.5 Meticaís per brick¹⁰ and others organized groups of friends, neighbors, kinships etc. and produced bricks which were later divided amongst the members. The brick production became therefore very much a result of how individuals managed to secure the necessary labor force or financial means to do so. The elderly, female headed households and the handicapped were virtually excluded from the process, becoming almost invisible.

Anticipating this to happen, the government sought to produce bricks for the most vulnerable groups known as the target group (*grupo alvo*). This included elderly (*os idosos*), the handicapped or PPD (*Pessoas Portadoras de Deficiências*), the women headed households or the MCF (*Mulheres Chefes de*

¹⁰ 1 USD= 25 Meticaís, average 2008

Familia) and the HIV and AIDS orphaned children or the COVS (*Crianças Orfas Vitimas do Sida*).

To target these categories, the government in partnership with WFP launched in the early stages of the brick making process (around April-May 2007) a food-for-work brick making programme. A considerable amount of bricks were produced and later on transported to the resettlement centres and delivered to the chief's houses. The bricks were supposed to be allocated to the most vulnerable ones- the target group. This happened before most of the people, including the chief's themselves, had produced their own bricks. Instead of being allocated to the *grupo alvo*, the chiefs used the bricks to start building their own house. They claimed that the government had again and again stressed that the chiefs should be the first to build the houses so as to set the example and as a way to show the others that they were not planning to return to the flood prone areas.

Once the bricks had been transported, the building process was dependent on the government who provided the cement and the bricklayer. Access to these resources was another layer of invisibilization of the poor. For example, those close to the roads were given priority compared to those settled in the interior. To make this explicit and more overt some internal rules were devised. Amongst others, those who were not yet ready to start the construction but had been living alongside the main roads were advised or forced by local authorities to move into the interior and give their plots to those who were ready but the plots were located more in the interior than along the main roads. The underlying argument was that if the government wanted the resettlement centres to look like *small towns*, then it would make no sense to have brick houses scattered around the resettlement centres in a mixture with tents and hubs *palhotas*. The new houses had to be neatly lined up, preferably along the main roads¹¹.

This produced on the one hand what was referred in the backstage as cities- *ciudades* (located visibly along the main roads) and bush *Kutsanga* (into the interior-invisibly beyond the main roads). On the other hand, it led to a process of exclusion of those considered more vulnerable, who could not yet afford to make or buy the bricks. Furthermore, the process of lining the brick houses along the main roads created a new layout. Although households were expected to settle according to their area of origin, the lining process tended to disintegrate that layout. To exemplify, chief Cocorico's 'modern' house at the 24 de Julho resettlement centre is located along one of the main roads outside the area which is supposed to be for people coming from the lowland Cocorico region which is more into the interior. What emerged out of the process was elite, regardless of their origin, occupying most of the places along the roads, near water pumps and schools while those with limited resources were pushed into the interior.

¹¹ Interview with Carlos Froi, chief *Zonas Verdes* resettlement centre Mopeia, September 24, 2008 and Alberto Ismael, chief *24 de Julho* resettlement centre September 23, 2008; interview with Tomé Gole, September 22, 2008.

In between continuities and discontinuities

As observed in the introduction, the envisaged plan was to bring more than just resettlement. The idea was to move people from their traditional lifestyle marked by scattered wood and grass houses, limited market integration and social infrastructures to a modern lifestyle of brick and lined houses with market integration and modern infrastructure. In practice, however, life in the resettlement centres turned to be neither truly modern nor traditional. 'Modernity' seemed to intermingle with 'traditionality'. Wood and grass houses were still in the majority in the resettlement centres and people were still using traditional healers and previous socio-cultural practices in their everyday life.

The *estruturas do centro* (centre's leaders) were viewed by the locals as the progressive and modern men. They carried mobile phones, had cement and zinc roofed houses and were more of business men than farmers and fishermen. However, they also carried what would be called 'traditional vignettes'. They were mostly polygamous, and although they had brick houses, they lacked latrines and fiercely feared witchcraft. The 'estruturas do centro' involved the 'traditional' chiefs (*the regulos, sapandas and muenes*) and the 'modern' ones *secretarios* and *chefes de centro*. As they used to put it: '*nós trabalhamos juntos*' - '*we work together*'.

The so-called more traditional people such as the *curandeiros* (traditional healers and witch doctors) and elderly people seemed to command a reasonable knowledge of modernity. The *curandeiros* for instance knew reasonably well about HIV/AIDS and they tended to advice their patients to go to the hospital if they saw related symptoms. The elderly, *anciões*, were also knowledgeable on 'modern' humanitarian assistance. When approached by humanitarian organizations they would present themselves in torn old clothes so that they could be the target group. Both (*curandeiros* and *anciões*) were indeed, in most of the cases, part of the traditional authority and were supposed to be the masters of traditional knowledge.

What emerges from this is a fluid set of 'traditionality' and 'modernity' practices which coexisted and people drew on each of these depending on the context and actors involved. Traditional practices continued to be applied wherever they were required and were discontinued when modernity was the better option.

INTERFACES AT THE SEEDS AND TOOLS FAIRS

Introduction

Seeds and tools have been part of humanitarian assistance for a long time. According to Sperling and Longley (2002:283), over the past 15 years the distribution of seeds and tools has become a popular approach to promote food security and development among communities affected by disasters. This is done under the assumption that, after a disaster, there is a lack of available seed and tools (Sperling *et al.*, 2004:4). There are also misperceptions

that in cases where farmers are able to save seeds, these are physiologically of lower quality compared to the ones distributed during the humanitarian assistance (Jones *et al.*, 2002: 307). Although the approach has shifted from a classical 'seed and tool package' to what Longley *et al.*, (2003:3) called 'market-based' and 'demand-driven' approach through seed vouchers and fairs strongly defended by Remington *et al.*, (2002), the core assumption is still the same - inexistence or lower quality of seeds and tools after a disaster. In recent years, however, much of the academic research has proven that farmers' seed systems are remarkably resilient even in the face of severe natural hazards, requiring therefore a shift from the paternalist thinking into a more field-based diagnosis (Longley *et al.*, 2002; Jones *et al.*, 2002; Longley *et al.*, 2003; Sperling *et al.*, 2004; Maxwell *et al.*, 2008).

In this section, I will not go into the question of whether the seeds and tools were needed by the affected people. Rather, by using the actor-oriented approach and conceptualizing the fairs as arenas, I will address how the seed vouchers and fairs were appropriated and transformed by the actors. In doing so, I am not so much interested in the arguments which try to portray seed fairs either as a success (Remington *et al.*, (2002) or as a failure (Jones *et al.*, 2002). Rather I see the fairs being reconfigured at the local level and acquiring different meanings and outcomes. To do this, I use the case of a fair organized by the Save the Children UK in October 2008 at the *24 de Julho* resettlement centre. I will discuss three aspects that emerged as relevant during the fairs namely (1) the power conflicts; (2) the setting of resettlers' needs and (3) the setting of criteria of quality on seeds and tools.

Save the Children UK was established in 1919 by Eglantyne Jebb after witnessing the impacts of the World War I (1914-1918) on children's welfare. She drafted, in 1923, the universal children's rights declaration which was approved by the League of Nations (UN) in 1924. The organization has operated in Mozambique since 1984 focusing on the well-being of the children. During the 2007 flooding, Save the Children provided different types of humanitarian aid like food, school tents, teaching material, clothes, hygienic items and livelihood related interventions. As mentioned in chapter 5, Save the Children led the Education and Protection Clusters and was nearly involved in all the 11 clusters. The fairs were part of the Save the Children programme on livelihood recovery after disasters and were funded by USAID.

The fairs: Contestation and power conflicts

From October 27 - 30, 2008 Save the Children UK in partnership with the local government organized seed vouchers and fairs in three resettlement centres (24 de Julho, Nhamirere and Vumbe) in Mopeia district. 5,226 households were beforehand registered from which 2, 594 at the 24 de Julho (SCF, 2008). Ten seeds and tools' vendors were selected from the Zambezia province, of which six were from within Mopeia district itself. The total amount for the fairs was 2,090,400.00 MT (about 83,616 USD) and each of the households got vouchers equivalent to 400 MT (about 16 USD).

On the morning of 27 October, I was among the many people waiting for the fair to start. By 9 o'clock the SCF staff and most of the beneficiaries were already there and the vendors were ready at their stalls to start their sales. But, the district administrator who was going to do the opening ceremony was not yet present. The opening ceremony started around 11 o'clock, about two hours later.

In October 29, I had an interview with the district administrator and I raised the question of the relationship between local government and NGOs. The administrator citing the just ended fair pointed out that local government was hardly involved in the planning and selection of the intervention sites. There was a by-pass to government institutions and due to that, he was not willing to be part of the process. SCF had to come to his office and give him assurances that this would never happen again. This explained why he took long before coming for the opening ceremony. For the administrator it should be the government to take the lead and not the NGOs or donors. The district has a development plan which addresses the resettlement process as part of a much wider district development project¹².

Planned and parallel needs

The fairs focus on providing the households with seeds and agricultural tools. At 24 de Julho and more likely in Mopeia district in general, not all the beneficiaries seemed to agree with this perception of needs. During the fair, some beneficiaries suggested that the fairs should provide more options including clothes, school material, food items, fishing tools, livestock and construction material. Some households have shown these parallel needs by negotiating their vouchers for goods other than seeds and tools. A monitor of SCF fairs found one of the vendors in possession of vouchers of about 30 households (who wanted something different). The idea was that after the fairs those households would approach the provider and select items of their choice from his shop (SCF, 2008: 15).

Planned and parallel criteria for quality

During the fairs, the vendors were advised to bring and sell certified seeds (SCF, 2008: 5). This is an international donor-driven demand that rests on the assumption that certified seeds guarantee quality and will provide increased agricultural yields. In Mozambique, however, Longley *et al.*, (2005:24) found that both certified and local seeds supplied during the fairs, had a low germination percentage and many of the commercial seeds failed to meet the quality standards set by law. They also found that rather than focusing on quality, the beneficiaries were more concerned with the vendors themselves. Most of the beneficiaries preferred to buy from local traders that they already knew and with whom a trusted relationship had been established over time (ibid: 22).

In Mopeia this was also the dominant pattern; 74.5 percent of the beneficiaries purchased their seeds and tools from local vendors and about 61

¹² Interview with district administrator October 29, 2008.

percent purchased from just two local vendors (SCF, *ibid*:19). In informal discussions, some beneficiaries stated that they preferred local vendors because a trusted relationship had been established from way back. They knew them and dealing with local vendors allowed room for price negotiation and the possibility of going back, later on, to exchange the purchased seeds and tools with other commodities. This pattern suggests as well an attempt by the resettlers to maintain continuity in their social relations. Relationships, trust, previous experience and mutual expectations are relevant and used continuously to shape the practices.

‘AID WITHDRAWAL’, CONTINUITIES AND DISCONTINUITIES

According to the Harrell-Bond (1986; 1999) resettlement model which I have drawn on so far, the last stage of the resettlement process involves withdrawing the aid after the first agricultural harvest, basically under the assumption that the seeds and the tools provided earlier have allowed self-sufficiency and the (re)integration of the resettled into the market. Although this may happen frequently and most organizations use that rationale for planning their intervention in resettlement programmes, some cautionary remarks need to be made. In most of the cases, the aid is not withdrawn completely. Development programmes run either by the government or by NGOs continue to provide aid to some of the resettled under the umbrella of development. More importantly, people do not make the aid-post aid distinction. From the word go, as seen in the previous chapter, they are busy saving their livelihoods and aid is only one of the strategies they use. In the remainder of the chapter I look at how the resettlers craft their livelihoods in the resettlement centres.

Intensive and Extensive Livelihoods: The ‘Aquatics’, the ‘Terrestrials’ and the ‘Amphibians’

Living in the resettlement centers, close to the urban village and away from the flood-prone areas has, to a large extent, reshaped people’s lives. One of the changes, which emerged for the people from Cocorico, was the sources of livelihoods. In the flood prone areas, households tend to rely on few sources of livelihoods. These included mainly practicing agriculture, raising small scale poultry, trading products derived from agriculture, fishing and, occasionally, remittances. A social network and an *art de la localité* (Van de Ploeg, 1989), by which space, knowledge and practices are crafted in each context and reproduced over time, evolved around these activities.

In the resettlement centers, however, they had to expand their livelihood strategies in order make a daily living. They lived from agriculture, fishing, processing or marketing of food, beer, liquor, and other products from the farms or factors, from scavenging, from livestock rearing, from mutual help, from contract outwork, from casual labour, from hunting or

gathering of forestry products, from craft work, from remittances, from begging, from selling assets and from seasonal food-for-work, public works and relief.

When comparing Cocorico (lowland) with resettlement centres (upper lands) I found statistical differences ($p < 0.001$) on the livelihood activities and the number of months households sustain themselves from their own agricultural production. On average households practice more activities on resettlement centres (7 activities) compared to lowland Cocorico (4 activities). In Cocorico households are able to feed for a longer period from own agricultural production (average of 8 months) compared to people in resettlement centres (5 months).

The need for expanding livelihood activities can be explained by a number of reasons. Firstly, as said above, households living on the lowlands tend to have food supplies from their own production for a much longer period compared to those living in the upper/resettlement areas. This derives not just from higher soil fertility and humidity on the flood-prone areas, but also from a different management of agricultural fields and harvests. For example, as household members on the upper areas are involved in different activities and farms become located far from the cement houses, the more 'traditional' activities such as agriculture and fishing get less labour force that in turn has consequence on the production levels. Secondly, although earning on average similar amounts (no statistical difference between lower and upper areas- $p = 0.118$), people tend to spend less money on the lowlands compared to upper areas as most of their material, physiological and nutritional needs can be extracted from the surrounding natural resources. This includes, protein and oil sources, firewood, construction material etc, which on the urbanized resettlement centers tend to be monetized and for sale.

The diversification of livelihood sources has implications far beyond the mere fact of practicing more activities. It actually deconstructed the cultural boundaries and notions of space, time and assets. This unbundling produced in the Mopeia case, three different categories of responses which I metaphorically labelled the 'aquatics', the 'terrestrials' and the 'amphibians'. These categories which I will elaborate on shortly are, in practice, dynamic and from time to time people may swing around them. I am aware as argued by Lakoff (1992) and Morgan (1998) that labels and metaphors may be misused and misleading. They are subject to different interpretations and appropriations, some of them not according to intended conceptualization. But as observed also by Lakoff and Johnson (2003) metaphors and categories may be the only way to highlight and coherently organize research data which would otherwise be very difficult.

The 'aquatics': keeping the continuity

'Aquatics' is a metaphorical concept I use to denote households whose livelihoods are intrinsically embedded with the lowlands around the Zambezi River. Thus, living on the lowlands or being an aquatic implies a flood risk taking behaviour. It includes households who are excluded from interventions taking place in the resettlement centres or, those for different reasons have limited ability to command adequate human, social, natural, financial, economic and political resources to build livelihoods on the upper resettlement areas. This group of households lives in or returns to lowlands after flooding and keep a certain continuity with their previous lives¹³.

Living on the lowlands is in essence a matter of *l'art de la localité* (Van der Ploeg, 1989). Intensification carried out on the lowlands requires, largely, a different arrangement of space, knowledge and practices compared to the arrangement for diversification undertaken on the resettlement centres. On the lowlands *l'art de localité* involves, as discussed already in chapter 3, a specific crafting of livelihoods taking into consideration the seasonal flooding. Fishing and agriculture are the major livelihood activities and the house layout, investments and division of labour are all tailored to take advantages of the seasonal flooding while bearing minimal losses.

Men tend mostly to develop and reproduce knowledge and networks on fishing and marketing the fish. Different fishing tools, discussed in chapter 3, and rituals and regulations for fishing are developed. For example, during the research I was told that sexual intercourse before a long fishing journey is prohibited as this is perceived as making a person's body hot '*manungo aku pissa*' which in turn drives away fish and catches are almost impossible. Dreams are carefully interpreted before long fishing journeys. Dreams that may be interpreted as cautions for not going fishing may lead to postponing the fishing journey. Fishing sites vary according to the time of day, month of the year and fishing purposes. Early morning, late afternoon and nights are the best times for fishing. Similarly, the beginning and the end of the rainy season are the best months for fishing that produce good catches¹⁴.

Women specialise in agricultural production and domestic duties. In doing so, they develop extensive knowledge by which soils, seeds and tools acquire different meanings and purposes both for agriculture and for domestic uses. From deep clay to loose sand soils, women identify different agricultural and domestic soil uses (see also Barbosa *et al.*, 1998). Loose sand soils '*thetcha*' are not good for agricultural purposes but may be used for the backyard during the rainy season because they do not become slippery. A mixture of sand, loam and clay in different proportions is good for the production of different crops and domestic uses. More sand than loam and clay is good for cassava; more loam and clay is good for maize. Deep clay

¹³ There are contested numbers of those who return after flooding or do not evacuate. Government officials claim that there are no people returning back (interview with Dr. Higinio Rodrigues, Maputo, May 26, 2009). But in interviews with the chiefs at the 24 de Julho and Zonas Verdes resettlement centres I was told that nearly 1/3 from these resettlement centres have returned back.

¹⁴ Group discussion with fishermen Cocorico July 23, 2007

'*d'hongo*' is good for making pots and plates- a typical female domain¹⁵. Moreover, time and social networks are, as discussed also in chapter 3, crafted by women around agricultural production and the reproduction of the domestic duties.

In this *art de la localite*, a symbolic meaning is attached to the place. For people living on the lowlands, the land is not just a land. It is a land inherited from the grand-grand-grand fathers who still bless it for good harvests. The land has been passed over through generations and is part of the household like a children is. It has meaning far beyond the agricultural purposes; it represents generations, vivid images of the past (including the transmission of the knowledge of farming particular land from one generation to the other); represents and manifests current challenges and hopes, and hubs future aspirations. Food production involves, in many cases, the perceptions of blessing from ancestors and comes from seeds carefully selected from the previous harvests, most of the times that resisted better to the flooding. The Zambezi has meanings far beyond just a River. Fish from the Zambezi River is not just a fish; it is a fish caught in the biggest river, requiring one to be brave. Furthermore, compared to other fish, the fish from the Zambezi does not require cooking oil and spices and, tastes better, '*Ndzipa maningue*'¹⁶.

Finally but not the least, the Sena speaking people living in the lowlands of the Zambezi River consider themselves as different and superior to other Sena speakers. They are '*Sena-Gombe*'- literally translated meaning Sena-River/water course which relates to the Zambezi River and regard themselves as original and true descendants¹⁷(see also Martins, 1960; Freitas, 1971; Simbe (2004) quoted by Chambote, 2008). In this way, the place (related to the river) attains a much broader meaning and shapes, to some extent, people's behaviour and practice. This is how livelihoods get a broader sense of identity formation and status, apart from food and shelter, as suggested by Long (2001) and Kaag (2004).

'Aquatics' differ from the others by their dependency on the Zambezi River and its surrounding lands and ecosystem to built livelihoods. They live on the lowlands and build livelihoods around fishing and agriculture with limited diversification. The merits of the 'aquatics' is that in crafting their livelihoods in the lowlands they managed to adapt to seasonal flooding and take advantages emerging from it. In doing so, the notion of what constitutes security and insecurity becomes problematic. Security encompasses different aspects ranging from pure physical to socio-economic, cultural and political aspects. 'Aquatics' appear to find their overall security by living on the lowlands rather than on the upper lands. This is not to suggest that the

¹⁵ Group discussion with women in Canhungue (Mutarara district) May 23, 2007; in Cocorico (Mopeia District) September 24, 2007

¹⁶ Group discussions Canhungue (Mutarara District) May 23, 2007; Inhangoma (Mutarara District) September 10, 2008; Xitsomba (Chinde district) June 15, 2007; Luabo (Chinde District) October 23, 2007; Cocorico (Mopeia District) September 24, 2007 and Chupanga (Marromeu District) March 11, 2007.

¹⁷ There are 5 groups of Sena speakers: the *Sena Gombe*; the *Sena Phodzo*; the *Sena Rambhala*; the *Sena Bangwe* and the *Sena Tonga*.

'aquatics' are locked in the lowlands. Although based on the lowlands they are very dynamic and capture a lot of knowledge, information and interventions from the upper lands. Cross marriages, fish marketing, visits, evacuations and attempts at resettlements allows information and interventions from upper areas to reach the lowlands.

The 'Terrestrials': diversification, discontinuities and reconfiguration

Terrestrials is my metaphorical concept to denote those resettled who for different reasons (see case below), managed to make their living depending less on the Zambezi river and the flood-prone lowlands. They are living and building their livelihoods on the upper lands in resettlement centres. They turn out to be flood risk avoiders and they include those households whose major livelihood sources have shifted from farming or fishing to trading or permanent employment. Although few cases are still available from the 2007 flooding, that 'transition' has happened as illustrated in the following case:

António Francisco Marromo, a handicapped man (figure 7 below) is one amongst those who managed to make that shift. Marromo about 60 years old was living with his wife and three daughters at lowland *Benjuaque*, Mopeia District. Their livelihoods were based on agriculture, fishing and craft making and selling. They also got support from fellow church members. However, due to flooding in 2007, they evacuated to Zonas Verdes Resettlement centre.

Figure 7: Antonio Marromo crafting mattress



Source: Author

At the resettlement centre, Marromo's household faced different challenges. They started their new life living in a tent. In the tent they were indeed robbed blankets, dishes and pots and Marromo had to buy some items while the Red Cross provided others. Furthermore, his wife eloped and married another man, leaving him behind with the three daughters aged 12, 7 and 4. Handicapped and without a wife, Marromo faced several difficulties to provide livelihoods to his daughters. He hardly practiced agriculture and being far from the river he could not engage in fishing. Craftwork became his major livelihood activity besides running several domestic duties previously undertaken by his wife. When his daughters were busy or tired, he did the cleaning of the house, the cooking and the washing.

To 'meet' household needs Marromo had to reshape his livelihood sources. He got integrated into the local market. He constructed mattresses (picture above) and other home furnishers which his daughters took to the village market for sale or to buyers who had a contract with him. His daughters collected the crafting materials. He was happy because people bought his crafts while it was hardly the case in Benjuaque. Marromo expanded his network to cover NGOs and government bodies. Today he is one of the beneficiaries of aid from local government, the Red Cross, Save the Children and WFP as part of the handicapped target group (*Pessoas Portadoras de Deficiencia*).

By October 2008, Marromo moved to a new wood and grass house built under the WFP food for work programme, while waiting for a brick house he has been promised in the near future. Marromo thinks these opportunities would hardly be possible in Benjuaque. He is happy that he gets support from different institutions, his daughters go to a nearby school close to the house and they seem happier on the resettlement centre compared to the Benjuaque lowlands. He says he will never go back to live at Benjuaque. However, from time to time he goes to Benjuaque to visit friends and to see what new opportunities are emerging over there. He plans to marry another woman in Benjuaque who would be living there to develop agriculture but would come to the resettlement centre once in while to help his daughters.

Marromo's case illustrates the changing circumstances that may disrupt and reconfigure livelihoods when moving from the lowlands to upper resettlement centres and within the resettlement centre itself. Marromo's livelihood activities have shifted from agriculture and fishing to market integration and enrolment in NGOs and government institutions.

To build a living in the resettlement centres, Marromo, like many other people, had to reframe the cultural boundaries and notions of space, time and assets. Most of the households living in the resettlement centres had, as mentioned earlier, to expand their livelihood sources and this required to expand and rework networks to be able to enter into new domains of activities outside fishing and agriculture. For most households this includes networking to find a permanent or temporary job. Also, finding buyers for different merchandise, being enrolled in projects and learning new skills.

In this process, the so-called cultural divide of space between women and men is reconfigured. Women are no longer confined to agriculture and domestic duties but become active actors in the public sphere. The selling of different commodities is carried out mainly by women who also become very active in the process of searching or producing them. Many men also become actively involved in home duties and this was one of the advantages, referred to by women during group discussions, of living on the resettlement centers. For women, males are busy developing different activities for building livelihoods and have less time to drink beer and beating them. Furthermore, males like Marromo understand the need to let their wives and daughters interact with the market and increasingly accept to carry out domestic activities that culturally were designed as female domains.

By expanding the networks and entering into new spaces and domains of activity, the time and labour required for agriculture and fishing becomes

limited. People actively search for new assets including knowledge, as their agricultural expertise is not appropriate for their new lifestyle. In a PRA (Participatory Rural Appraisal) carried out by the Save the Children Alliance at the 24 de Julho resettlement center, women did not ask for seeds and tools but instead they asked for training on how to run business and grants to start business. They also asked for better market information. Men did not ask for fishing tools but for diverse new skills like masonry, carpentry, plumbing or mechanic (SCF, 2008a).

Market integration clearly becomes a real need by the households to make a living on the upper resettlement areas rather than a government demand. Hence knowing each type of soil and its utility becomes less relevant than knowing prices and markets. For example, following the October seed vouchers and fairs, Save the Children realized that in resettlement centers located close to the village such as 24 de Julho, people were less interested in seeds and tools and emerging from that recommended to reduce the number of beneficiaries of seeds and tools in these resettlement centers (SCF, 2008: 23). Thus, resettlement and lives in upper lands tended, in this case, to reconfigure the pre-existing norms and values of the resettled.

The Marromo case illustrates that resettlement is very dynamic with no clear cut phases and timeframes. Although I have followed, for analytical purposes, the 3 stage resettlement model by Harrell-Bond the case illustrates that there are much discontinuities and reconfigurations of stages. People have different capabilities and see and explore opportunities and constraints differently. For Marromo whose livelihoods depended less on agriculture, the second stage of the Harrell-Bond model (getting seeds and tools) meant little. Marromo had, to a large extent, jumped into the integration stage because of the new context. Under such a context, it is hard to conceive of a homogeneous and linear process which departs from recruitment/registration, through seed vouchers ending up with adaptation and incorporation after aid is withdrawn (which in his case is still part of the livelihood).

Finally, the Marromo case illustrates that resettlement does not necessarily mean detachment from the old site. It is neither the complete incorporation of new elements nor the rejection of the previous ones. Despite his integration into the new context, Marromo still visits the lowlands and has plans involving the lowlands. Thus, resettlement and life on the upper lands appears to be a process in constant shaping with no clear cut end. By now, Marromo does not want to return to the lowlands but depending on how livelihoods will evolve over time return is possible. Marromo now depends, largely, on markets and aid, but given market and aid volatility, there are open possibilities of going back to the lowlands if the situation turns sour in the upper resettlement centres. Otherwise he may well turn to be an 'amphibian' as I discuss below.

The 'Amphibians': in between continuity and discontinuities

I apply the metaphor of 'amphibian' to describe those who are in between the terrestrials and the aquatics, that is, those who settled on both sites. The 'amphibian' lifestyle is adopted by households who tend to explore advantages (and disadvantages) of being in both sites and have the ability to do so. This can be done either by moving part of the household to the lowlands while others remain in upper areas, or by moving the whole household to one site in a given time. For example, during the period between October and December, locally known as the 'hunger period' when market prices go up, households with limited purchasing power tend to move to the lowlands where they can rely more on natural resources. During the flood season and after harvests, these household may spend most of their time in the upper areas.

In the lowlands, households tend to make use of their previous knowledge of living as 'aquatics' building livelihoods around agriculture and fishing while in the resettlement centres a certain discontinuity evolves with households going for market integration and diversification. By building livelihoods around the two sites they appear, neither to be flood risk avoiders nor flood risk takers. They are concerned with the flooding but do not feel the need to avoid it completely.

Although some households resettled from the 2001 flood have adopted this as their permanent lifestyle, the 'amphibian' character is the dominant feature during the initial stages of the resettlement process. For most of the people who still have much of their knowledge and networks based on the 'aquatic' livelihoods, being 'amphibian' marks a 'transitional' stage toward the 'terrestrial' livelihoods. On the other hand, when drought periods are longer, 'terrestrial' households may shift to 'amphibian' or 'aquatics'.

Being 'amphibian' requires a different spatial arrangement, division of labour and networks. Most of the 'amphibians' tend to possess two houses or to develop networks which allow them to spend time at the two sites. This includes for instance finding a caretaker for the kids if the adults go away to the lower or upper lands for days or weeks.

To remain (temporarily or in shifts) on each site depends also on what skills, knowledge and networks each person (within the household) has and can be usefully and positively explored by remaining on each site for a specific time. Thus, there is a special labour arrangement within the household and community which if not aptly managed may lead to negative consequences. For example, school drop outs are higher amongst this group compared to the 'terrestrials'¹⁸. In some cases, young children may be left in the resettlement centres with their teenage sisters for hours or days while their parents are in the lowlands. This worried Save the Children who subsequently launched a project called '*espaço amigo da criança*', kid's space-where kids left behind by their parents in the resettlement centres can play and have some food.

¹⁸ Interviews with the director of the school at *24 de Julho* resettlement center, May 8, 2008 and 2 teachers at *Zonas Verdes* resettlement center, May 9, 2008

This section on different lifestyles brings out the manifold ways actors use to build livelihoods. Resettlers use lowlands, uplands and swing between the two. This requires different knowledge, networks and careful labour allocation. The mobilization of these resources shows local heterogeneity and results in what I have metaphorically called the aquatics, the terrestrials and the amphibians. The section shows also that the mobilization of resources for building livelihoods embeds different narratives, rationales, conflicts and negotiations. In overall, it shows that the building of livelihoods occur across different geographical areas and this stresses further the need to deconstruct the idea of a research site as demarked by clear boundaries. It also deconstructs the idea that we can clearly make the aid-post aid distinction or take the resettlement as a linear step-by-step process, starting with registration and ending up with the incorporation of the resettlers into the new context.

CONCLUSIONS

This chapter analyzed the resettlement process taking place on the Zambezi delta. It used the Harrell-Bond three stages resettlement model, which looks at the resettlement process from (i) the registration (ii) the provision of seeds and tools (iii) aid withdrawal. The chapter argued, however, that the resettlement process is rather complex without clear cut stages or a marked ending. Resettlers have different capabilities and see and explore opportunities and constraints differently. In such a context, it is hard to conceive a homogeneous and linear process that departs from recruitment/registration, through seed vouchers ending up with adaptation and incorporation in the new context after aid is withdrawn.

The resettlement of flood affected people is an idea, which the government of Mozambique has been pursuing since long ago. This has been marketed by using narratives of security and development, and reinforced through different incentives and disincentives. Private and public investments are incentivized in the new sites but discouraged in the old sites. At local level resettlement policy was, however, an arena of power relations, conflicts and negotiations. The policy was re- configured to meet local understanding and needs.

Throughout this chapter, I found that resettlement in practice takes on a very difference shape than the projects combining securitization and modernization as envisaged by the government, donors and NGOs. The resettlement appears to fulfill different agendas, besides security and modernity and during the implementation parallel discourses and unforeseen practices emerged. The resettlement process was in practice reconfigured to respond to the different local concerns such as social inclusion, power relations, access to resources and the crafting of livelihoods. In doing so, the resettlement process was marked by 'cheating', exclusion, contestation, elite capture and attempts to fulfil parallel needs. As outcomes of this, some

households return to the lowlands keeping continuity with their previous knowledge and life experiences. On the other, there are households integrated into the life and livelihoods of the resettlement centre and tend to reconfigure the norms and values from the lowlands. In between, a considerable number of households make use of knowledge accumulated from both-lowlands and resettlements centres and build their livelihoods on both sites.

For the outsiders, cheating appeared particularly annoying to most aid agencies. To overcome the 'cheating problem', some authors with whom I agree, to a large extent, have suggested using local participation, knowledge and building platforms (see Juma and Suhrke, 2002; Kibreab, 2004). Nonetheless, it is my understanding that the use of 'participation discourse' and 'local knowledge' will not end the complexities and power relations involved in the registration and cheating practices. Participatory mechanisms are just as likely to become immersed with personal agendas and power relations. We need sociological and anthropological researches to understand these dynamics (disclosing the access, control and use of resource in each context) and play into them with more flexible programme arrangements.

From all this, it is hard to conceive the resettlement as a linear process toward securitization and development. In the resettlement centres 'modernity' intermingle with 'traditionality'. Grass and wood houses mingle with brick and zinc roofed houses and people make use of both- 'traditional and modern knowledge'. The leadership in the resettlement centres involves also the traditional chiefs (*the regulos, sapandas and muenes*) and the modern *secretarios* and *chefes de centro*. On the other hand, the chapter illustrates that security encompasses different variables of life and livelihood and this changes in time and space. For instance, despite resettlement centres being discursively considered secure, Marromo was robbed suggesting that physical security is one among multiple variables encompassing security.

Overall, it appears that resettlement is a government's long established solution for the flooding 'problem' which indeed fulfils a range of other governmental agendas. Beyond security, resettlement tends to put households close to each other and the government can, thus, provide social services at low costs. On the other, it also helps the government to collect taxes and expand its influence on people who otherwise could not be reached by the government authorities. Hence, resettlement provides a route for the government to steer its power and control upon the people.

CHAPTER 8

CONCLUSION: CONTINUITIES IN CRISIS

Sometimes you need to take one step back in order to take two steps forward

Joaquim Chissano, former president of Mozambique¹

The present thesis emerged out of my personal experiences with disaster responses in Mozambique. I have been involved in humanitarianism since the year 2000 and ever since I have seen conflicting realities of disaster responses in the country. What strikes me is that in most of the cases, a widely held perception is maintained of local powerlessness, and humanitarian actors (including government and donors) providing aid to those local powerless victims, moved supposedly merely by philanthropic motivations.

Nonetheless, as I came to interact more with the affected and aid providers I came to experience a complex and contradictory picture to that of powerlessness and homogeneity. Affected people have their strategies and struggles. They need to deal not only with natural hazards, but also with their ancestors, various government departments, humanitarian organizations, their family members, fellow community members, the market, their past, their present and their future. NGOs providing humanitarian aid had to strategize, struggle and negotiate with donors, local government officers and their 'beneficiaries' so that their response would make sense to the local government, the donors, to local people and to themselves. I have come across different disagreements, conflicts and negotiations between and among local actors, NGOs, donors and government. In everyday practices, intervention models and humanitarian principles were, in most of the cases, reinterpreted transformed and continuously negotiated in the interactions between the different actors.

To grasp these complex realities, I set out to answer the question *how disasters and adaptation to climate change programmes are interpreted and acted upon by different actors in Mozambique?* Mozambique is, by international development standards, a poor country and disaster management has a long history of being based on international 'mercy' and national 'begging'. This being the case, an international and institutionalized perception has been developed, that assumes that there is very little national and local capacity to cope with disasters. This has crystallized into a dependency culture. The two front cover pictures and the introductory case study are illustrative of this widely held perception.

¹ Excerpt from a seminar "The Role of the International Aid for the Development of Mozambique. UEM, Maputo September 03, 2008

What is little understood is that beyond these pictures, there are disaster response practices in line with the above quotation from the former Mozambican. Local actors (including the government of Mozambique) use their agency to respond to hazards and disasters in ways that they perceive to suit their interests best. The Mozambican Red Cross case (chapter 4), where I discussed how the organization takes a 'sit back and take it' approach towards the donors is an example of 'taking one step back in order to take two steps forward'- a strategy widely used in Mozambique and, likely, in many other contexts.

To answer my research question I have taken an actor oriented approach, which focuses on actors' agency and sheds light on the structural factors surrounding people's everyday lives. I conceived disaster management as an arena where multiple actors from different domains of disaster response with different knowledge, cultural backgrounds, roles, power and interests meet, dispute and/or negotiate the process. This means that the outcomes cannot necessarily be predicted or planned. I conceptualise the outcomes as emerging from the interfaces between those different actors and their social negotiations. To be able to understand that process I focused on the everyday interactions between the different actors, their strategies, emerging conflicts, negotiations and the power relations which altogether enable or constrain disaster responses in the short and long run.

The major conclusion that I can draw from the present thesis is that disaster management in Mozambique involves the crafting of continuities in crisis by the different actors involved. The notion of continuities applies to disaster situations and responses in different ways:

- It can be stated that for poor people 'normal life' can hardly be disentangled from the exceptionalities of disaster situations. I found that people seek continuity in their livelihoods once disasters happen in institutions and their lives.
- Recurrent crises have shaped state formation in Mozambique and therefore have become part of the continuity or the long haul of historical transformations.
- Crises allow the continuity of humanitarianism- a deep political, economic and moral endeavor.
- Crises provide room to continuously claim the need to control nature and societies.
- Crises force actors to continuously reassess their beliefs, practices and to produce changes.
- Crafting continuities in crisis is, ultimately, what makes societies move.

In the next sections, I elaborate further on these continuities in crisis as they are shaped by different actors from the three domains of disaster response that I have analyzed throughout the book, i.e. the domain of international disaster response, the domain of the national government, and the domains of local people affected by disaster.

CONTINUITIES IN CRISIS: THE INTERNATIONAL DOMAIN OF DISASTER RESPONSE

The international domain of disaster response represents a cluster of international actors such as UN agencies, international NGOs, scientists who tend to respond to disaster situations based on a view of limited local capacity to deal with the disaster. These limitations include a lack of local political commitment and a lack of or limited material, human and financial resources. To undertake their responses, a wide range of global policies and regulations has been developed such as the UN guidelines for disaster response, the Sphere project, and the humanitarian principles. Individual organizations also have their own rules of the game. All these rules have in general a common goal which is to make aid delivery justifiable, predictable, calculable, efficient and controllable (Waters, 2001:35).

But, this bureaucratization of aid delivery tends to create internally oriented, rigid lines of communication and institutional culture which resists change, and reinforces existing international practices of disaster response which, as elucidated in chapter 5 and 6 of the present thesis, tend to overlook national and local capacities and even by-pass local authorities. In Chapter 5, I discussed the introduction of the Cluster Approach by the UN agencies, without previous consultation and agreement with the national government. In Chapter 6, I presented local response to the 2007 floods that clashed with external interventions that were based on the perception of local powerlessness. Kent (1987:92) has argued that resistance to changes and continuities in practices are due, mainly, to the fact that international actors fear losing control and changes create an institutional insecurity, and threaten organizational survival.

Although Kent is right in pointing out these aspects, I think that the reasons for continuities in policies and practices go far beyond the self-interest of the international actors. We have also to look at what national and local actors expect from the international actors and what gains they get. For many actors there is much to gain by maintaining and playing along with the actual status quo. Further, we need to note that, at the field level, international actors may be manipulated or, as it happens frequently, aid delivery is a by-product of different negotiations and re-interpretation of the international codes of conduct. In chapter 2 I discussed, amongst other aspects, how humanitarian aid came to empower FRELIMO. In Chapter 4, I highlighted that the CBDRM project became useful at local level after negotiations and reinterpretations of

the initial design. In Chapter 7, I show that the resettlement programme of the government is being re-configured to suit local power relations, needs and interpretations of security and development. Hence, national and local actors generally, reinforce continuities in practices through everyday demands at field level.

However, because the international rules and regulations are negotiated during the disaster response, they are therefore not necessarily static. They might be static in written form but are dynamic in their application. The findings that the Cluster Approach either as applied in Mozambique (chapter 5) or elsewhere (see Harvey, 2009) was being top-down, dictated changes in the application of the approach to become more participatory and inclusive. In short, international continuities are always in crisis, requiring adjustments and reformulation (in policies and practices) in every new disaster context even though the adjustments and reformulation might not be tacit or written.

CONTINUITIES IN CRISIS: THE DOMAIN OF DISASTER GOVERNANCE

The domain of disaster governance represents the ways national governments worldwide, based on global understanding of disasters, global policies and regulations as well as national and local understandings and interests come to frame disasters and shape disaster responses either institutionally or through everyday practices. Disaster governance is a political process and the case studies in this thesis have overwhelmingly found that disaster management is aligned to the continuity of the actors in power, either parties or individuals.

Disaster governance in Mozambique is part of the state formation process as it has, historically, been in consonance with the political and economic interests of government. Chapter 2 discussed how disaster mismanagement contributed to the erosion of kingdoms and how disaster management allowed, to a large extent, the FRELIMO government to remain in power. Disaster management within the domain of disaster governance requires finding the right balance with the local as well as the international constituents. Finding and keeping that balance is a continuous endeavor as the factors dictating the behavior and responses of the constituents are in constant flux.

In this book, the 'sit back and take it approach' emerged again and again as one of the strategies to keep that balance. When Hanlon and Smart (2008:295) state that donors have taken the driver's seat and the government is at most a hitch-hiker, they seem to have missed out on the active strategizing on the part of the government that this may entail. It can be understood as a strategy that allows resource flows and room for manoeuvre for many local and international actors. The Mozambican Red Cross has also been using the strategy as part of its survival politics.

Related to the 'sit back and take it approach' is a continuity in the 'lack of capacity narrative'. Lack of capacity is continuously claimed by different actors to legitimize their entry in the humanitarian arena. 'Sit back and take it' feeds into this narrative of a 'lack of capacity' in the same way that the 'narrative of lack of capacity' feeds into the 'sit back and take it approach'. From the moment local actors, including the government, adopt the 'sit back and take it approach' they appear indeed to have limited capacity and reinforce the narrative. Alternatively, from the moment actors are represented as having lack of capacity, interventions tend to take a top down approach and the 'sit back and take it' approach develops.

'Lack of capacity' is indeed a complex process. As I discussed in chapter 4 lack of local capacity needs to be analyzed from the politics involved in international relations, contracting staff, ascribing tasks, confronting chiefs and bringing new and innovative ideas, rather than merely looking, homogeneously, if the staff has received enough training. Hence, we need to critically appraise when and how the lack of capacity notion emerges and is applied.

Disaster governance means also enabling and disabling continuities and changes. Chapter 3 has provided four discourses on climate change. The scientific discourse; the discourse of climate change as an emerging property of God's will; the discourse of climate change as an emerging property of ancestor's will, and the discourse of climate change as an emerging property of witchcraft. Which discourse is allowed to perform on stage, depends on its relevance in keeping social order hence, allowing continuities, rather than disruption on everyday life. When in 2009, the discourse of climate change as an emerging property of witchcraft, produced discontinuities in social order, the government was compelled to imprison people and to stage the scientific discourse to produce continuities in crisis.

The episode illustrates as well that climate change is not detrimental at all. Despite the negative impacts marked, largely, by increased frequency and intensity of natural hazards, climate change is producing parallel (and positive) impacts by, for instance, bringing upfront local voices and obliging the government to intervene at local levels, either by providing scientific knowledge of climate change or by making livelihoods more resilient. Furthermore, it shows that there is much fluidity in discourses and practices of disaster response feeding each other in a number of ways and being relevant in different degrees at different times. The four discourses above feed different responses, which, as illustrated along the book, come to be neither genuinely autonomous nor genuinely planned.

Hence, disaster response from the domain of disaster governance in Mozambique was found to embed a continuous search for social order, either provided in concomitance with local actors through their different discourses and practice or in concomitance with the international actors also through their discourses and practices. The capability of crafting continuities in crisis will ultimately determine how disaster governance works out in practice for affected people. But this capability is in a constant making, which means that

the crafting of continuities in crisis is a constant endeavor by the actors in the domain of disaster governance.

CONTINUITIES IN CRISIS: THE LOCAL DOMAIN OF DISASTER RESPONSE

The local domain of disaster response represents responses by the afflicted population and their surrounding networks. This may geographically be connected to community or village levels although responses at these levels are informed by other geographical levels and domains. As observed by Hilhorst (2004:63) practices at local level are constantly evolving through interaction, social negotiations, accommodations, exchanges and power struggles within the domain and with other domains of disaster response.

The analysis provided throughout this thesis leads us to conclude that local response involves, mainly, the crafting of continuities in crisis as evidenced in chapter 6 and 7. People at the local level respond to disaster by attempting to find the right balance between saving lives and livelihoods. This includes attempts to save productive assets, attempts to keep power and control over resources, attempts to build or strengthen social networks in the midst of crisis, and attempts to improve livelihoods through emerging opportunities. Overall, this thesis which focused on floods shows that, under gradual flooding, people tend to decide who goes where, when, how and what to take with them. This process is informed by past experiences, current situation and future aspirations.

Emerging from this, people's refusal to evacuate or decision to wait until late evacuation should not be understood as a matter of backwardness, stupidity, irrationality as portrayed at the time in Mozambican media and political speeches. Rather, it is a creative form of securing long established livelihood assets at the same time that they take advantage of newly emerging opportunities brought in by an emergency logic. It is their weapon against their long-term impoverishment and vulnerability. It responds strategically to their perception of how humanitarian assistance is done, and what sort of short and long-term rewards and punishments they may eventually face. Patt and Schroter (2008:460) have observed that when taking actions will lead to both-gains and losses- people's decisions will be dominated by their understanding of the potential losses. Likewise, when any ambiguity exists in their understanding, people use new information to confirm rather than disprove their pre-existing beliefs.

Disaster responses by other domains may well strengthen local response but may also weaken it. By implementing coercive (early) evacuation with little knowledge of the local context and dynamics, relief providers and disaster managers may wittingly or unwittingly contribute to the impoverishment and long-term vulnerability of those who, due to coercions, lose their assets, networks and have limited abilities to capture emerging opportunities. When this occurs, discontinuities are created or

exacerbated which brings along crisis on the disaster response practices requiring reformulations. Disasters are, therefore, an emerging property of the inability to craft continuities in crisis at local level.

.... BACK TO RESEARCH QUESTIONS

In the preceding section I have outlined my major conclusions on disaster responses in Mozambique. Before finalizing the book, it is worth to revisit the research questions that guided the thesis and, shortly, provide more concrete answers. The main research question of the book was *how disasters and adaptation to climate change programmes are interpreted and acted upon by different actors in Mozambique*. More specifically, the research has set out to answer the following questions:

1. How do local people experience and interpret climate-related extreme weather events?
2. How do local people integrate disaster responses in their everyday livelihood practices?
3. How do local people, national government authorities, NGOs, donors interact in disaster response and what are the outcomes of their interactions?
4. How do intervening agencies (i.e. government and NGOs) translate, (inter) national policies and projects to make them suitable to their own needs and the needs of local people?
5. How do different actors at local level appropriate, integrate or transform project interventions on disaster risk reduction to suit their needs?

After the discussion provided throughout this thesis the following 10 points represent, shortly, the answers to the research questions posed above:

1. **Local actors avail of different interpretations of extreme weather events.** The local level is heterogeneous. There are multiple identities, multiple projects and goals, multiple encounters, multiple strategies, multiple tasks and multiple outcomes. The perception and response to extreme events is based on experiences, current situation, and future aspiration and is subject to contingencies.
2. **Disaster and climate change management in Mozambique are part of the state formation process.** It is hard to conceive disaster responses out of the wider process of state formation in Mozambique since disasters have been shaped and shape processes of 'development' taking place nationwide.
3. **Disaster management is an arena of discourses and power relations.** The framing of disaster and responses to it is embedded in different (competing) discourses and, the hegemonic ones, which, generally, dictate the timing and the type of response, emerge out of power relations.

4. **Disaster management may increase local vulnerability.** Disaster responses are often based on faith rather than a critical appraisal of the practices and needs. When this is the case, responses may reduce resilience and increase local vulnerability.
5. **There is no 'one size fits all'.** The present thesis has shown that disaster response needs to be flexible and context based. The Red Cross project in Cocorico and the Cluster Approach have shown that we can not opt for one approach that can suit all contexts all the time.
6. **Local people are creatively adapting to climate change.** Regardless of which discourses and interventions are hegemonic on climate change, local people, within the limits of their knowledge and other resources, are adapting to climate change by changing behaviour, practices and voicing out their concerns.
7. **Adaptation is a dynamic process.** Adaptation is a continuous process of making people more resilient and lessening their vulnerability. This process is crafted in societies facing continuous crisis, which, therefore, makes adaptation to evolve as a dynamic process.
8. **Climate change is one amongst many risk factors people face in Mozambique.** People in Mozambique face different risks (i.e. diseases such as HIV and AIDS, market price's volatility, soil erosion, globalization among others). Hence, climate change is just one additional risk factor. People's response to climate change is not singled out. It is intertwined in the complex crafting of responses to these different risks.
9. **Lack of capacity is a strategy to appropriate, integrate or transform interventions on disaster risk reduction.** The weakness discourse represents, for the actors from the three domains of disaster response, a pathway to appropriate, integrate or transform interventions on disaster risk reduction. By playing weak, national and local actors grab international attention and sympathy and, to some extent, resources to fulfil their different agendas. On the other hand the international actors use the discourse to enter the humanitarian arena and in doing so, forge their multiple objectives.
10. **Discontinuities are relevant for continuities.** Extreme events and disasters tend to produce discontinuities in people's lives. In so doing, they unveil the limitations of the existing practices of disaster response and force actors to reassess their beliefs, practices and to produce changes in disaster response. Recurrent disasters means continuities are in crisis and crisis are in continuity. The interplay of continuities in crisis and crisis in continuity forces changes in practices. Hence, changes in disaster

responses are an emergent property of crisis that tend for continuities and continuities that tend for crisis.

REFERENCES

- ActionAid (2007) The Cluster Approach in Mozambique 2007: Is It Improving Emergency Response? An NGO Perspective. London, UK
- Adam, Y. (2005) Escapar aos Dentes do Crocodilo e Cair na Boca do Leopardo. Promedia, Maputo, Moçambique
- Adam, Y. (1990) Foreign Aid to Mozambique; Needs and Effects. Centro dos Estudos Africanos, UEM, Maputo
- Adger, W.; S. Agrawala; M. Mirza; C. Conde; K. O'Brien; J. Pulhin; R. Pulwarty; B. Smit and K. Takahashi (2007) Assessment of Adaptation Practices, Options, Constrains and Capacity. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of the Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*; M. Parry; O. Canziani; J. Palutikof; P. van de Linden and C. Hanson, Eds., Cambridge Univesrity Press, UK, pp. 717-743
- Adger, W; N. Arnell; E. Tompkins (2005) Successful Adaptation to Climate Change Across Scales. *Global Environmental Change* 15, pp: 77-86
- ADPC (2006) Community-Based Disaster Risk Management for Local Authorities; Bangkok, Thailand.
- Anderson, M and P. Woodrow (1989) A Framework for Analysing Capacities and Vulnerabilities in: *Rising from Ashes: Development Strategies in Time of Disaster*. Westview press, Boulder & San Francisco. pp.9-25
- Alexander, C. (2000) From Civil War to Civil Society? Aid, NGOs and Hegemonic Construction in Mozambique. PhD Thesis, University of Toronto, Canada
- Alexander, D. (1997) The Study of Natural Disasters, 19770-1997; Some Reflections on a Changing Field of Knowledge. *Disasters* 21(4) , pp: 283-304
- Al-Madhari, A. and Keller, A. (1997) Review of Disaster Definition. *Pre-Hospital Disaster Med* 12 (1), pp: 17-20.
- Amnesty International (1988) Mozambique. Human Rights Report 1988. London, UK
- ARPAC (1998) Relatório Final do Workshop sobre Uso Sustentável da Barragem de Cahora Bassa e do Vale do Zambeze. Songo de 29 de Setembro a 2 de Outubro de 1997
- Arce, A. and N. Long (2000) Reconfiguring Modernity and Development from an Anthropological Perspective in Long, N. and A. Arce (eds) *Anthropology, Development and Modernities: Exploring discourses, Counter-tendencies and Violence*. London and New York: Routledge
- Arndt, C; S. Jones; F. Tarp (2006) Aid and Development: The Mozambique Case. Discussion papers, Department of Economics, University of Copenhagen
- Artur, L. and D. Hilhorst (2010) Climate Change Adaptation in Mozambique in: Martens, P and C. Chang (Eds) *The Social and Behavioural Aspects of Climate Change: Linking vulnerability, Adaptation and Mitigation*. Greenleaf publishing Limited, UK pp. 114-129
- ARPAC (1998) Relatório Final do Workshop sobre Uso Sustentável da Barragem de C.Bassa e do Vale do Zambeze. Songo de 29 de Setembro a 2 de Outubro de 1997
- Asthana, R. (1996) Involuntary Resettlement. Survey of International Experience. *Economic and Political Weekly* 31(24), pp: 1468-1493
- Atmar, H. (2001) Politization of Humanitarian Aid and its consequences for Afghans. *Disasters* 25, pp: 321-330

- Babbie, E. (2007) The Practice of Social Research. Thomson Wadsworth publishing, USA
- Bailey, K. (1994) Methods of Social Research. Fourth Edition. The Free Press, USA
- Bankoff, G. (2004) The Historical Geography of Disaster: 'Vulnerability' and Local Knowledge in Western Discourse in: Bankoff, G; G. Frerks, D. Hilhorst (2004) Mapping Vulnerability: Disasters, Development & People, London, Eartscan publications
- Bankoff, G; G. Frerks, D. Hilhorst (2004) Mapping Vulnerability: Disasters, Development & People, London, Eartscan publications
- Barbosa, F; T. Lynam; B. Chande (1998) Avaliação do Uso dos Recursos no Delta do Zambeze. Relatório final, IUCN-Beira
- Barnes, B. (2000) Understanding Agency. Social Theory and Responsible Action. SAGE Publications
- Barnes, S. (1998) Humanitarian Aid Coordination During War and Peace in Mozambique: 1985-1995. Studies on Emergencies and Disaster Relief. Report no. 7, Nordiska Afrikainstituten, Sweden
- Barnes, S. (1996) Humanitarian Assistance as a Factor in the Peace Negotiations 1990-1992 in Mozambique. Nordiska Afrikainstituten, Sweden
- Barnes, S. (1996) NGOs in Peacekeeping Operations: Their Role in Mozambique. Paper presented at ACUNS Ninth Annual Meeting, 25-26 June. Turin, Italy
- Bebbington, A. (1999) Capitals and Capacities: A Framework for Analysing Peasant Viability, Rural Livelihoods and Poverty. *World Development* 27: 2021-2044
- Beilfuss, R. (2005) Zambezi Delta Flooding Patterns and Water Balance. Paper presented at the seminar on the Water Management on the Lower Zambezi held in Maputo 5-6 September
- Beilfuss, R. (2005a) Natural and Dam-Induced Patterns of Hydrological Change in the Zambezi River Basin. Paper presented at the workshop on Water Management on the Lower Zambezi held in Maputo, September 5-6
- Beilfuss, R. (2005b) Understanding Extreme Floods in the Lower Zambezi River. Paper presented at the seminar on the Water Management on the Lower Zambezi held in Maputo 5-6 September
- Beilfuss, R. (1999) Can This River Be Saved? Rethinking Cahora-Bassa Could Make a Difference for Dam-battered Zambezi. *World Rivers Review*
- Beilfuss, R. and C. Brown (2005) Assessing Environmental Flow Requirements for the Marromeu Complex of the Zambezi Lower: Application of the Drift model (Downstream Response to Imposed Flow Transformation). Paper presented at the workshop on Water Management for the Lower Zambezi held in Maputo, September 5-6.
- Blaikie, P., T. Cannon, I. Davis, and B. Wisner. (1994) At Risk: Natural Hazards, People's Vulnerability and Disaster. Routledge, London
- Bless, C. and P. Achola (1990) Fundamentals of Social Research Methods. An African Perspective. Government Printer, Lusaka
- Bolton, P (1983) Social and Environmental Changes Associated with the Cahora Bassa Project in: *The Regulation of the Zambezi in Mozambique. A study of Origins and the impacts of the Cahora Bassa project*. PhD Thesis, University of Edinburg, Chapter 6, pp: 343-406.
- Bolton, P (1978) The Control of Water Resources in the Zambezi Basin and Its Implication for Mozambique. Occasional papers on Appropriate Technology, University of Edinburg, Scotland
- Borton, J. (2009) The Future of the Humanitarian System: impacts of internal changes. John Borton Consulting, UK

- Bowen, N. (2000) Traders and Livelihood Strategies in Post-Conflict Zambézia. PhD Thesis, LSE, University of London
- BUREP (1980) Programa para o Desenvolvimento Hidro-Agrícola do Baixo Zambeze, 1980-1990. DNA, Maputo, Moçambique
- Bruijn, M and H. van Dijk (1999) Insecurity and Pastoral Development in the Sahel *Development and change* (30); pp: 115-139
- Burton, I., S. Huq; B. Lim; O. Pilifosova and E. Schipper (2002) From Impact Assessment to Adaptation Priorities: the Shaping of Adaptation Policy. *Climate policy* 2, pp: 145-159
- Buys, P.; U. Deichmann; C. Meisner; T. That; D. Wheeler (2007) Country Stakes in Climate Change Negotiations: Two Dimensions of Vulnerability. The World Bank, Washington.
- Callamard, A.(1994) Refugee and Local Hosts: A Study of the Trading Interactions Between Mozambican Refugees and the Malawian Villagers in the District of Muanza. *Journal of refugee Studies* 7(1), pp: 39-62
- Cardona, O. (2004) The Need for Rethinking the Concepts of Vulnerability and Risk from a Holistic Perspective: a Necessary Review and Criticism for Effective Risk Management in: Bankoff, G; G. Frerks, D. Hilhorst (eds) *Mapping Vulnerability: Disasters, Development & People*, London, Eartscan publications, pp: 37-51
- Casley, D. and D. Lury (1982) Monitoring and Evaluation of Agriculture and Rural Development Projects. London: The Johns Hopkins University Press.
- CEA (1979) Problemas de Transformação Rural na Provincia de Gaza. Um Estudo Sobre Articulação Entre Aldeias Comunais Seleccionadas, Cooperativas Agrícolas e Unidades de Produção do Baixo Limpopo. Universidade Eduardo Mondlane, Maputo
- Ceres Research School (2006) In Search of Common Ground, the Netherlands
- Cernea, M. (1996) Understanding and Preventing Impoverishment from Displacement- Reflections on the State of Knowledge in: C. Mc Dowell (ed) *Understanding Impoverishment. The Consequences of Development-induced Displacement*. Berghahn Books. Providence and Oxford, pp: 13-32.
- Cernea, M. (1990) From Unused Social Knowledge, to Policy Creation: The Case of Population Resettlement. Development Discussion paper no. 342. Havard Institute for International Development
- Cernea, M. (1988) Involuntary Resettlement in Developing Projects. The World Bank, Washington DC
- Chabal, P. (2002) A History of Postcolonial Lusophone Africa. C. Hurt & Co. Publishers ltd
- Chambers, R. (1983) Rural Development: Putting the Last First. Longman Publication
- Chambers, R. and G. Conway (1991) Sustainable Rural Livelihoods: Practical Concepts for the 21st century, IDS Discussion paper 296
- Chambote, R. (2008) METIER- Consultoria & Desenvolvimento Escamotea a Realidade Linguística e Cultural de Moçambique: O Caso do Perfil do Distrito de Mutarara. In <http://oficinadesociologia.blogspot.com> assessed 04 May 2008
- Chidiamassamba, C. & G. Liesegang (1997) Dados Historicos Sobre Ocorrencia e Tipos de Cheias no Vale do Zambeze. Paper presented at the Workshop on Sustainable Use of Cahora Bassa Dam and Zambezi Valley. Songo 29-09 to 2-10-1997.
- Christie, F. and Hanlon, J. (2001) Mozambique and the Great Flood of 2000, African Issues, London. Long house publications
- Christoplos, I. (2010) The Multiplicity of Climate and Rural Risk. DIIS Working Paper 8

- Cleaver, F. (2001) Institutions, Agency and the Limitation of Participatory Approach to Development in: Cooke, B. and U. Khotari (eds) *Participation: the new tyranny?* Zed Books, London and New York pp: 36-55
- Coburn, A.; J. Leslie and A. Tabban (1984) Reconstruction and Resettlement 11 years later: a case study of Bingol Province Eastern Turkey in: Schupisser, S. and Studer, J. (eds) *Earthquake Relief in less industrialized areas*. A.A. Balkema, pp 49-58
- Coelho, J. (1993) Protected Villages and Communal Villages in the Mozambican Province of Tete (1968-1982). A History of State Resettlement Policies, Development and War. PhD Thesis, University of Bradford
- Coelho, J. (2001) State, Community and Natural Calamities in Rural Mozambique. Centro dos Estudos Africanos, Maputo
- Cosgrave, J.; C. Goncalves; D. Martyris; R. Polastro and M. Sikumba-Dils (2007) Inter-agency real time evaluation of the response to the February 2007 floods and cyclone in Mozambique. Mozambique, April 2007.
- Covane, L. (2001) Southern Mozambique: Migrant Labour and Post-Independence Challenges in: Wet, C. and R. Fox (Eds) *Transforming Settlement in Southern Africa*. Edinburgh University Press. Pp. 48-64
- Cramer, C. (2001) Privatization and Adjustment in Mozambique: a 'Hospital Pass'? *Journal of Southern Africa Studies* 27(1)
- Cravinho, J. (1995) Modernizing Mozambique. Frelimo Ideology and the Frelimo State. PhD thesis, University of Oxford, UK
- Crisp, J. (1999) Who Has Counted the Refugees? UNHCR and the Politics of Numbers. UNHCR, Working paper No. 12
- CVM (2007) Síntese da Visita de Trabalho da Senhora Secretária Geral da CVM a Caia- 20-23 de Março de 2007. Maputo, Moçambique
- CVM (2006) Cruz Vermelha de Moçambique- 25 anos de História. Maputo, Moçambique
- CVM (2005) Relatório de Treinamento de Comitês de Gestão de Desastres (9) nos Distritos de Namacurra, Maganja da Costa e Mopeia. Quelimane, Moçambique
- CVM (2004) Mozambique Red Cross Society. Partnership meeting. Pemba, November 16-17, 2004
- CVM (2002) Política de Gestão de Desastres. Maputo, Moçambique
- CVM (2002a) Plano Estratégico 2003-2005. Maputo, Moçambique
- CVM (2002b) Estratégia de Preparação para Desastres. Maputo, Moçambique
- CVM (2001) A Experiência da Cruz Vermelha sobre Cheias. Maputo, Moçambique
- CVM (1982) Conferência Constitutiva. 10-12 de Julho de 1981. INDL, Maputo, Moçambique
- CVM and IFRC (2007) Floods and Cyclone Response. Mozambique 2007. Maputo, Mozambique
- CVM and DRC (2002) Community Disaster Preparedness Programme- Mozambique 2002-2005. Programme document. Maputo, Mozambique
- da Silva, T. (1994) Post-War Resettlement Strategies: A Case Study of Mozambique 1992-1993. MSc thesis, London School of Economics and Political Science
- Davies, B., R. Beilfuss and M. Thoms (2000) Cahora Bassa Retrospective, 1974-1997: Effects of Flow Regulation on the Lower Zambezi River. *Verh. Internat. Verein. Limnol* (27), pp:1-9
- Day, G. (2006) Community and Everyday Life. Routledge, London and New York.
- de Brito, L. (1980) Dependência Colonial e Integração Regional. *Estudos Moçambicanos* (1), pp:23-32, Maputo, Moçambique
- de Matteis, A., L. Oliveira; P. Martill; J. Correia (2006) Baseline Survey of Food Security and Nutrition in Mozambique. SETSAN, Maputo, Mozambique

- de Waal, A. (1997) Famine Crimes: Politics and the Disaster Relief Industry in Africa. James Currey. Oxford and Indiana University Press
- DFID (2006) Mozambique. Strategic Conflict Assessment. Maputo, Mozambique
- DFID (2005) Disaster Risk Reduction: a Development Concern, DFID Publications, London, UK
- DFID (1999) Sustainable Livelihoods Guidance Sheets. London, UK
- Dick, B. (2004) Action Research Literature. Themes and Trends. Action Research 2(4) pp. 425-444
- DNA (1998) Water Resources. Country Situation Report. Final Report prepared by Consultec. Maputo, Mozambique
- Downing, T. (2002) Avoiding New Poverty: Mining-induced Displacement and Resettlement. IIED and WBCSD publications, Issue 58
- Downing, T. (1996) Mitigating Social Impoverishment When People are Involuntarily Displaced in: C. Mc Dowell (ed) *Understanding Impoverishment. The consequences of development-induced displacement*. Berghahn Books. Providence and Oxford, pp: 33-48
- DPCCN (1997) Projecto de Reajustamento de DPCCN e a Criação de Reserva Financeira para a Prevenção de Calamidades. Maputo, Moçambique
- DRC (2002) Community Based Disaster Preparedness Pilot Phase- Final report. Maputo, Mozambique
- Drury, A. and R. Olson (1998) Disaster and Political Unrest: An Empirical Investigation. Journal of Contingencies and Crisis Management 6 (3), pp: 153-161
- Duffield, M. (2000) Humanitarian Conditionality: Origins, Consequences and Implications of Pursuit of Development in conflict in: G. Loane and T. Schumer (eds.) *The Wider impact of Humanitarian Assistance; the case of Sudan and the implications for European Union Policy. Conflict Prevention Network (SWP-CPN) 60/6*. Baden-Baden: Nomos Verlagsgesellschaft.
- Dwivedi, R. (1999) Displacement, Risks and Resistance: Local Perceptions and Actions in the Sardar Sarovar. Development and Change 30, pp:43-78
- Egero, B. (1992) Moçambique: Os Primeiros Dez Anos da Construção da Democracia. Arquivo Histórico de Moçambique, Maputo, Moçambique
- Eriksen, S. and J. Silva (2009) The Vulnerability Context of a Savanna Area in Mozambique: Household Drought Coping Strategies and Responses to Economic Change. Environmental Science and Policy 12, pp:33-52
- Eriksen, S. (2004) Building Adaptive Capacity in a 'Glocal' World: Examples from Europe and Africa. The ESS Bulletin 2(2), pp: 18-26
- Feldman, S.; C. Geisler; L. Silberling (2003) Moving targets: displacement, impoverishment and development. ISSJ 175, UNESCO.
- Filipe, E. (2003) The Dam brought us hunger: a history of the building of Cahora bassa dam, work, aldeamentos and the social, economic and environmental transformation in Mutarara and Sena, 1969-2000. MSc Thesis, University of Minnisota
- Fishbein, M. & I. Ajzen (1975) Belief, attitude, Intention and behaviour: an introduction to theory and research. Addison-Wesley, UK.
- Fitzpatrick, J. (1981) The Economy of Mozambique: Problems and Prospects. Third World Quarterly (3)1, 77-87
- Foley, C. (2007) Mozambique: A case study in the role of the affected state in humanitarian action. HPG Working Paper, September 2007
- Freitas, R. (1971): O grupo Sena. Gabinete Provincial de Accao Psicologica; Lourenco Marques

- Frerks, G., D. Hilhorst, A. Moreyra (1999) Natural Disasters: Definitions and Concepts. pp. 7-15 in: *Natural Disasters; a Framework for Analysis and Action, Report for MSF*. Wageningen, Disaster Studies
- Garfinkel, H. (1967) Studies in Ethnomethodology. Prentice-Hall, INC, USA
- Geertz, C. (1983) Local Knowledge: Further Essays in Interpretative Anthropology. Basic Books, USA
- Giddens, A. (1981) A Contemporary Critique of Historical Materialism. The Macmillan Press LTD. UK
- GoM (2007) Estrategia Nacional de Gestão de Recursos Hidricos. Maputo, Mozambique
- GoM (2004) Lei de Familia. Lei no 10/2004. Publicado no Boletim da República I serie-Numero 34
- GoM (2000) Post-Emergency Reconstruction Program: International Reconstruction Conference, Rome Italy
- GoM (1988) Rising to the Challenge. Dealing with Emergency in Mozambique. An Inside View. Maputo, Mozambique
- GPZ (2001) Ante-Projecto do Plano de Desenvolvimento Comunitario do Vale do Zambeze, Sub Região do Delta. Tete, Moçambique
- Granje, P . (1970) Relatorio da Inspeccao Ordinaria a Circunscriçao de Mopeia. Quelimane, Moçambique
- Greenwood, D. (2002) Action Research: Unfulfilled Promises and Unmet Challenges. Concepts and Transformation 7(2) pp. 117-139
- Griffin, R.; K. Neuwirth; S. Dunwoody; J. Giese (2004) Information Sufficiency and Risk Communication. *Media psychology* 6
- Hammersley, M and P. Atkinson (1983) Ethnography Principles in Practice. Tavistock Publications. London and New York.
- Hammond, L. (2008) Strategies of Invisibilization: How Ethiopia's Resettlement Programme Hides the Poorest of the Poor. *Journal of Refugee Studies* 21 (4) pp. 517-536
- Hanlon, J. and T. Smart (2008) Há Mais Bicicletas- Mas há Desenvolvimento? Missanga Ideas & Projectos. Maputo
- Hanlon, J. (2007) Is Poverty Decreasing in Mozambique? IESE, Conference paper # 14
- Hanlon, J. (1991) Mozambique. Who Calls the Shot? James Currey Publishers. London
- Haque, C. (1997) Hazards in a Fickle Environment: Bangladesh. Kluwer Academic Publishers, Netherlands
- Harrell-Bond, B. (1999) The Experience of Refugees as Recipients of Aid. In: A. Ager (ed) *Refugees Perspectives on the Experience of Forced Migration*. Cassell, London pp. 136-168
- Harrell-Bond, B. (1986) Imposing Aid. Emergency Assistance to Refugees. Oxford University Press
- Harvey, P., A. Stoddard; A. Harmor; G. Taylor (2010) The State of the Humanitarian System: Assessing Performance and Progress. A Pilot Study. ALPAN, London, UK
- Harvey, P. (2009) Toward Good Humanitarian Government. The Role of the Affected State in Disaster Response. HPG Policy Brief 37, London, UK
- Haws, E.; N. Reilly; D. Plinston (1982) Lower Zambezi Floods and Warning System: Reassessment of Cahora Bassa Design Flood and Operations. Quatorzième Congress des Grands Barrages, Rio de Janeiro. Proceedings, pp:346-365

- Head, J. (1980) State, Capital and Migrant Labour in Zambezia, Mozambique: A Study of the Labour Force of Sena Sugar Estates Limited. PhD Dissertation, University of Durham
- Hebinck, P. (1995) Intervention and the Black Box: Maize Farming in Nandi District, Kenya in : Frerks, G. and J. den Ouden (eds) *In search of the middle ground. Essays on the sociology of planned development*. Wageningen university. Pp. 165-185
- Hedges, D. (1977) Trade and Politics in Southern Mozambique. PhD thesis, University of London
- Hewitt, K. (1969) Natural Hazard Research. A Pilot Survey of Global Natural Disasters of the Past Twenty Years. University of Toronto, Working paper # 11
- Heijmans, A. (2004) From Vulnerability to Empowerment in: Bankoff, G. Frerks, G. Hilhorst, D. (eds) *Mapping Vulnerability. Disaster, Development and People*. Earthscan publications, London, UK; pp: 115- 127
- Hewitt, K. (1997) Introduction: Danger and Modernity. Region of Risk- a Geographical Introduction to Disasters. Longman, London, pp: 1-17
- Hilhorst, D. & B. Jansen (2010) Humanitarian Space as Arena. A Perspective of Everyday Practice. *Development and Change*, 41 (6) 1117-1139
- Hilhorst, D. & J. Warner (Forthcoming) Normality and Exception: Linking up the Security Chain. Paper presented during the 1st International Humanitarian Conference, Groningen (NL), February 2009
- Hilhorst, D. and M. Serrano (2010) The Humanitarian Arena in Angola 1975-2008. *Disasters* (34), 183-201
- Hilhorst, D. (2007) Saving Lives or Saving Societies? Realities of Relief and Reconstruction. Inaugural Lecture. Wageningen: Wageningen University
- Hilhorst, D. (2004) Complexity and Diversity: Unlocking Social Domains of Disaster Response in: G. Bankoff; G. Frerks and D. Hilhorst (eds) *Mapping Vulnerability. Disaster, Development and People*. Earthscan, UK and USA, pp:52-66
- Hilhorst, D. (2003) The Real World of NGOs. Discourse, Diversity and Development. Zed Books, London and New York.
- Hilhorst, D. and N. Schmiemann (2002) Humanitarian Principles and Organizational culture. Everyday practices in Médecins Sans Frontières-Holland. In: *Development in Practice*, 12 (3)4
- Hodges, T. and R. Tibana (2005) A Economia Politica do Orçamento em Moçambique. Principia, Lisboa, Portugal.
- Hogwane, A. (2000) Morphological Changes of the Zambezi Delta Due to Upstream Regulation of the River. Maputo, Mozambique
- Hogwane, A. (1997) Shrimp Abundance and River Runoff in Sofala Bank- the Role of the Zambezi. paper presented at the Workshop on the Sustainable Use of the Cahora Bassa Dam and the Valley of the Lower Zambezi. Songo, September 29- October 02.
- Holloway, A. (2000) Drought Emergency, Yes... Drought Disaster, No: Southern Africa 1991-93. *Cambridge Review of International Affairs* XIV (1), pp: 254-275
- IASC (2006) Guidance Note on Using the Cluster Approach to Strengthen Humanitarian Response. Geneva, Switzerland
- IFRC (2009) World Disaster Report 2009: Focus on Early Warning, Early Action. Geneva, Switzerland.
- IFRC (2005) World Disaster Report 2005: Focus on Information in Disasters, Geneva, Switzerland
- IFRC (2002) World Disaster Report 2002. Focus on Reducing Risk. Eurospan, London
- IFRC (1997) World Disaster Report 1997. Geneva, Switzerland

- Impacto (1998) Diagnostico Ambiental da Província da Zambezia. Maputo, Mozambique
- INE (2007) III Censo Geral da População e Habitação. Resultados Preliminares. Maputo, Mozambique. Available at www.ine.gov.mz accessed October 11, 2009
- INE (2002) Censo Agro-Pecuário 1999-2000. Apresentação Sumária dos Resultados. Maputo
- INGC (2009) Syntesis Report. INGC Climate Change Report: Study on the Impacts of Climate Change on Disaster Risk in Mozambique: Van Logchem, B. and Brito, R. (eds). INGC, Maputo, Mozambique
- INGC (2007) Diagnóstico Preliminar e Acções de Reconstrução Pós-Calamidade. Maputo, Mozambique;
- INGC (2007a) Normas Mínimas para os Centros de Acomodação (CA). Maputo, Fevereiro 2007
- INGC (2006) Plano Director para Prevenção e Mitigação das Calamidades Naturais. Maputo, Moçambique
- INGC (2001) Balanço do Apelo de Emergência Face às Cheias de 2001. Maputo, Mozambique
- INGC,UEM & Fewsnets (2003) Atlas for Disaster Preparedness and Response in the Limpopo Basin, Maputo, Mozambique
- IPCC (2007) Fourth Assessment on Climate Change. Cambridge University Press, Cambridge
- IPCC (2001) Climate Change 2001: Impacts, Adaptations and Vulnerability. Contribution of Working Group II to the third Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge
- Isaacman, A. (1996) Cotton is the Mother of Poverty. Peasants, Work, and Rural Struggles in Colonial Mozambique, 1938-1961. London: James Currey
- Isaacman, A. and B. Isaacman (1976) The Tradition of Resistance in Mozambique: The Zambesi Valley 1850-1921. University of California Press
- Jackson, M.(1998) Minima Ethnographica: Intersubjectivity and the Anthropological Project. The University of Chicago Press.
- Jackson, P. (1997) Ecological Studies on the Middle Zambezi Priori to Kariba and Cahora Bassa and the Need for Surveys of the Lower Zambezi priori to the creation of further Hydrological dams. paper presented at the Workshop on the Sustainable Use of the Cahora Bassa Dam and the Valley of the Lower Zambezi. Songo, September 29-October 02.
- Jacobsen, K. (2002) Can Refugees Benefit the State? Refugee Resources and African Statebuilding. *Journal of Modern African Studies* 40 (4), pp: 577-596
- Jones, R.;P. Bramel; C. Longley; T. Remington (2002) The Need to Look Beyond the Production and Provision of Relief Seed: Experiences from Southern Sudan. *Disasters* 26(4), pp: 302-315.
- Juma,M. & A. Suhrke (2002) Eroding Local Capacity. International Humanitarian Action in Africa. Nordic African Institute
- Junod, H. (1996) Usos e Costumes Bantu- Tomo I. Arquivo Histórico de Moçambique, Documento 3. Maputo, Moçambique
- Kaag, M. (2004) Ways Forward in Livelihood Research in: Kalb, D; W. Pansters and H. Siebers (eds) *Globalization and Development; Themes and Concepts in Current Research*. Kluwer Academic Publishers, pp: 49-74
- Kibreab, G. (2004) " Pulling the Wool over the Eyes of the Strangers: Refugee Deceit and Trickery in Institutionalized Settings". *Journal of Refugee Studies* 17(1)1-26, Oxford University Press

- Kinsey, B. and H. Binswanger (1993) Characteristics and Performance of Settlement Programs- a review. World Bank Working paper 1207
- Kent, R. (1987) Anatomy of Disaster Relief: The International Network in Action. Pinter Publishers Limited, London UK
- Lakoff, G. (1992) The Contemporary Theory of Metaphor. @ George Lakoff
- Lakoff, G & M. Johnson (2003) Metaphors We Live By. University of Chicago Press
- Latour, B. (1987) Science in Action; How to Follow Scientists and Engineers Through Society. Milton Keynes, Open University Press
- Lautze, S. (1997) Saving Lives and Livelihoods. The Fundamentals of a Livelihood Strategy. Feinstein International Famine Center
- Leader, N. (2002) Humanitarian Principles in a Changing World in: The Politics of Principle. HPG Report 2. Overseas Development Institute
- Leeuwis, C. (1993) Towards a Sociological Conceptualization of Communication in Extension Science: On Giddens, Habermas and Computer-based Communication Technologies in Dutch Agriculture. Sociologia Ruralis (33) 2, pp: 281-305
- Leichenko, R. and K. O'Brien (2008) Environmental Change and Globalization. Oxford University Press
- Lewis, J. (1999) The Observation, Perception and Identification of Vulnerability. Development in Disaster Prone Place. Intermediate Technology Publications, London; pp: 12-26
- Li-EDF-KP (2001) Feasibility Study: Mepanda Uncua and Cahora Bassa North Projects. Report to the Unidade Técnica de Implementação de Projectos (UTIP). Maputo, Mozambique
- Liesegang, G. (1970) Nguni Migration Between Delagoa Bay and the Zambezi, 1821-1839. African Historical studies 3, pp: 317-337
- Liverman, D. (1989) Vulnerability to Global Environmental Change. Workshop on Understanding Global Environmental Change. Clark University, Worcester.
- Long, N. (2001) Development Sociology. Actor Perspectives Routledge London and New York
- Long, N. (1997) Agency and Constraint, Perceptions and Practice. A Theoretical Position. In: de Haan, H. and N. Long (eds) *Images and Realities of Rural Life. Wageningen Perspectives on Rural Transformations*. Van Gorcum, The Netherlands. pp: 1-20
- Long, N. and J. van der Ploeg (1995) Reflections on Agency, Ordering the Future and Planning in: Frerks, G. and J. den Ouden (eds) In search of the middle ground. Essays on the sociology of planned development. Wageningen university. Pp.64-78
- Long, N. and A. Long (1992) Battlefield of Knowledge: The Interlocking of Theory and Practice in Social Research and Development. London and New York: Routledge
- Long, N. (1989) Encounters at the Interface. A Perspective on Social Discontinuities in Rural Development. Studies in Sociology 27, Wageningen, Wageningen Agricultural University.
- Longley, C.; C. Dominguez; M. Devji (2005) Agricultural Input Trade Fairs and Vouchers in Mozambique: Experiences and Lessons Learned. ICRISAT/ODI Working Paper, September 2005
- Longley, C.; I. Christoplos; T. Slaymaker (2003) From Relief to Food Security? The Challenges of Programming for Agricultural Rehabilitation. FAO International Workshop on "Food Security in Complex Emergencies: Building Policy Frameworks to Address Longer-term Programming Challenges", Tivoli, 23-25 September 2003

- Longley, C.; C. Dominguez; M. Saide; W. Leonardo (2002) Do Farmers Need Relief Seed? A Methodology for Assessing Seed Systems. *Disasters* 26(4) 343-355
- Lopes, J. (2007) Zambeze- Um Outro Lado das Cheias. Cahora Bassa Foi Bem gerida? XITIZAP #31
- Lubkemann, S. (2008) Involuntary Immobility: On a Theoretical Invisibility in Forced Migration Studies. *Journal of Refugee studies* 21 (4) pp. 454-475
- Luna, E. (2001) Disaster Mitigation and Preparedness: The Case of NGOs in the Philippines. *Disasters*, 25(3) 216-226.
- Lyon, D. (1987) An Analysis of the RENAMO Insurgency in Mozambique. The National College, US.
- MacAndrews, C. (1979) The Role and Potential Use of Land Settlements in Development Policies: Lessons from Past Experiences. *Sociologia Ruralis*, pp: 116-134
- Mackenzie, C. (2006) Forestry Governance in Zambézia, Mozambique: Chinese Takeaway! Report prepared for FONGZA, Quelimane, Mozambique.
- Maier, K. (1989) The Battle for Zambezia. *Africa Report*; March-April 1989, pp: 13-16
- Mafambissa, F. (2007) Efeitos dos Desastres Naturais na Produção Agrícola de Culturas Alimentares e na Segurança Alimentar. IESE, Conference paper #21
- Marques, M.; M. Vilanculos; J. Mafalacusser; A. Ussivane (2002) Levantamento dos Regadios Existentes no País. Ministério da Agricultura e Desenvolvimento Rural, Moçambique.
- Martins, A. (1960) Monografia sobre Usos e Costumes dos Senas. Boletim de Sociedade de Estudos de Moçambique, ano XXIX no 123
- Maxwell, D., K. Sadler., A. Sim; M. Mutonyi; R. Egan and M. Webstar (2008) Emergency Food Security Interventions. HPN 10, December 2008. Overseas Development Institute, UK.
- Marzoli, A. (2007) Avaliação Integrada das Florestas de Moçambique. Inventário Florestal Nacional, DNTF, Maputo, Moçambique
- McEntire, D. (2005) Why Vulnerability Matters- Exploring the Merit of an Inclusive Disaster Reduction Concept. *Disaster Prevention and Management* 14(2) 206-222
- Meriam, S. (1990) Case Study Research in Education. San Francisco: Jossey-Bass Publications
- MICOA (2007) Relatório do Processo de Reassentamento das Populações Afetadas pelas Cheias na Zona Centro do País. Maputo, Abril de 2007
- MICOA (2006) Avaliação Participativa da Vulnerabilidade do País à Mudanças Climáticas. Maputo, Moçambique.
- MICOA (2005) O Delta do Rio Zambezi. Maputo, Moçambique
- Middleton, N. and P. O'Keefe (1997) Disaster and Development. The Politics of Humanitarian Aid. Pluto Press
- Moiane, J. and H. Ingimarsdottir (2006) Mozambique Red Cross Society. Summary and Analysis of Year 2006. Administration Costs and Sources of Funding. Maputo, Mozambique
- Monteiro, G. (1955) SSE. Sessenta Anos de Açúcar na Zambézia 1893-1953, Lisboa
- Moore, S.; E. Eng and M. Daniel (2003) International NGOs and the Role of Network Centrality in Humanitarian Aid Operations: A Case Study of Coordination During the 2000 Mozambique Floods. *Disasters* 27(4) 305-318.
- Mosse, D. (2001) People's Knowledge, Participation and Patronage: Representation and Representation in Rural Development in: Cooke, B. and U. Khotari (eds) *Participation: the new tyranny?* Zed Books, London and New York pp: 16-35
- Morgan, G.(1998) Image of Organizations. Sage Publications, INC

- Morgan, G. (1990) Violence in Mozambique: Toward an Understanding of Renamo. The Journal of Modern African Studies (28)4, 603-619
- MPF, IFPRI and UP (2004) Pobreza e Bem-Estar em Moçambique. Segunda Avaliação Nacional, Maputo
- Mwanje, J. and B. Gotu (2001) Issues in Social Science Research. OSSREA, Addis-Ababa
- Muchave, P. (1998) Estratégias de Produção e Comercialização Agrícola no Perímetro Irrigado de Chokwe. Tese de Licenciatura, FAEF, Maputo
- Naess, L.; G. Bang; S. Eriksen; J. Veatne (2005) Institutional Adaptation to Climate Change: Flood Response at the Municipality Level in Norway. Global Environmental Change 15, pp: 125-138
- Negrão, J. (2001) Cem Anos de Economia da Familiar Rural Africana. Promedia, Maputo.
- Negrão, J. (2001a) O Impacto Socioeconómico das Cheias. Oração de Sapiência por Ocasião da Abertura do Ano Lectivo 2001-2002. Maputo, Moçambique
- Newitt, M. (1995) A History of Mozambique. Hurst & Company, London
- Newitt, M. (1988) Drought in Mozambique 1823-1831. Journal of Southern African Studies 15(1) pp. 15-35
- Newitt, M. (1969) The Portuguese on the Zambezi: A Historical Interpretation of the Prazo System. The Journal of African History 10(1), pp: 67-85
- Noteboom, G. (2003) A matter of style. Social Security and livelihoods in Upland East Java: PhD Thesis; Nijmegen Univerity
- Nuijten, M. (2003) Power, Community and the State: the Political Anthropology of Organization in Mexico. Pluto press
- OCHA (2007) Mozambique. Situation report # 1. Maputo, Mozambique
- OCHA (2007a) Mozambique Emergency Situation. 30 Days After the Launch of Post-Disaster Reconstruction Plan. Maputo, Mozambique
- Olivier de Sardan, J. (1988) Peasant logic and Development Project Logics. In *Sociologia Ruralis* 18 (1/2), pp: 216-226
- Oliver-Smith (2008) Displacement and Diasporas: Human Rights, Global Climate Change and Forced Migration in the 21st century. Aula at the 2008 UNU-EHS Summer Academy held in Hohenkammer, German 27 July-2 August
- Oliver-Smith, A. (2005) Communities After Catastrophe. Reconstructing the Material, Reconstructing the Social In: S. Hyland (ed) *Community Building in the Twenty-First Century*. School of American Research Press. USA, pp:45-70.
- Oliver-Smith, A. (1999) What is a Disaster? Anthropological Perspectives on a Persistent Question. Pp 18-34 in *The Angry Earth; Disaster in Anthropological Perspective*, edited by A. Oliver-Smith and S.M. Hoffman. Routledge, New York, London
- Oliver-Smith, A. (1996) Fighting for a Place. The Policy Implications of Resistance to Development-Induced Resettlement. In: C. Mc Dowell (ed.) *Understanding Impoverishment. The consequences of development-induced displacement*. Berghahn Books. Providence and Oxford, pp: 77-98
- Oliver-Smith, A. (1991) Successes and Failures in Post-Disaster Resettlement. Disasters 15(1), pp: 12-23
- Osbahr, H., C. Twyman; W. Adger; D. Thomas (2008) Effective Livelihoods Adaptation to Climate Change Disturbance: Scale Dimensions of Practice in Mozambique. Geoforum 39. pp. 1951-1964
- Osório, J. (1964) Monografia Etnográfica para Concurso- O Povo Podzo. S.E. II, Lourenço Marques, Moçambique

- Pain, R. (2002) Danger and No-Risk Thesis in: Oliver-Smith, A. and S.M. Hoffman (eds) *Catastrophe and Culture: The Anthropology of Disaster*. Routledge, New York, London
- Palmer, G. (1974) The Ecology of Resettlement Schemes. *Human Organizations* 33 (3), pp: 239-250
- Palmer and Tritton (1979) Review of Hydrological Network and Study and Design of Flood Warning System for the Zambezi River. Maputo, Mozambique
- Patt, A. and D. Schroter (2008) Perceptions of Climate Risk in Mozambique: Implications for the Success of Adaptation Strategies. *Global Environmental Change* 18. pp: 458-467
- Pearce, L. (2003) Disaster Management and Community Planning, and Public Participation: How to Achieve Sustainable Hazard Mitigation. *Natural hazards* 28, pp:211-228
- Pelling, M. and K. Dill (2009) Disaster Politics: Tipping Points for Change in the Adaptation of Sociopolitical Regimes. *Progress in Human Geography*, pp: 1-17
- Plank, D. (1993) Aid, Debt, and the End of Sovereignty: Mozambique and Its donors. *The Journal of Modern African Studies* 31(3), pp:407-430
- Prevention (2008) Mozambique. Interim National Progress Report on the Implementation of the Hyogo Framework for Action. www.preventionweb.net/english/countries/africa/moz/ accessed 05 January 2009
- PWC (2000) Mozambique Red Cross Society (MRCS). Report to Management Year Ended 31 December 1999. Sunninghill 2157, South Africa
- Rahman, A. (1996) People's Perception and Response to Flooding: the Bangladesh Experience. *Journal of Contingencies and Crisis Management*. (4) 4
- Raphael, B. (1986) When Disaster Strikes: A Handbook for the Caring Professionals, UNWIN HYMAN, London
- Reason, P. (1994) Inquiry and Alienation. In Reason, P. (ed) *Participation in Human Inquiry*. Sage Publications Ltd. London, Thousand Oaks, New Delhi.
- Reimer, D; K. Brownly; G. Lunde; I. Dengo (2005) Programa de Preparação para Desastres Baseado na Comunidade. Relatório de Avaliação. Maputo, Moçambique
- Remington, T.; J. Maroko; S. Walsh; P. Omanga; E. Charles (2002) Getting Off the Seeds-and-Tools Treadmill with CRS Seed Vouchers and Fairs. *Disasters* 26(4), pp: 316-328
- Rendal Palmer & Tritton (1979) Review of Hydrological network and study and design of flood warning system for the Zambezi river. Maputo, Mozambique
- Renzio, P. and J. Hanlon (2007) Contested Sovereignty in Mozambique: the Dilemmas of Aid Dependency. *Global Economic Governance Program*, paper 2007/25
- Rey, F. (2001) The Complex Nature of Actors in Humanitarian Action and the Challenge of Coordination in: Humanitarian Studies Unit (ed.) *Reflections on the Humanitarian Action: Principles, Ethics and contradictions*, pp:99-119. Pluto, London.
- Ribeiro, D. (2006) The Zambezi Valley. Damned by Dams. Justiça Ambiental, Maputo, Moçambique
- Rios, S. and E. Nicolson (2002) Community Based Evaluation of DPP Pilot Project in Inhambane and Zambézia. Maputo, Mozambique
- Rita-Ferreira, A. (1999) African Kingdoms and Alien Settlements in Central Mozambique(c.15th-17th cent). Departamento de Antropologia, Universidade de Coimbra, Portugal

- Rocha, A.; D. Hedges; E. Medeiros; G. Liesegang (1999) A História de Moçambique 1885-1930 in: Hedges, D. (Ed) *Historia de Moçambique, Volume 2: Moçambique no auge do colonialismo, 1930-1961*, Livraria Univeristaria, Universidade Eduardo Mondlane, Maputo, Moçambique pp: 1: 34
- Ronco, P. (2008) Sediment Budget of Unsurveyed Rivers at Watershed Scale: The Case of Lower Zambezi. PhD Thesis, Università Degli Studi di Padova, Italy.
- Rogers, R. (1975) A Protection Motivation Theory of Fear Appeals and Attitude Change. The journal of Psychology 91, pp: 93-114
- Russell-Bernard, H. (2005) Research Methods in Anthropology. Qualitative and Quantitative Approaches. Altamira Press. 4th edition
- Santos, M. and G. Henriques (1999) Characterization of Meteorological Drought in Mozambican. International Conference on Integrated Drought Management- Lessons for Sub-Saharan Africa. Pretoria 20-22nd September
- Sasin, M. (2008) The Flow of Information During Disaster Response: The Case of the Mozambique Floods, 2007 in: Amin, S. and M. Goldstein (eds) *Data Against Natural Disasters. Establishing Effective Systems for Relief, Recovery, and Reconstruction*. The World Bank, Washington DC
- Sayer, A. (2006) Realism and Social Science. Sage Publications
- SCF (2008) Relatório sobre a Implementação de Feiras de Insumos Agrícolas no Distrito de Mopeia, 27 a 30 de Outubro 2008. Quelimane, Mozambique
- SCF (2008a) Levantamento Participativo nos Centros de Reassentamento em Mopeia. Quelimane, Mozambique
- SCF (2006) A bridge Across the Zambezi. What Needs to be Done for the Children? Maputo, Mozambique
- Schipper, L. and M. Pelling (2006) Disaster Risk, Climate Change and International Development: Scope for, and Challenge to, Integration. Disasters 30(1), pp:19-38
- Schmidt, I. (1997) The Zambeze Lower. Diagnostic Overview of Its Socio-Economic Characteristics. IUCN Beira, Mozambique
- Schmink, M. (1984) Household Economic Strategies: Review and Research Agenda. Latin America Research Review, 19(3) pp. 87-101
- Schoones, I. (2009) Livelihoods Perspectives and Rural Development. Journal of Peasant Studies 36 (1), pp: 171-196
- Schoones, I. (1998) Sustainable Rural Livelihoods: A Framework for Analysis. IDS Working Paper 72
- Scudder, T. and E. Colson (1982) From Welfare to Development : A Conceptual Framework for the Analysis of Dislocated People in: Hansen, A. and Oliver-Smith, A. (eds) *Involuntary Migration and Resettlement: The Problems and Responses of Dislocated People*. Westview Press. PP: 267-288
- Serra, C (2000) Historia de Moçambique, Volume I; Livraria Universitária, Maputo, Mozambique
- SETSAN (2007) Relatório da Vulnerabilidade Corrente em Moçambique, Maio. Maputo, Mozambique
- Shela, O. (2000) Management of Shared River Basins: The Case of the Zambezi River. Water Policy 2, pp: 65-81
- Silva, A. (2005) Aplicação de Imagens de Satélites na Avaliação da Dinâmica de Cobertura Vegetal do Mangal no Delta do Zambeze. Tese de Licenciatura em Geografia. Universidade Eduardo Mondlane
- Smit, B.; I. Burton; R. Klein; R. Street (1999) The Science of Adaptation: A Framework For Assessment. Mitigation and Adaptation Strategies for Global Change (4), pp: 199-213

- Smith, A. (1991) The Idea of Mozambique and Its Enemies, c. 1890-1930. Journal of Southern African Studies, 17(3), pp: 496-524
- Smith, H (1975) Strategies of Social Research. The Methodological Imagination. Prentice-Hall International, INC London.
- Sperling, L.; T. Remington; J. Haugen; S. Nagoda (2004) Addressing Seed Security in Disaster Response: Linking Relief with Development, Overview. International Center for Tropical Agriculture. Cali, Colombia
- Sperling, L. & C. Longley (2002) Editorial: Beyond Seeds and Tools: Effective Support to Farmers in Emergencies. Disasters 26(4), pp: 283-287
- Stake, R. (1995) The Art of Cased Study Research. London: Sage Publications
- SWECO (1982) Pre-Investment Report, part 5 ecology. Maputo, Mozambique
- Suschka, J. (1986) Complementary Information To Zambezi River System. Country Report. Maputo
- Taju, G. (1992) Integração de Desmobilizados na Sociedade Civil. Maputo
- Taveira, J. (1943) Acucar de Moçambique- A SSE, Limitada. Imprensa Nacional de Moçambique,
- TEC (2006) Impacts of the Tsunami Response on the Local and National Capacities. London, UK
- Telford, J. (1997) Counting and Identification of Beneficiary Populations in Emergency Operations: Registration and its Alternatives. ODI publications, Good Practice Review, number 5, September 1997
- The Sphere Project (2004) Humanitarian Charter and Minimum Standards in Disaster Response. Geneva, Switzerland
- Tibana, R. (1989) Mozambique's Economic Policy and International Aid. EDICESA Symposium " War and Peace in Southern Africa- Namibia and Mozambique in the Frontline. Harare, January 31 February 3.
- Thomalla, F. and H. Schmuck (2004) "We All Knew That a Cyclone Was Coming": Disaster Preparedness and the Cyclone of 1999 in Orissa, India. Disasters 28(4), pp: 373-387
- Tinley, K. (1994) Description of Gorongosa-Marromeu Natural Resources Management Area. IUCN, Harare, Zimbabwe.
- Tschirley, D. (1998) Planning for Drought in Mozambique: Balancing the Roles of Food Aid and Food Markets. Research Report # 29, Ministry of Agriculture and Fisheries, Mozambique
- Twigg, J. (2005) Community Participation-Time for a Reality Check? in: ISDR (ed) Know Risk. Geneva.
- UN (2009) UNISDR Terminology on Disaster Risk Reduction. Geneva, Switzerland
- UN (2006) On Better Terms. A Glance at Key Climate Change and Disaster Risk Reduction Concepts. Geneva, Switzerland
- UN (1990) The Emergency Situation in Mozambique. Priority Requirements for the Period 1990-1991. New York
- UNCT (2007) Mozambique Humanitarian Country Team. Inter-Agency Contingency Plan. 2007/2008. Maputo, Mozambique
- UNDP (2009) Overcoming Barriers. Human Mobility and Development. Human Development 2009. New York
- UNDP (2008) Human Development Report 2007/2008. Fighting Climate Change: Human Solidarity in a Divided World. New York
- UNDP (2004) Reducing Disaster Risk-A Challenge for Development. A Global Report, New York
- UNDP and GoM (2008) Report on the Millennium Development Goals. Maputo, Mozambique

- UNHCR (1998) Registration Guidelines. UNHCR, Geneva
- UNHCR (1996) Evaluation of UNHCR's Repatriation Operation to Mozambique. Geneva
- UNHCR and UNDP (1997) Perfil de Desenvolvimento Distrital- Distrito de Mutarara. Maputo, Mozambique
- UNHCR and UNDP (1997a) Perfil de Desenvolvimento Distrital- Distrito de Caia. Maputo, Mozambique
- UNHCR and UNDP (1997b) Perfil de Desenvolvimento Distrital- Distrito de Mopeia. Maputo, Mozambique
- UNICEF (2007) Childhood Poverty in Mozambique and Budgetary Allocations. New York
- Walmsley, D. and G. Lewis (1984) Human Geography- Behavioral Approaches. Longman, New York
- Warner, J. (2008) The Politics of Flood Insecurity. Framing Contested River Management Projects. PhD Thesis, Wageningen University, the Netherlands
- Waters, T. (2001) Bureaucratizing the Good Samaritan. The Limitation of Humanitarian Relief Operations. Westview press US and UK
- Weinstein, J. & L. Francisco (2005) The Civil War in Mozambique. The Balance Between Internal and External Influences in: Collier, P. and N. Sambanis (eds) *Understanding Civil War- Africa*. World Bank Publications, Washington.
- Weiss, T and C. Collins (2000) Humanitarian Challenges and the Intervention. Westview Press; 2nd edition; US and UK
- Wilkinson, I. (2010) Risk, Vulnerability and Everyday Life. Routledge, London and New York
- Wisner, B; P. Blaikie, T. Cannon; I. Davis. (2004) At Risk: Natural Hazards, People's Vulnerability and Disaster. Routledge, London
- Wisner, B. and H. Luci (1993) Disaster Vulnerability: Scale, Power and Daily Life. *GeoJournal* 30(2) 127-140
- Wisner, B. (1979) Flood Prevention and Mitigation in the People's Republic of Mozambique. *Disastes* 3(3), pp: 293-306
- World Bank (2008) Zambezi River Basin. Sustainable Agricultural Water Development- Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, Zimbabwe. Washington DC
- World Bank (2005) Learning Lessons from Disaster Recovery: The Case of Mozambique. Working Paper # 12
- World Bank (2001) OP 4.12. Involuntary Resettlement. New York
- World Bank (1991) OD 4.30. Involuntary Resettlement, New York
- Wuyts, M. (1981) Sul do Save: Estabilização da Força de Trabalho in: *Estudos Moçambicanos* 3, pp: 33-44, Maputo, Mozambique
- Wuyts, M. (1980) Economia Política do Colonialismo in: *Estudos Moçambicanos* 1, pp: 09-22, Maputo, Moçambique
- Vail, L. and L. White (1978) Tawani, Machamero: Forced Cotton and Rice Growing on the Zambezi. *The Journal of African History*, 19(2) pp. 239-263
- Van Aalst, M., T. Cannon; I. Burton (2008) Community Level Adaptation to Climate Change: The Potential Role of Participatory Community Risk Assessment. *Global Environmental Change* 18, pp: 165-179
- Van Aalst, M (2006) The Impacts of Climate Change on the Risk of Natural Disasters. *Disasters* 30(1), pp: 5-18.
- Van de Ploeg, J.(1989) Knowledge Systems, Metaphors and Interface: The Case of Potatoes in the Peruvian Highlands in: Long (ed)-*Encounters at the Interface. A*

- Perspective on Social Discontinuities in Rural Development*. Wageningen Studies in Sociology, WSS 27, pp: 145-164
- Van Koppen, K.; A. Mol; J. van Tatenhove (2008) Coping with Extreme Events: Institutional Flocking in: NWO (ed) *What if..... abrupt and extreme climate changes*. Programme VAM, The Hague, Netherlands; pp. 45-64
- Van Leeuwen, M. (2008) Partners in Peace. Discourses and Practices of Civil-society Peacebuilding. PhD Thesis, Wageningen University
- Vaux, T. (2001) The Selfish Altruist. Relief work in famine and war. Earthscan publications, UK and USA
- Vaz, A. and P. van der Zaag (2003) Sharing the Incomati Waters. Cooperation and Competition in the Balance. UNESCO
- Vines, A. (1996) Renamo: from terrorism to democracy in Mozambique? James Currey, 2nd edition, UK.
- Vonhof, S. and D. Hilhorst (2004) Community Based Disaster Preparedness in Mozambique. Wageningen University in Collaboration with the Mozambican Red Cross. Wageningen, The Netherlands.

SUMMARY

Mozambique is a disaster prone country. Its geographical location along the shoreline of the Indian Ocean and downstream of ten international rivers associated to its higher levels of poverty tend to turn natural and man made hazards into disasters. Mozambique has a long history of disasters. The flooding in 1977, 1978, 2000, 2001, 2007, 2008 and the widespread drought from 1983-1985 among others events, have marked the history of the country due to their political, economic and social impacts.

Responses to disasters in Mozambique have relied, heavily, on the international community and, due to this, a certain perception of lack of national and local capacity was developed, reproduced and crystallized over time. This thesis delves into the other side, which has hardly been explored academically. It focuses on local and national capacity to respond to disasters and, the interface between and within national and international actors. For this endeavour, the book asks the question *how disasters and adaptation to climate change programmes are interpreted and acted upon by different actors in Mozambique?*

Three major arguments are developed throughout the book in answering that question. The first is that the way the affected are represented affects the ways external disaster responses are carried out. If they are represented, as passive, weak, incapable or irresponsible, interventions will tend to take a top down approach with little attempt to understand local capacity and motivations to act otherwise. The second argument is that a focus on weakness helps to mobilize resources and produces gains for many actors in the humanitarian and development sectors and beyond. Hence, the weakness discourse is reproduced not necessarily for humanitarian purposes but far beyond that. The third is that local actors in Mozambique are neither passive victims of disasters nor submissive recipients of international responses. Within the limits of their knowledge, abilities and information local actors respond to disasters and external interventions in ways that best suit their own interests.

Throughout the eight chapters composing the book, empirical evidence has been produced to sustain the claims. Chapter 2 demonstrates that the government of Mozambique (led by FRELIMO Party) has been very active in responding to disasters, coming to an extent of 'manipulating' the international community to fulfill its own agendas. The various strategies on disaster management developed over time such as the setting of DPCCN, COE, CENE, INGC, CENOE, UNAPROC, GACORE or the shift of INGC subordination from the Ministry of Foreign Affairs to the Ministry of State Administration, results, not necessarily from international demand, but from internal demands, analysis and needs. Nonetheless, these strategies allowed the government to gain international sympathy and a continuous funding of different FRELIMO's political, economic and social agendas.

Chapter 3 shows, on the one hand, that the occupation of the Zambezi lowlands results, partly, from the human induced processes such as political and development strategies promoted over time and, on the other hand, from the occurrence of natural phenomena such as the drought that affected the country right after the end of civil war from 1992 to 1995. Nonetheless, the chapter discusses different strategies developed by the locals to build a living in the lowland and take advantages from their interaction with the Zambezi River. In living in the lowlands, people have developed a certain lifestyle marked by low investments in items whose dimension would jeopardize the cyclical evacuation process or would be lost due to flooding such as home furniture and large animals. Alternatively, people tend to invest in items such as canoes and social networks that are disaster preparedness measures. The chapter ends by claiming that these adaptation measures are in decay due to interplay of political, economic, social and environmental changes.

Chapter 4 shows how interventions for disaster risk reduction are an arena of conflicts, negotiations and are transformed at local level to fulfil an amalgam of different interests. It also shows processes of elite capture of interventions, emerging conflicts and ways of diffusing social tensions at local level.

Chapter 5 deals with the interfaces between the government, UN agencies and NGOs during the 2007 flooding. The chapter shows that government leadership during this flooding was an emerging property from the everyday interactions in the field and not necessarily that the government had a strong and well established aptitude to do so. There were various contradictions between the government and UN agencies, within the UN agencies themselves, between UN agencies and NGOs and between international and national NGOs. To diffuse the tensions, the government emerged as a glue-actor and the coordinator of all the present actors. The chapter shows that the Cluster Approach had little real impact on disaster response and may have been used mainly as a test road of new international approaches of disaster response.

Chapter 6 focuses on local responses to the same 2007 flooding and shows that the use of pejorative terms such as backwardness, irrationality, stupidity, reluctance, to explain the widespread refusal to evacuate or later evacuations masks complex processes that dictates the behaviour of the inhabitants of the lower Zambezi. Contrary to these claims held by many actors from the international and governance domains of disaster response, this thesis shows that local response is highly skilled and planned. Local responses to flooding tend for saving lives and livelihoods requiring therefore the setting of the right momentum for evacuations. Generally, under gradual flooding people tend to decide about where to go, when to go, how to go, who goes, what to take with and how to manage life and livelihood in short and long run.

Chapter 7 discusses the resettlement process that evolved following the flooding. Similar to chapter 4, this chapter shows how the intervention is appropriated and transformed to fulfil different local interests. Based on data

collected in two resettlement centres in Mopeia district (24 de Julho and Zonas Verdes resettlement centres) the chapter shows that there was elite capture of the process and that the international guidelines for resettlement have literally been put aside.

In answering the question 'do people stay on the resettlement centers' the chapter concluded that there are three patterns of response to the resettlement program. There are households that I have metaphorically called 'aquatics' with strong links with the lowlands and difficulties in crafting their livelihoods on the resettlement centers. They return to the lowlands and, as they always did, craft their livings with the support from the Zambezi River, its tributaries and the seasonally nourished fertile lowlands. The second pattern involves households that managed to adapt to the lifestyle of the resettlement centers and have definitely resettled and have now little contact with the lowlands. Although few cases are still available this includes individuals and households that found permanent employments on the higher grounds, are involved in trading schemes and have developed a (wider) network of relations that allow them to craft livelihoods on the resettlement centers relatively far from the Zambezi waters. I have metaphorically called this group 'terrestrials'. The third pattern involves households that craft their livelihoods by exploring the potentials and limitations of both locations (lowlands and resettlement centers). These groups of households that have houses in both locations or those who have a permanent residence in one of the sites divide their time between the two locations by making use of networks they develop. I have called this group 'the amphibians'.

Chapter 8 concludes the book and argues that the whole process of disaster response is based on the need of crafting continuities in crisis. Crisis of different intensities and frequencies are part of our everyday life and through the crafting of continuities in crisis that societies move the way they move. A continuous management of crisis which are in continuous formation provide mechanisms for society control, to mold behaviors, interventions and dictates, largely, government and leader's mandates at different levels.

SUMÁRIO

Moçambique é um país bastante vulnerável à desastres. A sua localização geográfica ao longo do litoral do Oceano Índico e a jusante de 10 rios internacionais, aliado aos altos índices de pobreza da sua população, tendem a tornar ameaças em desastres. Moçambique tem uma longa história de ocorrência de desastres. As cheias de 1977, 1978, 2000, 2001, 2007, 2008 e a grande seca de 1983-1985 entre outros, são eventos que marcaram a história do país dados os seus impactos políticos, sociais, económicos e ambientais. Para responder a estes eventos, o país contou e continua contando, em grande medida, com o apoio internacional. Dado este facto, uma certa percepção de falta de capacidade nacional e local foi sendo desenvolvida, reproduzida e cristalizada ao longo do tempo.

A presente tese debruça-se sobre o outro lado que pouco ou quase nada se fala. Ele focaliza na capacidade nacional e local, e procura entender o que acontece na interacção entre os diferentes actores internos e externos. Para isso, o livro procura responder a questão *'Como os diferentes actores interpretam e agem em desastres e, programas de adaptação às mudanças climáticas em Moçambique?'*

Três grandes argumentos são lançados ao longo do livro. O primeiro é que a maneira como os afectados são representados, afecta a maneira como intervenções externas são levadas a cabo. Quando as pessoas são representadas como incapazes, passivas e irresponsáveis, as intervenções tenderão a ter um carácter de cima para baixo (top-down) com pouco esforço para entender as capacidades e conhecimentos locais, assim como as motivações que as pessoas têm para agir numa determinada forma. O segundo argumento é de que, focalizar na incapacidade local facilita o processo de mobilização de recursos e produz ganhos para muitos actores nos sectores humanitário, de desenvolvimento e outros. Assim, o discurso de incapacidade local é reproduzido não apenas para fins filantrópicos, mas muito para além destes. O terceiro é que os actores locais em Moçambique não são nem vítimas passivas dos desastres nem receptores submissos da ajuda internacional. Dentro dos limites dos seus conhecimentos, habilidades e informação, eles tendem a responder à desastres e intervenções externas em modos que melhor respondem aos seus interesses e anseios.

Ao longo dos oito capítulos que compõem o livro, foram produzidas evidências que suportam estes argumentos. O capítulo dois demonstra que o governo de Moçambique foi e continua bastante activo na resposta à desastres, chegando inclusive, a manipular a comunidade internacional para responder os seus próprios interesses. As várias estratégias de gestão de desastres tais como a criação do DPCCN, COE, CENE, INGC, CENOE, UNAPROC, GACOR, a mudança do INGC da tutela do Ministério de Negócios Estrangeiros para o Ministério da Administração Estatal resultam numa análise interna bastante profunda que visam, não apenas responder exigências internacionais, mas sobretudo, interesses nacionais e do próprio governo. As estratégias desenvolvidas ao longo do tempo na componente de

gestão de desastres permitiram, em grande medida, a atracção duma grande simpatia internacional por Moçambique e nisso, o continuo financiamento de vários projectos políticos, económicos e sociais.

O capítulo três mostra por um lado que, a ocupação de zonas de risco no vale do Zambeze resultou, em grande parte, de processos provocados pela acção humana tais como políticas e estratégias lançadas ao longo do tempo e, por outro, resultam de fenómenos naturais tais como a seca no período pós guerra civil entre 1992-1995. No entanto, o capítulo apresenta várias estratégias que foram desenvolvidas ao longo do tempo pelas pessoas locais para garantirem o seu sustento e tirar vantagens da sua convivência com o rio Zambeze. Das estratégias mais relevantes, as pessoas tendem a levar um estilo de vida marcado por baixo investimento em bens que podem facilmente ser perdidos durante cheias ou que dificultariam o processo de evacuação tais como mobílias de casa, animais de grande porte e tendem a fazer investimentos em bens que podem ajudar nas evacuações tais como em canoas e redes sociais. Porém, o capítulo termina mostrando que, as estratégias estão em decadência devido à vários factores de ordem politica, ecológica, social e económica.

O capítulo quatro mostra como intervenções viradas a redução de risco de desastres se tornam arenas de conflitos, negociações e são transformadas, ao nível local, para responder a vários interesses. Uma intervenção que visava apenas aspectos técnicos de redução de risco de desastres acabou sendo politizado, apropriado pela elite local e criando divisões dentro da comunidade de Cocorico no distrito de Mopeia. Ele mostra também como modelos internacionais podem não se adequar a contextos específicos. O modelo de redução de riscos de desastres usado no Cocorico era uma cópia de como se faz a gestão de riscos no contexto asiático e, dum modo geral, houve muitas limitações na sua aplicação.

O capítulo cinco fala da interacção entre o governo, as agências das Nações Unidas e as ONGs durante as cheias de 2007 no vale do Zambeze. O capítulo mostra que, a liderança do governo na resposta à esta cheia emergiu do que aconteceu no terreno e, não necessariamente, fruto duma forte e concertada capacidade da sua parte. Durante as cheias houve contradições entre o governo e as organizações internacionais, entre organismos das Nações Unidas entre si, entre organismos das Nações Unidas e as ONGs e, entre ONGs nacionais e internacionais. Em função disso, o governo surgiu como o elemento aglutinador das várias clivagens e, assim, como líder e coordenador de todos quanto estiveram presentes. No entanto, para além da liderança do governo haviam varias outras lideranças paralelas, algumas vezes desfasadas do controlo do governo. Por outro lado, o capítulo mostra que, o 'Cluster Approach' teve pouca relevância no terreno e, poderá ter sido aplicado como um ensaio duma nova abordagem internacional de resposta a desastres.

O capítulo seis focaliza a resposta local a mesma cheia de 2007 e mostra que os termos usados tais como relutância, irracionalidade, estupidez, tradicionalismo, irresponsabilidade entre outros termos pejorativos para

explicar os comportamentos de recusa ou resistência a evacuações, encobrem e limitam explicações de processos muito mais complexos que ditam os comportamentos dos habitantes do vale do Zambeze. O capítulo mostra que os afectados tem uma grande responsabilidade, racionalidade e não são estúpidos ou atrasados. A sua resposta à fenómenos como cheias tendem a levar em consideração não apenas salvar vidas, mas também, os meios de sustento que são importantes no curto, médio e longo prazos. Numa cheia gradual as pessoas tendem a evacuar depois duma análise sobre onde ir, quando ir, como ir, quem ir, o que levar, o que deixar, e como gerir a vida feita em dois locais.

O capítulo sete discute o processo de reassentamento após as evacuações. A semelhança do capítulo quatro, o capítulo sete mostra como o reassentamento foi transformado e apropriado, muito longe do modelo e concepção original dos proponentes. Baseando em dados colhidos em dois centros de reassentamento (24 de Julho e Zonas Verdes) no distrito de Mopeia, o capítulo mostra processo de exclusão, de captura da elite local e do desinquadramento de modelos internacionais para contextos locais específicos.

Com relação a pergunta se as pessoas ficam ou não nos centros de reassentamento o capítulo mostra que existem, duma maneira geral, três respostas ao reassentamento. Existe um grupo de agregados familiares, a que apelidei metaforicamente de *aquáticos*, com uma forte ligação com as zonas baixas e o rio Zambeze e, que, por várias razões, têm imensas dificuldades em moldar o seu estilo de vida nas zonas altas. Estes voltam para as zonas baixas e, como sempre o fizeram, garante o seu sustento numa grande interacção com o rio Zambeze, seus afluentes e as zonas baixas férteis. O segundo grupo que apelidei metaforicamente de *terrestres*, representa o grupo de agregados familiares que conseguiu adaptar-se ao estilo de vida da zona alta e ficaram com pouco contacto com a zona baixa. Apesar do número ser ainda bastante limitado, este grupo inclui agregados que conseguiram oportunidades de emprego, negócios e outras fontes alternativas de sustento, relativamente fora do contacto permanente com a zona baixa. O terceiro grupo representa indivíduos ou agregados que moldam o seu sustento explorando as potencialidades e limitações que existem tanto na zona baixa assim como na zona alta. Neste grupo que apelidei metaforicamente de *anfíbios*, enquadram-se agregados com residência dupla, ou aqueles que, mesmo sem residência dupla dividem o seu tempo entre zona baixa e alta através de diferentes redes sociais que desenvolve(ra)m.

O capítulo oito trás as principais conclusões do livro e defende que, as respostas à desastres no mundo e em Moçambique no particular, baseiam-se na necessidade de moldar continuidades em crises. As crises, de diferentes frequências e intensidades fazem parte do dia a dia das pessoas e é a partir da gestão destas crises que o mundo segue o rumo que segue. A gestão contínua de crises que estão em contínua formação, fornece mecanismos e instrumentos para gerir sociedades, moldar comportamentos, intervenções e dita, em grande medida, os mandatos de governos e líderes a vários níveis.

SAMENVATTING

Mozambique ondergaat veel natuurrampen, dankzij zijn ligging aan de kust van de Indische Oceaan en aan de benedenstroom van tien internationale rivieren. In combinatie met hoge armoedecijfers leidt dit er toe dat natuurlijke dreigingen tot rampen verworpen. Het land kent een lange rampengeschiedenis. Overstromingen in 1977, 1978, 2000, 2001, 2007, 2008 en de grote droogte van 1983-1985, hebben geschiedenis gemaakt als gevolg van hun politieke, economische en sociale effecten.

Rampenbestrijding is in Mozambique sterk afhankelijk van de internationale gemeenschap. Als gevolg hiervan is door de tijd een perceptie ontstaan en bevestigd dat er nationaal en lokaal een gebrek aan capaciteiten is. Dit proefschrift verdiept zich in de andere kant van dit beeld, waar nog weinig onderzoek naar is gedaan. Het richt zich op de lokale en nationale capaciteiten om met rampen om te gaan, alsmede de *interface* tussen nationale en internationale actoren. De centrale onderzoeksvraag luidt: *Hoe worden rampen en klimaatadaptatie geïnterpreteerd door verschillende actoren in Mozambique en hoe gaan ze er mee om?*

Het kernantwoord op de centrale vraag behelst drie argumenten. Op de eerste plaats dat de representatie van getroffenen door rampen mede bepaalt hoe externe interventies worden uitgevoerd. Als de representatie gekenmerkt wordt door termen als passief, zwak, incapabel of onverantwoordelijk, dan zullen interventies van boven af worden opgelegd zonder veel moeite te doen om lokale capaciteiten en drijfveren te begrijpen. Op de tweede plaats dat een focus op zwakte instrumenteel is in het verwerven van hulpbronnen, wat voordelen oplevert voor veel spelers in de humanitaire en ontwikkelingswereld. Het discours van zwakte dient dus doelen ver buiten het humanitaire speelveld. Op de derde plaats dat lokale actoren in Mozambique noch passieve slachtoffers van rampen zijn, noch ondergeschikte ontvangers van internationale hulp. Binnen de kaders van hun kennis, competenties en beschikbare informatie zoeken actoren antwoord op rampen en rampeninterventies, op zodanige wijze dat zij daarmee hun eigen belangen zo goed mogelijk dienen.

Deze argumenten worden empirisch onderbouwd in de acht hoofdstukken van het boek. Hoofdstuk 2 laat zien dat de overheid van Mozambique (onder leiding van de FRELIMO partij) heel actief is geweest in rampenbestrijding, en de internationale gemeenschap heeft weten te manipuleren in hun eigen belang. De verschillende instanties voor rampenbestrijding die zijn ingesteld door de tijd, zoals daar zijn de DPCCN, COE, CENE, INGC, CENOE, UNAPROC en GACORE, of de overplaatsing van de nationale rampenbestrijdingsdienst INGC van het ministerie van buitenlandse zaken naar het ministerie van algemene zaken, waren geen antwoord op externe eisen, maar het gevolg van interne analyse, belangen en behoeften. De overheid slaagde er in om de internationale sympathie op zijn hand te krijgen en voldoende fondsen te werven voor de politieke, economische en sociale plannen van de partij.

Hoofdstuk 3 toont aan dat de bewoning van het laagland bij de Zambezi rivier deels voortkomt uit politieke en ontwikkelingsstrategieën die door de jaren heen gepromoot zijn en daarnaast uit de natuurlijke factoren zoals de droogte die het land trof in de nadagen van de burgeroorlog van 1992 tot 1995. Het hoofdstuk behandelt verschillende strategieën die lokale mensen gebruikten om hun bestaan te verzekeren in het laagland en gebruik te maken van hun interactie met de Zambezi rivier. Hierbij hebben mensen een bepaalde leefstijl ontwikkeld, die gekarakteriseerd wordt door lage investeringen in dingen die te groot zijn om mee te nemen bij een evacuatie of die makkelijk verloren gaan bij overstromingen, zoals meubels en dieren. In plaats daarvan zijn mensen geneigd te investeren in kano's en sociale netwerken om zich voor te bereiden op de gevolgen van overstromingen. Het hoofdstuk eindigt met het argument dat deze adaptatiepraktijken aan erosie onderhevig zijn, als gevolg van het samenspel tussen politieke, economische, sociale en milieuveranderingen.

Hoofdstuk 4 belicht hoe interventies op het terrein van rampenreductie gezien kunnen worden als arena's van conflicten en sociale onderhandeling rond een veelheid van belangen en hoe ze daardoor op lokaal niveau transformeren. Het toont aan dat de interventies gekenmerkt worden door coöptatie door elites en hoe ze ingezet worden om sociale spanningen te onderdrukken.

Hoofdstuk 5 behandelt de interfaces tussen de overheid, VN organisaties en NGO's tijdens de overstroming van 2007. Het hoofdstuk toont aan hoe de leidende rol van de overheid meer tot stand kwam als resultante van de alledaagse interacties in het veld, dan vanuit afspraken of competenties. Om de spanning tussen andere actoren te dempen kon de overheid als bruggenbouwer en coördinator naar voren komen. Het hoofdstuk laat ook zien hoe de cluster benadering van de Verenigde Naties weinig impact had op het management van de ramp en dat deze wellicht vooral ingezet werd om de nieuwe benadering te testen.

Hoofdstuk 6 gaat over lokale responses op dezelfde overstroming van 2007. Het toont aan dat neerbuigende termen als 'achterlijkheid', 'irrationaliteit', 'domheid', en 'weerstand', waarmee de weigering van mensen om te evacueren wordt geduid, de complexe processen maskeren die het gedrag van mensen aan de Zambezi rivier bepalen. In tegenstelling tot het beeld van veel actoren, toont dit proefschrift aan dat de lokale responses strategisch en adequaat zijn. Lokale responses neigen er naar behalve het redden van leven ook het redden van bestaansmiddelen mee te nemen in de besluitvorming rond het tijdstip en de middelen van de evacuatie. Bij een geleidelijke overstroming nemen mensen weloverwogen beslissingen over waar ze heen evacueren, wanneer, hoe, met wie en wat ze meenemen.

Hoofdstuk 7 bediscussieert het hervestigingsprogramma dat volgde na de overstroming. Net als in hoofdstuk 4 blijkt hierbij dat actoren zich het programma eigen maken en het omvormen om zo goed mogelijk aan hun eigen belangen te voldoen. Op basis van data in twee hervestigingscentra in het Mopeia district (24 de Julho and ZonasVerdes) toont het hoofdstuk aan

dat elite cooptatie plaatsvond en dat daarbij de beleidsvoorschriften van het programma aan de kant geschoven werden. In antwoord op de vraag of mensen zich permanent in de centra vestigen, concludeert het hoofdstuk dat er drie vestigingspatronen zijn. Een groep huishoudens, metaforisch geduid als 'watermensen' houdt vast aan hun sterke band met het laagland en vindt het moeilijk om hun bestaan te vinden in de centra. Zij gaan terug naar het laagland om, net als voorheen, hun leven te vormen rond de Zambezi en seizoenslandbouw op de vruchtbare oevers van de rivier. Het tweede patroon betreft huishoudens die hun levensstijl aanpassen aan het hervestigingscentrum, zich daar permanent vestigen en hun banden met het laagland grotendeels doorsnijden. Ofschoon hier weinig voorbeelden van zijn te vinden op dit moment, gaat het om huishoudens die vast werk hebben gevonden, hun bestaan vinden in handelsactiviteiten en een sociaal netwerk dat hen helpt bij het vinden van bestaanszekerheid. Deze mensen worden aangeduid met de term 'landmensen'. Als derde is er een groep huishoudens die de mogelijkheden van beide lokaties wil benutten (in het laagland en in het centrum). Deze groep heeft huizen in beide lokaties en verdeelt hun tijd daar tussen in. Deze groep wordt in dit hoofdstuk de 'amfibiën' genoemd.

Hoofdstuk 8 vormt de conclusie van het boek. Het werkt het thema uit van de titel: continuïteit in crisis. Crises, van verschillende intensiteit en frequentie, zijn onderdeel van het dagelijks leven. Het aanbrengen van continuïteit in deze crises is een formatieve factor in samenlevingen. Het voortdurende management van crises, die steeds in beweging zijn, reikt mechanismen aan voor maatschappelijke controle, het beïnvloeden van gedrag en interventies en bepaalt voor een groot deel de mandaten van overheidsorganen op verschillende niveaus.

ANNEX 1: PEOPLE INTERVIEWED AND GROUP DISCUSSIONS

People interviewed

Institution	Name	Local	Position
CVM	Fernanda Teixeira	Maputo	General secretary
	Eunice Mucache	Maputo	Program director
	Rabeca Chalufu	Maputo	Disaster preparedness department
	Ataide Sacramento	Maputo	Disaster preparedness department
	Luisa Mboana	Maputo	Human resource
	Ivete Dengo	Maputo	CBDRM team leader
	Frieda Drasma	Maputo	Community development department
	Jacinto Moiane	Maputo	Finance Department
	Respeito Chirindza	Maputo	Volunteers coordinator
	Simao Nhassengo	Maputo	Water and sanitation department
	Simone Bonate	Quelimane	Provincial secretary Zambezia
	Custodio Giro	Beira	Provincial secretary Sofala
	Aguinaldo Almeida	Quelimane/Mopeia	CBDRM Zambezia
Inácio Melo	Mopeia	CVM president Mopeia district	
German Red Cross	Hanna Schmuck	Maputo	Delegate
Finish Red Cross	Kaisa Rouvinen	Maputo	Delegate
Iceland Red Cross	Nina	Maputo	Delegate
	Paulo Zucula	Caia	Former General director
INGC	João Ribeiro	Maputo	General director (from 2008)
	Ana Cristina	Maputo	Prevention and mitigation department
	Higino Rodrigues	Maputo	Resettlement cabinet
	Bonifácio Antonio	Maputo	Coordination office manager
	João Zamissa	Quelimane	Provincial delegate Zambézia Province
	Onorio Vaz	Quelimane	Tecnhical staff
	Lucas Renço	Caia	Technical advicer
	Luis Pacheco	Beira	Provincial delegate Sofala Province
José Dambiro	Caia	Regional CENOE coordinator	

MICOA	Telma Manjate	Maputo	Climate change focal point
	Anselmina Liphola	Maputo	Natural resources management department
	Felicio Fernando	Maputo	Technical staff -national level
	Becas	Quelimane	Technical staff -provincial level
Save the Children	Sophie Chotard	Quelimane	Project manager
	Salomão	Quelimane	Project manager
	Florêncio	Mutarara	Agriculture Services director-Mopeia district
Government of Mopeia District	Alberto Chapila	Mopeia	Administrator
	Natalino Frenando	Mopeia	Agriculture Services director-Mopeia district
National Water Directorate	Belarmino Chivambo	Maputo	Water Resources Department
World Vision	Brian Hilton	Quelimane	Program director
	Jorge Machanguane	Quelimane	Project manager
	Claudio M.	Maputo	Project manager
Academics	Prof. G. Liesagang	Maputo	Historian/ Anthropologist/ Archeologist
	Prof. João P. B. Coelho	Maputo	Resettlement expert
	Prof. Boaventura Cuamba	Maputo	Climate change expert
	Prof. Richard Beilfuss	US (via email)	Hydrologist/environmental researcher; International Crane Foundation
GTZ	Carolina Zelada	Caia	Project manager
INAME	Moisés Benessene	Maputo	National director
UNDP	Nelson Xavier	Maputo	Communication officer
WFP	Osvaldo Lucas	Mopeia	Field officer

Local Authorities	Baptista Cocorico	Cocorico/24 de Julho	Actual Inhacuaua of Cocorico
	Fernando Cocorico	Cocorico	Former Inhacuaua of Cocorico
	Nhanswimbo	Cocorico	Chief in Mulamba/Cocorico
	Alberto Ismael	Mopeia	Chief 24 de Julho resettlement centre
	Carlos Froi	Mopeia	Chief Zonas Verdes resettlement centre
	A. Chamanga	Mopeia	Inhacuaua of Chamanga area
	José Jussa	Mopeia	Religious leader 24 de Julho
	António Alfinete	Mopeia	Religious leader Zonas Verdes
	Languitone	Mutarara	Chief Canhungue area
	Domingos Fole	Mutarara	Fumo Inhangoma area
	Manuel Guente	Mutarara	Field Guide in Mutarara
	Feliciano Luis	Mutarara	Sapanda Jardim area
	Fernando Samo	Mutarara	Fumo Jardim area
	Dias Ernesto	Mutarara	Chief 10 houses Jardim area
	Isac Mbassa	Mutarara	Inhacuaua Gogodane area
	Joaquim Chacuamba	Mutarara	Sapanda Gogodane area
	António Gocha	Chinde	Fumo Xinsomba area
	João Forquia	Caia	Sapanda Murraça area
	Agostinho Bulande	Marromeu	Fumo Malingapanse area
	Ordinary people	Fernando Chapo	Mutarara - Inhangoma
Rosa Ernesto		Mopeia- Cocorico	
Augusta Quembo		Mopeia- Cocorico	
Luís Ngota		Mopeia-Cocorico	
Gertrude Antonio		Mopeia-24 de Julho resettlement centre	
Lina Augusto		Mopeia-Zonas Verdes resettlement centre	
Tome Gole		Mopeia-24 de Julho resettlement centre	
Antonio Marromo		Mopeia-Zonas Verdes resettlement centre	
Inacio Joaquim		Mopeia-Cocorico	
Joaquim Baptista		Mopeia-Cocorico	
Joaquina Afonso		Mopeia-Cocorico	
Total	78		

Group discussions (average 15 people each group)

District	'village'	Number of group discussions	observations
Mopeia	Cocorico	4	1- mixed group (female and male) 2- men's group 3- women's group 4- Red cross volunteers
	24 de Julho Resettlement centre	2	1- women's group 2- men's group
	Zonas Verdes Resettlement centre	1	Mixed group
Mutarara	Canhungue	2	1- men's group 2- women's group
	Jardim	2	1- men's group 2- women's group
Marromeu	Chupanga	1	Mixed group
Chinde	Xinsomba/Luabo	1	Mixed group
Caia	Tchetcha	1	Mixed group
	DAF	1	Mixed group
	Amílcar Cabral	1	Mixed group
Total	16		

ANNEX 2: CHECKLIST AND QUESTIONNAIRE

a. Checklist

1. Specific for the Mozambican Red Cross (CVM)

Method	What to ask for/see	To whom	Observations
Visit/interviews in different department	What they do, changes over time, interaction with others, strong/weak points, if they know and how do they perceive CBDRM project	Head of department and someone low ranked on that department	The main idea is to have an overview of who does what on the organization and how the project is perceived and owned by others within the organization.
Secondary data	Written institutional rules and regulations	Personnel administration	
	History of the organization	National archives/ institutional library	Data might be also in different organizations i.e. national historical archive; ministry of Health,... Meetings with different actors like the first workers and leaders as well as outsiders might bring information about the Red Cross
	Project documents (Memos, meeting notes, correspondence with local staff, donors and other partners, reports, etc)	DRR team at different levels	It will allow the initial analysis on the written discourses and interfaces between MRC and other stakeholders
	Budgets and cash flow	DRR team or Finance department	This is important for donor-MRC relationship
Participant observation (interacting with them)	<ul style="list-style-type: none"> Formal and informal rules and practices in the institution and specially regarding CBDRM Oral and visual language (narratives, jokes, jargon, metaphors, body language ...) 	<ul style="list-style-type: none"> Paying attention to what they do, where, what they are expected to do and how it has changed over time and why? How people make them and are shaped by them. What is their meaning for disaster management Paying attention to what is said, who says, when it is said to whom and why 	<ul style="list-style-type: none"> To see if practices conform to institutional rules/principles and what is written in project documents. To look within the organization and in meeting with others (ex. Donors, local communities, government
	Entitlement to resources within the organization (ex. Computer, cars, space, subordination) and management	Paying attention to who have access to what resource at what time and why. Attention to network building to access the resources (within and outside) under the DRR project	
	Information flow	From community to headquarter or donors and vice-versa	Specially within the CBDRM project

Semi-structured Interview

History and overview of DRR

- What is Red Cross Mozambique? (here I want to know the history)
- Since its creation could you please tell me the critical moments and why? (want to see if change from reactive to proactive is mentioned as one)
- Where and how did you work during war time? (want to see if they have worked on RENAMO's controlled areas and how they managed to do so. To have a look at the working of humanitarian principles)
- What CVM do? And how the different activities interact? What is your specific role in the organization?
- How do you operate in cases of natural hazards? (to see the approach)
- When does the Red Cross consider a disaster? If there are criteria, what criteria, who created them
- Do you personally agree with these criteria/work with them or have others? If yes, have you discussed them with others? What was the output?
- Are there different responses/approaches to different hazards?
- Which hazards do you find more difficult to work with and why?
- Now Red Cross talks about proactive CBDRM. What it means?
- Which you think is the best approach for DRR?

Vulnerability and Climate change perception and actions

- RC also mentions vulnerability. What do you mean? How you come to know vulnerable communities and people?
- Now also Red Cross talks about Climate change. What does it mean? What is your perception about it? What are the ways to deal with it? Are you working with it? If yes how?
- Do you see any link climate change and natural hazards? And with disasters?
- What you consider to be a community? How do you work in the communities? Are there different approaches between different communities?
- Participation is also your major concern. How do you apply it with partners and at local level?

Partnership

- Who are your partners? I have to categorize in terms of (Community, governmental bodies, NGOs, private sector, donors).
- How do you work with them (ex. via memorandum of understanding, oral agreements, etc...)
- How co-ordination is done and what is your perception regarding co-ordination?
- What is the role of each of them?
- What do you think has been your relationship with each of them? Which partner do you think is hard to work with and why?
- Can you more specifically talk about your partnership with local people and with donors? (how does it work, strong points, weak points, opportunities, barriers)
- What do you think are the weak and strong point of the Mozambican Red Cross?
- What are the challenges for the Mozambican Red Cross and how do you think are going to deal with them?

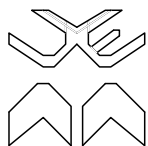
2. specific for the communities

Which method	For what	Observation
Secondary data	Understanding of the wider environment of the community	Data might be found at different geographical location (District and national level)
Group discussion	Community mapping. Overview of the community geographical location and setting: living areas (especially who is living where), population, infra-structure, field areas, natural resources location, its use and distance to it; limits if any, communal and individual areas. Changes over time (i.e on settlements, population density and other trends)	I would like to precisely map each household geographical position (house and field to be able to do purposeful sampling for questionnaire)
	Resource mapping. To find out which natural and social (associations, groups, churches, etc) resource exist locally, where they are, technologies and local knowledge on its use and dynamics/trends on resource stocks. Also accounts of conflicts over resources	Transects will also be made to help have a clear idea of the community geography, resources and locations
	Historical record. An overview of the main events (especially natural hazards and disasters) that took place and discuss local mechanisms used to deal with. This includes nature of hazards, frequency, severity, duration, area and people most affected. Local words used to refer to disaster, hazards, vulnerability, risk, capacity. Changes on words and on mechanism to deal with the hazards	To collect data also on annual rainfall, rainfall variability, deaths over time, product prices intra-annual and inter-annual of the main products sold and bought. Mainly through interviews with elderly women and men. Parallel hazards such as diseases, failure of markets, among others that might be mentioned on group discussions. Which hazard is given much attention and why? Which seemingly relevant are not mentioned?
	Seasonal annual calendars (agriculture, diseases, and flooding, higher and lower expenditures, labor need, price variation).	Allow to understand possibilities or not for collective action and in which periods. To understand seasonal dynamics, vulnerabilities and its implications for CBDRM.
	Venn diagram and interventions. To understand links within and outside. To discuss interventions (past and present)	To try to find out if links with the Mozambican Red Cross will come out and which persons will refer to it. Will be the base to follow interfaces between Red Cross and local people

Key informant's interview and participant observation (following the actors)	Cultural aspects: (Formal and informal) rules making/makers and practices	Paying attention to what they do, what they are expected to do and how has it changed over time and why? How people make them and are shaped by them. What is their meaning/effect for disaster risk and livelihoods? Of who and why?
	Networks and entitlement to resources	Paying attention to who have access to what resource (i.e. land and agricultural inputs, forestry products, water based products, social groups, infra-structures), changes over time (especially over the last 5 years), where at what time and why. Attention to network building to access the resources (within and outside the community)
	Politics and economics	Questions of representation, participation and local economy trends (productions, prices, consumptions,...) and its meaning for DRR and livelihood.
	Organizations and access	Existence of local forms of organizations, who created, for what purpose, who is part of or access them
	Information flow	Within the community and from community to outside and vice-versa.
	Oral language (narratives, jokes, jargons, metaphors...)	Paying attention to what is said, who says, when it is said to whom and why. This will be made particularly during the interaction with the Red Cross
	Disaster risk perceptions and measures for disaster risk reduction	Collecting perceptions (regarding risk, climate change, vulnerability, disaster and looking closely to practices for dealing with disaster risk. Collective action, participation and community meaning. After this, perceptions will be categorized into groups and for each particular group 1 or 2 representatives will be chosen for extended case study.
	Interaction with Red Cross project	<ul style="list-style-type: none"> • To follow interaction between MRC staff and local people. Pay attention to language and practices of actors involved and the way the project is being appropriate, integrated or transformed at local level by different actors including MRC staff <ul style="list-style-type: none"> ○ Project organization at local level (from community side and from MRC) ○ Activities ○ Approaches on implementing activities ○ Target areas and people/groups ○ Perception of the project by local Red Cross staff and local people
Individual extended observations and interviews	Questions related to personal history; household issues; networks within and outside the community, access to resources, ways of dealing with disaster risk, perceptions on community, collective action, climate change, hazards and disasters. Also perceptions on interventions, particularly of Red Cross and participation on interventions.	

Questionnaire	Quantitative data on different variables which might correlate to people's perceptions and actions regarding climate change, disaster risk and livelihoods. Specific question will be on social networks and on the intervention of Red Cross (see the questionnaire).	On sampling attention will be to including people from all the categories in order to find meaningful/statistical differences between the categories.

b. Questionnaire



**UNIVERSIDADE EDUARDO MONDLANE
& WAGENINGEN UNIVERSITY
DESATRES E COMUNIDADES EM MOPEIA**

Entrevistador _____

Area (Comunidade) _____

Entrevistado (AF) N0: _____

Questão geral sobre desatres

Pode nos contar a sua experiência com desastres? (o que aconteceu, qual é o nome que da a desastre/cheia, como escapou/ o que fez e o que não fez)

1. Informação Geral do Entrevistado

1. Sexo: 1. M 2. F
- 1.1. Estado Civil: 1. solteiro/a 2. casado/a 3. divorciado/a 4. viuva/o 5. vivem juntos
- 1.2. Se for casado/vivem juntos pagou/recebeu: 1. fungula mulomo; 2. malumphato; 3. phete; 4. parcela 5. mafuwa 6. outro
- 1.3. Polígamo: 1. sim 2. não. Se sim quantas outras mulheres _____ . vivem juntas? 1. sim 2. não
- 1.4. Idade: _____ se nao sabe estime o intervalo: 1. <15 2. 15-35 3. 36-64 4. >64
- 1.5. Educação escolar: _____
- 1.6. Maior ocupação: 1. camponês 2. pescador 3. negociante 4. ganho-ganho 5. artesão/carpintaria/sapataria....
- 2. Família**
- 2.1. Quantas pessoas voces consideram parte deste agregado: Total _____ homens _____ mulheres _____ crianças (<14) _____ e velhos (> 64) _____
- 2.2. Quantas pessoas que voces consideram parte do agregado estao fora (ex. A trabalhar fora da comunidade). total _____ . Deste _____ H; e _____ Mulheres
- 2.3. O que vem mais frequentemente quantas vezes por ano eles vem ? _____
- 2.4. recebem algum tipo de apoio de familia que esta fora? 1. sim 2. não: se sim: tipo de apoio 1. dinheiro 2. bens ; comparativamente a 5 anos atras o envio é: 1. menos frequente; 2. igual; 3. mais frequente
- 2.5. Tiveram alguma infelicidade/morte do ano passado para ca? 1. sim; 2. não: se sim quem foi(ram)? _____
- 2.6. Tem alguém no agregado constantemente doente (esta doente nos ultimos 3 meses) ? 1. sim 2. não. Se sim quem _____
- 2.7. No. de radios que possui familia? _____ No. de bicicletas que possui a familia? _____
- 2.8. No. Canoas que possui _____ No de redes de pesca que possui _____
- 2.9. No de pratos que possui _____ No de panelas que possui _____
- 2.10. No de copos que possui _____ No de colheres que possui _____
- 2.11. Criação que possui: nº de aves _____ nº de cabritos _____ nº de porcos _____ nº de bois _____
- 2.12. Se compara o peso de trabalho/ocupacao de m.d.o na família depois das cheias de 2007: este: 1. reduziu 2. sem mudanças 3. aumentou. Porque? _____
- 2.13. Durante a guerra: 1. nao saiu da zona; 2. saiu para ilha 3. saiu para sede distrito 4. saiu para fora do distrito
- 2.14. Depois da guerra: 1. voltou a viver mesmo espaco/ e ocupou mesmas machambas 2. passou a viver em outros espacos/ e ocupou novas machambas; 3. mesmo espaco/machamba diferente 4. espaco diferente/mesma machamba
- 2.15. Depois da guerra: 1. voltou toda a familia nuclear 2. a familia nuclear dispersou-se
- 2.16. foi afectado pelas cheias de 2001? ? 1. sim 2. não; se sim: 1. evacuou; 2. nao evacuou
- 2.17. se evacuou como o fez? 1. a pé ; 2. de canoa propria; 3. de canoa familiar; 4. de canoa alugada; 5. de canoa/barco da CVM 6. de barco das FADM/INGC; 7. de helicoptero; 8. de bicicleta; 9. de carro
- 2.18. se evacuou: todos os membros do agregado usaram o mesmo meio mencionado acima? 1. sim 2. não; se nao mencione os outros meios usados _____
- 2.19. Depois das cheias de 2001: 1. voltou a viver mesmo espaco/ e ocupou mesmas machambas 2. viver em outros espacos/novas machambas; 3. mesmo espaco/machamba diferente 4. espaco diferente/mesma machamba
- 2.20. Depois das cheias de 2001: 1. voltou toda a familia nuclear 2. a familia nuclear dispersou-se

3. Normalmente/ na vida onde é que obtem conhecimento sobre desastres?

- 3.1. experiência pessoal clarifique _____
- 3.2. apartir de membros da familia clarifique _____
- 3.3. vizinhos clarifique _____
- 3.4. amigos clarifique _____
- 3.5. radio clarifique _____
- 3.6. comité local clarifique _____
- 3.7. lideres locais clarifique _____
- 3.8. outros especifique, _____

4. sobre as cheias de 2007

- 4.1. Foram afectados pelas cheias recentes? 1. Sim 2. não.
- 4.2. teve informacao antecipada que haveria cheias? 1. Sim 2. não.

4.3. se sim: como teve informacao? (se for mais de 1 fonte ponha em ordem crescente: 1ª fonte, 2ª etc)

- 4.3.1. experiência pessoal _____
- 4.3.2. a partir de membros da familia _____
- 4.3.3. vizinhos _____
- 4.3.4. amigos _____
- 4.3.5. rádio (mencionar de quem) _____
- 4.3.6. comité local _____
- 4.3.7. lideres locais _____
- 4.3.8. outros especifique, _____

4.4. foi necessario alguma coisa mais para se convencer que a cheia era um problema real?

4.5. Evacuação: 1. nao evacuou; 2. evacuou

4.5.1. se evacuou: 1. fez logo de inicio; 3. evacuou tardiamente de livre vontade; 4. evacuou tardiamente forçado

4.5.2. Se evacuou: quantos dias depois de ter informacao evacuou? _____.

4.5.3. fez alguma cerimonia (tsembe) antes de sair/evacuar para o centro? 1. sim 2. não

4.5.4. Quem não esteve presente na hora de evacuar? 1. marido 2. esposa 3. algumas crianças 4. todos estavam

4.5.5. algum membro da familia se encontrava doente na altura de evacuar? 1. sim 2. nao. Se sim quem era: ? 1. marido 2. esposa 3. alguma criança/filho (a); 4. outros familiares _____

4.5.6. como saiu da sua casa para fora (se saiu): 1. a pé; 2. de canoa propria; 3. de canoa familiar; 4. de canoa alugada; 5. de canoa/barco da CVM 6. de barco das FADM/INGC; 7. de helicoptero; 8. bicicleta; 9. carro; 10. outro

4.5.7. todos os membros do agregado usaram o mesmo meio mencionado acima? 1. sim 2. não; se nao mencione os outros meios usados _____

4.6. Conseguiram sair com alguma coisa? 1. sim 2. nao. Se sim: 1. utensilios da casa; 2. criação; 3. instrumentos de trabalho; 4. semente; 5. comida; 6. Outros, Mencione _____

4.7. o que procura sempre salvar custe o que custar (fora de pessoas). Fale em ordem de importancia 1. utensilios da casa; 2. criação; 3. instrumentos de trabalho; 4. semente; 5. comida; 6. Outros, Mencione _____

4.8. Perdeu-se alguma coisa no agregado? 1. sim 2. nao. Se sim: 1. utensilios da casa; 2. criação; 3. instrumentos de trabalho; 4. semente; 5. comida; 6. Outros, Mencione _____

4.9. Se perdeu criacao devido a cheias diga o tipo e quantidade? . No de aves: _____ No de cabritos : _____ no de porcos: _____ no de bois: _____

4.10. a casa: 1. nao sofreu; 2. danificou-se completamente; 3. danificou-se parcialmente

4.11. Para onde foram logo quando saíram de casa? 1. murmucho/zona alta; 2. casa de familia; 3. casa de amigo; 4. centro de acomodação/ centro de reassentamento; 5. igreja; 6. outro, mencione _____

4.12. Ja ouviu falar de rota de fuga? 1. sim; 2. nao. se sim, com quem ouviu? 1. membros do agregado; 2. vizinhos; 3. amigos; 4. comite local; 5. voluntarios da CVM; 6. lideres locais; 7. outros _____ usou agora nestas cheias 1. sim 2. nao

4.13. Ja ouviu falar de local seguro de acomodacao comunitaria? 1. sim 2. nao; se sim, com quem ouviu? 1. membros do agregado; 2. vizinhos; 3. amigos; 4. comite local; 5. voluntarios da CVM; 6. lideres locais; 7. outros _____ foi para lá nestas cheias? 1. sim 2. nao

4.14. Quantos lugares de refugio tiveram/passaram no total durante estas cheias? _____ enumere?

4.15. se foi ao centro de acomodacao /reassentamento quanto tempo (meses) ficaram lá? _____

4.16. se foi ao centro, o que achou do centro onde esteve em termos de organizacao comparado com 2001 (se em 2001 tambem foi ao centro)? 1. mau; 2. igual 3. bom; porque? _____

4.17. Comparando com as cheias de 2001 (se sofreu), o prejuizo destas cheias foi 1. menor 2. igual 3. maior. Porque acha assim/o que mudou? _____

4.18. Depois das cheias de 2007: 1. voltou toda a familia 2. voltou parte e outra ficou no centro 3. ficou toda no centro 4. dispersou-se (estao em mais de um sitio agora). Fale mais _____

4.19. Depois das cheias de 2007: 1. voltou a viver mesmo espaco/ e ocupou mesmas machambas 2. em outros espacos/novas machambas; 3. mesmo espaco/machamba diferente; 4. espaco diferente/mesma machamba

4.20. Fizeram alguma cerimonia (Tsembe) quando voltaram (se voltou a zona anterior) 1. sim 2. nao

5. Sobre os comites locais de gestao de calamidades

5.1. Ja ouviu falar dos comites locais de gestao de calamidades? 1. sim 2. nao

5.2. se sim, sabe o que fazem? 1. sim 2. nao . se sabe descreva o que sabe _____

5.3. que pessoas estão envolvidas? _____

5.4. como ficaram envolvidas? _____

5.5. Podes dar uma avaliacao do trabalho do comite em termos de: 1. mau 2. nada a comentar 3. bom

6. Actividades de sustento do agregado familiar

Por favor mencione as actividades de sustento praticadas pelo agregado familiar				
	Actividades	Importância relativa para a fam (as primeiras 3 mais importantes)	Actividades novas? (ultimos 5 anos)	Actividades que desapareceram (ultimos 5 anos) e porque?
1	Agricultura			
2	criação			
3	pesca			
4	caça			
5	Remessas			
6	Ganho-ganho			
7	Compra e Venda de produtos			
8	Venda de produtos da machamba propria			
9	Venda de carvão			
10	Venda de lenha			
11	Venda de material de construção			
12	Venda de bebidas tradicionais			
	Outros (pedreiro fabrico de cestos, barro, esteiras, etc)			

7. Qual é o rendimento medio do agregado (dinheiro/ Por mes) de todas as actividades que faz? _____

8. Em relação a agricultura:

8.1. quantas machambas o agregado tem no total? ____ destas: zona baixa ____ zona alta _____

8.2. Quantas machambas o agregado esta neste momento a trabalhar? ____ zona baixa ____ zona alta _____

8.3. como conseguiu té-las? 1. Herança dos pais; 2. pediu estrutura local; 3. comprou com algum 4. oferta de algum familiar 5. oferta de outras pessoas na comunidade; 6. outro mecanismo, mencione _____

8.4. Emprega mão-de-obra de fora da familia? 1. sim 2. não, se sim custos _____ unidade _____

8.5. Já mudou de lugar da sua machamba? 1. sim 2. não : se sim quantas vezes _____ razoes para isso: 1. fertilidade baixa; 2. demasiado pragas e doencas; 3. mudanca de residencia; 4. conflitos de terra; 5 outros, mencione _____ quando foi a ultima vez (ano) que mudou _____

8.6. Comparando com ano passado a sua área total é: 1. maior 2. mesma 3. menor . se há mudanças no tamanho da área mencione as razoes: 1. mao de obra 2. insumos; 3. cheias; 4. erosao; 5. outras mencione _____

8.7. usou nesta campanha novas culturas/sementes? 1. sim; 2. nao. Se sim, quais? _____
 porque? _____

8.8. Nesta campanha deixou de plantar algumas culturas/sementes? Quais foram que deixou _____
 razoes _____

8.9. Quantos meses em media a producao propria alimenta o agregado? _____

9. **Mudanças que nota:** em geral nota alguma coisa nao usual/mudanca na zona onde vive com relacao ao:

9.1. solo _____

9.2. na agua (i.e. quantidade, qualidade) _____

9.3. na pesca (numero de pescadores, quantidade de peixe, tipo de peixe) _____

9.4. vegetacao (i.e. aumetou, reduziu, o tipo que existe) _____

9.5. animais (selvagens e domesticos) _____

9.6. doencas (frequencia, tipo, tratamento) _____

9.7. na sua familia (i.e. tamanho do agregado) _____

9.8. na sua comunidade (i.e. vizinhanca reduziu, aumentou, etc) _____

9.9. quanto a ocorrencia e intensidade das cheias _____

9.10. quanto a ocorrencia e intensidade de secas _____

Nota: para cada elemento anotar desde quando ele nota esta mudanca/algo nao usual

10. **Comunidade** (para questionar a essencia de comunidade com observacao participante e entrevistas semi-estruturadas na comunidade)

10.1. Pertence a algum tipo de organizacao? 1. sim 2. não ; se sim:

Tipo	Ponha X	Razoes/motivacoes para fazer parte
Associacao profissional (i.e. de camponeses, de pescadores, etc)		
Igreja		
Xitique/ empréstimo e guarda de dinheiro		
Grupos de ajuda mutua		
Outras: especifique _____		

11. Em tempos de crise quantas pessoas mesmo confias que te podem ajudar? _____ quem sao em ordem de importancia? 1º _____
 2º _____ em ultimo _____ alternativas: 1. pais; 2. tios 3. irmaos de sangue; 4. irmaos de igreja 4. amigos; 5. vizinhos; 6. outros, mencione _____

12. a pessoa que recorre depende do tipo de preocupacao? Se sim explique

13. Se compara antes das cheias recentes de 2007 e agora:

13.1. 1. tenho mais amigos/amizades agora 2. mesma coisa 3. menos

13.2. 1. há mais ajuda a partir de amigos agora 2. mesma coisa 3. menos

13.3. 1. há mais ajuda dos familiares agora 2. mesma coisa 3. menos

13.4. 1. há mais ajuda dos vizinhos agora 2. mesma coisa 3. menos

13.5. 1. há mais acesso a servicos agora 2. mesma coisa 3. menos

13.6. 1. há mais acesso a informacao agora 2. mesma coisa 3. menos

13.7. 1. A comunidade é mais forte agora 2. mesma coisa 3. menos

14. Tem algum tipo de contacto com organizacoes/pessoas de fora? : sim não ; se sim:

14.1. instituicoes do governo

14.2. comerciantes

14.3. pescadores de fora

14.4. madeiros

14.5. CVM

14.6. ONGs ; se conhece os nomes diga _____

15. Em relacao a CVM sabe o que é? 1. sim 2.nao; se sabe diga:

15.1. o que é _____

15.2. o que faz _____

15.3. Que organizacoes de fora estao a trabalhar aqui na comunidade?

15.4. para cada 1 das organizacoes trabalhando na zona avalie o seu desempenho em termos de:

15.4.1. organização **A (ex. CVM)**: 1. mal 2. nada a comentar 3. bom

15.4.2. organização **B** : 1. mal 2. nada a comentar 3. bom

15.4.3. organização **C** : 1. mal 2. nada a comentar 3. bom

Muito Obrigado

Espaço para observações pessoais/do entrevistador em relação ao local, ao entrevistado e o decorrer da entrevista

ANNEX 3: BUDGET ALLOCATION DURING THE 2001 FLOODING

Item/Cost per province	MAPUTO	SOFALA	MANICA	TETE	ZAMBÉZIA	TOTAL
Per-diem	136,870,000.00	36,457,500.00	202,348,030.00	118,265,500.00	84,147,500.00	578,088,530.00
Fuels	979,056,510	348,523,872.00	139,853,900.00	290,086,151.00	211,144,981.50	1,968,665,414.50
Comunications	2,913,300.00	41,206,219.00	56,769,783.00	103,411,949.00	27,239,116.00	231,540,367.00
Water and Electricity	0.00	0.00	2,914,178.00	0.00	70,172,613.00	73,086,791.00
Office material (consumables)	38,938,500.00	84,807,538.00	34,262,000.00	24,166,666.00	17,784,000.00	199,958,704.00
Cargo and Transport	1,482,202,083.54	286,124,708.00	19,239,000.00	168,010,000.00	248,622,773.00	2,204,198,564.54
Other services	194,134,679.98	0.00	119,236,576.76	72,156,534.00	93,065,548.00	478,593,338.74
Different products	0.00	0.00	0.00	0.00	218,325,000.00	218,325,000.00
Port taxes	752,120,926.38	0.00	0.00	0.00	65,911,320.00	818,032,246.38
Aereal transportation	16,581,619,956.52	0.00	0.00	0.00	0.00	16,581,619,956.52
Acommodation and food	0.00	1,423,924,077.00	0.00	0.00	198,541,489.00	1,622,465,566.00
Milling	0.00	0.00	0.00	0.00	126,650,000.00	126,650,000.00
Stockage	588,006,901.00	0.00	0.00	0.00	0.00	588,006,901.00
Flight tickets	122,118,000.00	16,383,000.00	0.00	15,666,666.00	3,688,000.00	157,855,666.00
Equipment repairation	0.00	0.00	24,209,565.00	0.00	30,377,848.00	54,587,413.00
Equipment repairation	0.00	0.00	45,670,750.00	0.00	0.00	45,670,750.00
Office material (equipment)	0.00	0.00	20,821,982.00	0.00	0.00	20,821,982.00
Other equipment	0.00	0.00	39,540,000.00	0.00	0.00	39,540,000.00
Rental of spaces	93,489,594.00	0.00	5,098,500.00	0.00	0.00	98,588,094.00
Maintainance of rented spaces	0.00	0.00	250,000.00	0.00	0.00	250,000.00
TOTAL	20,971,470,451.42	2,237,426,914.00	710,214,264.76	791,763,466.00	1,395,670,188.50	26,106,545,284.68

Source: Adapted from INGC (2001)

ANNEX 4: ACTORS DURING THE 2007 FLOODING

Actor	Description
The affected/victims	Flood affected or victims emerged as an obvious actor in the arena. Nonetheless, defining who exactly was a victim and deserved humanitarian relief was a matter of contestation and led to an interruption in the distribution of emergency supplies by March 2007. The government defined victims only those living on the floodplains and had their houses inundated. However, those who lived on the upper grounds but had their agricultural fields on lowlands and were inundated, complained that they were also flood victims and deserved humanitarian aid as well. On February 15, distribution of emergency supplies was, for example, canceled at 'Tchetcha' resettlement centre in Caia district due to that dispute of victim definition. Furthermore one person was imprisoned accused of instigating such claims. This reignited the discussion on flood management approaches (<i>between the flood free approach and living with floods</i>). Some people accused, at CENOE meeting on February 16, 2007 the relief workers of perpetuating the moral hazard and rewarding the bad behavior of living on flood prone areas.
The registers	Distribution of aid depended on the registration of the victims. There were several registrations and list producers. There were parallel registration methodologies being undertaken by the different organization. Some organizations regarded local chiefs as the registers while others undertook themselves the task of enumerating the victims. For instance CVM trusted the local chiefs but INGC, in most of the cases, sent teams to undertake the registrations. Producing the lists was not an easy task and lists had to be made again and again delaying, in many cases, the distribution of emergency relief. The politics of registration are discussed at length in chapter 7.
The list providers	In many cases, the registers were not the same actors to deliver the lists to the decision makers. The lists were handled to their immediate hierarchical superiors who then took the lists to other superiors - eventually the decision makers. In this process, lists were reshaped and the distribution process delayed. To illustrate this, on February 16 a list was produced by local chiefs for flood victims in 'Sena' region, Caia district. The list was handed to the local government official who was supposed to hand it to the administrator of Caia district. It was then expected that the administrator would ultimately hand the list to the World Food Programme. This process took nearly 4 days and due to these delays those registered were not included on aid distribution during these 4 days. In meantime local chiefs in Sena region were being accused of inaction by the flood 'victims'.
The monitors of aid distribution	Each organization involved in aid distribution tended to bring monitors of the process. The monitors are staff from the aid provider organization that are charged with the mission to decide whether the distribution could proceed or could be stopped for a variety of reasons. In a number of cases monitors had to stop or delay the distribution so that a proper environment was created and distribution could go smoother. In Caia monitors from CEDES- a organization in charge of making the distribution stopped distributions in DAF and Nhambalo resettlement centres on February 17 and 18 to allow a proper environment.
The aid distributors	Aid distributors were people hired for a short time by the organization in charge of aid distribution to give the ratios to the beneficiaries. Together with the monitor they commanded a considerable power over the beneficiaries as they could stop, delay, postpone, tiny or increase the amount one received. I witnessed different lobbies between aid distributors and beneficiaries in order to maximize the amount received by the beneficiaries.
The transport(ers) including helicopter (s)	Transports and access to them during the aid deliver become a source of competition and power relations. It marked the difference between international and national humanitarian organizations in their ability to deliver quick humanitarian response and the organization visibility. Due to recurrent truck delays the INGC general director suggested on February 14 that INGC should have the

	telephone numbers of all drivers and truck owners involved in humanitarian relief operations in order to reinforce their commitments and speed up the operations .
Good's suppliers	Market and good supplies is a key issue during emergency operations. Some of the goods necessary for emergency relief were absent at the local markets. For example, CVM in Sofala Province had to search for goods in Manica province as they were not available in Sofala province. Truck delays were partly due to the fact that relief goods had to be purchased in different markets within and outside the country. In some markets prices went up (see next chapter) and this had implications on how humanitarian organizations especially the 'smaller' ones that depended on the local market could make their interventions. CVM for instance was obliged to send trucks straight from Maputo to Caia instead from Beira or Manica provinces. Hence, markets shape relief operations.
Security providers	In contexts of fragile security and robbery, trucks carrying humanitarian aid may require special protection and deals with security providers. During the 2007 flooding different truck drivers carrying humanitarian aid told me that they had to pay some amount of money, especial during evening time, so that the trucks and the content could not be robbed. The government provided security for the main emergency warehouses in Caia and other places but individual organizations and truck drivers required their own private security.
Financial/logistic managers	During the humanitarian operations financial and logistical personals from a range of organizations such as INGC, CVM, WFP were the key player and the most requested. Amongst other duties, they had to sign the checks, the forms and other bureaucratic papers needed for bank issues and, loading or de-loading merchandise. Although other staff was also relevant, the role of logistic and financial managers appeared to be critical. It is by recognizing their critical role that IFRC had to bring expats to manage logistics while CVM had to bring people from the headquarters in Maputo.
Banks	Access to funds during emergency operation becomes critical and this implies, as we saw, dealing with bank actors. Banks with their liquidity and regulations become an arena with exclusion, power relations and negotiations. The CVM case showed that by offering a first treatment to international actors, banks reinforce power relations and exclude, in some cases, the smaller and local humanitarian organizations. Hence, they shape who operate where and when.
Government institutions	Government through INGC and other institutions tried and in most of the cases succeeded in defining where and when humanitarian assistance should be provided.
Media	The national media, especially the government controlled media, tended to resonate the government led ideology and prescriptions. Decisions taken by the government were hardly critically debated on the media and alternative views tended to be sidelined. In March an article by José Lopes was published on one of the local independent newspaper. The article depicted the flooding as a failure at the Cahora Bassa dam management. Following the publication the newspaper and the authors were widely criticized by the state media and regarded as anti-patriots.
UN agencies	UN agencies provided different services either to the affected people or to other NGOs and government institutions. Nonetheless, the UN response tended to exclude other actors and to bypass the government. This brought in contestations and power conflicts.
INGOs	Different International NGOs made appeals and managed to get funds which allowed them to carry emergency related activities and shape the course of the humanitarian response. For instance, Save the Children was amongst the first INGOs to offer facilities for a quicker school return along the delta Zambezi.
Local NGOs	Local NGOs were also involved in humanitarian action. Although their response was mostly constrained by financial, human and material resource they attempted, within the limits of their capacities to help the affected.
Donors	The humanitarian operations run either by the government or by NGO were dependent, to a larger extent, to the funding from different national and international donors. The concept of donors was indeed very much fluid during the emergency. Some were at the same time

	donors and implementers and the amalgam of different actors making donations made the concept of donor very diffuse and imprecise. On the other hand, there is a tendency to sideline local donors such as national private companies and civil society organizations.
Scientists	The decision as whether to evacuate people or not was backed by hydrologists and meteorologists who presented to the decision makers the science of flooding and the evolution of the flooding event. To illustrate, meteorologists forecasted rainfall while hydrologists provided information on river heights and flows. Scientists set 5,00 meters river height at the gauging stations as the threshold to start the evacuation process of the people living or working on the lowlands. This benchmark was indeed contested by a considerable number of local people living along the floodplains. For them 5,00 meters appeared as a manageable level within the limits of their capacity and knowledge (see next chapter).
Military forces	Rescue operations were largely undertaken by the military forces deployed by the government. They were given orders to coercively evacuate people from the lower lands. Their intervention shaped, to a large extent, the live and the livelihood of many people affected by the flooding (see next chapter)
Dam managers	Flooding on the delta Zambezi depends, to a less or large extent, on how dams upstream (Cahora Bassa and Kariba dams) are managed. The amount and timing of water release by the dams influence the flooding of the delta. During the flooding the government had been requesting the dam managers to release as less water as possible, so that flooding could be avoided.

ABOUT THE AUTHOR



Luís Artur (36) is born in Sena, Caia district, Mozambique. Up to the age of 10 years, he lived in Sena with his grandmother where he attended Primary School. In 1986 they moved to Beira city where he attended Secondary School. In 1994 Luís passed entry exams to the Eduardo Mondlane University in Maputo to study Agronomy. In 1999 he graduated as Agronomist (Rural Extension Group) and became employed at the same university as Assistant Lecturer at the Faculty of Agronomy and Forestry Engineering. From 2000 up to 2002, Luís Artur pursued a Master degree in Rural Development Sociology at the Wageningen University in the Netherlands. After graduation he went back to Mozambique and started his PhD research with the Disaster Studies group of the Wageningen University in 2006.

Luís Artur has a work experience as lecturer, researcher, supervisor and as consultant. He lectured Rural Development, Research Methods, Rural Extension, Agrarian Education and Rural Saving and Credit. He carried out research with organizations such as IIED, IFPRI, OSSREA, UNDP and IIAM. Luís has published in books, journals and in local newspapers. Currently he works at the Faculty of Agronomy and Forestry Engineering of the Eduardo Mondlane University in Maputo. He can be reached via lartur@uem.mz or larturfaef@gmail.com

TRAINING AND SUPERVISION PLAN



Wageningen School
of Social Sciences

Name of the activity	Department/Institute	Year	ECTS*
A) Project related competences			
Ceres Orientation + presentation tutorials	CERES	2006	10
Presentation at the World Conference of Humanitarian Studies: 'The victimization of non-victims and the development of an emergency aid culture on the lower Zambezi, Mozambique'	Groningen/Wageningen University	2009	2
Presentation at the MICOA/MPD/World Bank symposium in Mozambique: 'Mecanismos de Adaptação aos Regimes de Cheias no Vale do Zambeze'	MICOA/MPD/World Bank Mozambique	2008	2
Course: Natural hazards and Disaster	Disaster Studies Group, Wageningen University	2006	4
Course: Risk Communication	Communication and Innovation studies, Wageningen University	2006	6
B) General research related competences			
The Art of Writing	WUR, Language Services	2009	1.8
Socio-Cultural Field Research Methods	Mansholt Graduate School	2006	4
Computer Assisted Qualitative Data Analysis	VLIR/UEM	2010	2
C) Career related competences/personal development			
Summer School	CERES, Netherlands	2006	3
Summer School	UN-EHS, German	2008	3
Learning from Practice. Field exposure in Bangladesh and Philippines	Care Bangladesh; CDP-Philippines; ADPC Thailand	2006	6
Workshop on Sociology of Disaster	UDM University-Mozambique	2010	3
Workshop on Climate Change Adaptation and the Role of Universities and Research Centers	MICOA/UNDP	2010	1
Total (minimum 30 ECTS)			47

*One ECTS on average is equivalent to 28 hours of course work

Citation of sponsors

The research described in this thesis was financially supported by the Netherlands Organization for Scientific Research (NWO), Vulnerability, Adaptation and Mitigation Programme.

Front cover pictures: Courtesy INGC
Back cover pictures: Author