

From Reaction to Pro-action in Zimbabwe: The Bulalima – Mangwe Districts Drought Coping and Reduction Experience¹

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ABSTRACT

Disaster risk reduction as a strategy is increasingly gaining prominence in development discourse within the context of a paradigm shift from post-disaster relief and reconstruction to pre-disaster prevention and preparedness. In the SADC region particularly in Zimbabwe, drought has always had a devastating impact on people's livelihoods and hence it is no surprise that although many studies have been carried out on drought coping strategies and not much has been done to understand drought risk reduction strategies. Thus there is what can be perceived as a time lag in disaster related paradigm shifts in Zimbabwe. Thus this study aimed to enrich the drought risk reduction data base. It analyses drought coping and risk reduction strategies in communal and resettlement areas of Mangwe District in South West Zimbabwe. The study area was selected on the basis of its exposure to drought and hence its ability in meeting donor funding criteria. Using a range of methods and tools such as the Khanya Sustainable Livelihoods Framework, focus group discussions, individual interviews, household questionnaires and observations, a rich body of data on the history, occurrences and impact of droughts on livelihoods, drought coping and risk reduction strategies was accrued. The data does not only help explain what people know and do, but how and why decisions to respond to droughts are made. It establishes the basis upon which coping and risk reduction strategies were undertaken.

Keywords: Climate change, drought, disaster risk reduction, Zimbabwe, sustainable livelihoods

INTRODUCTION

Zimbabwe is a landlocked country in Southern Africa, sharing its borders with Mozambique to the east and north east, South Africa to the South, Zambia to the north, Botswana to the west and south west as well as Namibia to the west at the Caprivi Strip. The 2002 census puts Zimbabwe's population at 11 million, though 4 to 5 million more are thought to be living in Diaspora. Zimbabwe is multilingual and multicultural with English as the official language of instruction, ChiShona and IsiNdebele as the other national languages. Zimbabwe has a savannah type of climate characterized by hot wet summers and cool dry winters. It lies within the tropics and hence much of the rainfall results from the 'inter – tropical convergence zone' (ITCZ) and occasionally from tropical cyclones that originate from the Indian Ocean hence both droughts and floods are common hazards. However, of late the droughts have become more frequent, persistent and the seasons short or less defined. This phenomenon has been attributed to climate change. The impact of this increase has been in

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compromising people's livelihoods particularly in marginal areas of the Save and Limpopo river basins as well as the Zambezi valley. Bulalima and Mangwe districts in south western Zimbabwe are some of the areas that have been frequently affected by drought conditions and in a bid to reduce the impact of disasters as well as preparing for them; different institutions have come up with varying interventions. Although such disasters are visible and tangible, it is the idea of reducing risks associated with disasters that pose problems, hence the need to concentrate on disaster risk reduction (Rockett, 1999), (Bednarz *et al.*, 2008).

Non Governmental Organisations (NGOs) and other stakeholders from outside the district depend on local institutions for the successful implementation of various programs aimed at disaster risk reduction. The capacity of local institutions is therefore critical for the success or lack of it, for any of the interventions in disaster risk reduction. This research sought to understand how institutions influence or affect outcomes of an intervention to mitigate the impact of drought and why some institutions are more effective than others. In meeting the objective, this research used the Institutional Dimensions of Global Environmental Change (IDGEC) framework to understand the historical and institutional dynamics of drought risk reduction and management in Bulilima and Mangwe districts in Zimbabwe, using the concepts of fit, interplay and scale. The study was guided by assumptions that; first, for efficient drought risk reduction, efforts to reduce climate risks should not be locally institutionalised and can not depend only on external interventions. Second, local institutional design for climate risk reduction does not need to be a shared vision among various tiers of government and the wider praxis community, needs not to be flexible and enable co-adaptive management if drought risk reduction in developing country contexts is to be effective.

RESEARCH QUESTIONS

The study targeted various stakeholders involved in drought risk reduction activities in the Bulilima and Mangwe Districts, and these included Government Departments, Non Governmental Organisations operating within the two districts, as well as the local communal farmers. The following research questions were therefore used to learn, understand and appreciate the how the farmers in the two districts are coping and managing drought risks.

1. What current institutional structures and processes exist to manage drought risk?
2. Which activities and/or agents enabled activation of this institutional management design to reduce drought risks?
3. Are there any challenges or limitations impeding the management of drought risks?
4. To what extent are various stakeholders or institutions linked to reducing drought related risks?

RESEARCH FRAMEWORK AND METHODOLOGY

The institutional dimensions framework (Institutional Dimensions of Global Environmental Change – IDGEC) was employed. The IDGEC framework looks particularly at concepts of institutional fit, institutional interplay and Scale. The idea was to determine the extent to which causal mechanisms through which institutions affect behaviour at one level of social organization, such as small scale or micro-level societies, also play key roles at other levels of social organization, including national (meso-level) societies and international (macro-level) society and vice versa. In essence, the problem of scale refers to the transferability of both empirical generalizations and causal inferences from one level to another in the dimensions of space and time.

A mixed methodologies approach was employed with a heavy leaning toward the qualitative paradigm. A qualitative research study is one that uses qualitative methods in both the gathering and analysis of the data, that is, visual and verbal (conceptual or thematic) rather than numerical data manipulation (Long and Godfrey 2004). It is informed primarily by an inductive model of reasoning. Long and Godfrey (2004) also point out that Qualitative research can encompass studies using methods such as interviewing, focus groups, ethnography, participant observation, and documentary analysis among others. This research primarily employed focus group discussion and interviews. The primary instrument in data collection is the researcher hence the justification of making use of focus groups and Interviews (Lincoln & Guba, 1985), (Bogdan & Biklen, 1992). Thus the rationale behind qualitative research design is that it is the most suitable in understanding a social or human problem, particularly in disaster reduction. Qualitative research helps the researcher to build a complex holistic picture as he analyses words, and reports of informants and conducts the study in a natural setting (Creswell, 2007).

The reason of using an interview was its ability to be able to provide important background information on participants/respondents whilst at the same time giving them an opportunity to express their views freely about disaster reduction issues. The researchers also felt that interviews were an important instrument if they were to access participants' feelings, intentions, beliefs, knowledge and opinions. Informal interviews were also used along the course of the research. The data from the interviews was analysed to reveal patterns, themes and recurrent ideas pertaining to research objective.

Three focus group discussions were conducted in Madabe Ward, Marula - Ward 11 and Tshitshi - Ward 4 in Mangwe district. A total of twenty key participants were interviewed at Ward and District levels. These interviews covered both Buililima and Mangwe districts. Fifty household questionnaires were administered in five wards namely, Marula, Madabe, Tshitshi, Sanzukwi and Madlambudzi.

Each focus group had an average of 21 participants comprising of ward leadership, men and women, youths and the elderly. The groups also comprised of representatives of child headed households, female headed households, households with high as well as low asset ownership.

Individual interviews were conducted with community leaders such as councillors and chiefs or village heads. District level key participants included Chief Executive Officers, staff from the two Rural District Councils (RDCs), District Administrators (DA), Agricultural Technical and Extension services (AGRITEX), Veterinary Services, Environmental Management Agency (EMA) and Non Governmental Organisations (NGOs). The distribution of participants gave insights on the variance of opinions and a wide array of information ranging from the empirical reality to policy and institutional issues and challenges facing the various organisations in programming and implementation of drought risk reduction interventions in the two districts.

FINDINGS

The study established that NGOs were involved in different aspects of disaster risk reduction and most of them offered relief services to communities. Some also gave technical assistance and financial/material support for initiatives to help communities in rebuilding their livelihoods. Major activities included and still includes, harnessing of underground and surface water, rehabilitation of water sources, small livestock support, agricultural inputs support, supporting irrigation schemes, supporting conservation farming, promoting planting of drought tolerant crops, promoting small gardens, food relief and capacity building in

various aspects involving drought coping and mitigation initiatives. In short the various organisations focused on the following areas.

1. Livestock development with emphasis on small livestock production,
2. Natural resource development
3. Health and child welfare
4. Food relief- particularly schools feeding schemes
5. Assisting orphans with school fees, uniforms and exercise books
6. Awareness creation and training on: conservation farming, planting of drought tolerant crops, planting time, application of organic manure, pot holing,
7. Training in livestock management.
8. Law enforcement on environmental issues

It is important to note that NGOs provide assistance that lasts only for a few months and only satisfies immediate needs. The scale of intervention differed since some offered help on an individual basis whereas others focused on helping the whole area. These organisations indicated that they carry out a needs assessment before an intervention can be applied. However, communities were not happy since some of the organisations do a superficial assessment that is not representative of community needs.

Data from focus group discussions, timelines/trend analysis reveal that institutions and institutional responses to drought have evolved over time. Before 1980 the two districts experienced three major droughts 1947, 1968, and 1972. During these three drought periods, both the government and private sector were not visibly involved in drought mitigation. After independence, Bulilima - Mangwe districts experienced four more major droughts these being in 1982, 1983, 1987 and 1991/92; the last one being the most devastating. The government was actively involved during this period and provided grain through grain loan schemes administered through the Department of Social Welfare. The government also provided loans for cattle feed. Now that both government and private organisations are involved, it is therefore essential to find out which initiatives are considered as viable by communities, and build on them. More frequent and severe droughts were experienced in 2002, 2003, 2005, and 2007. However, the most important thing to note is how the concerned communities define droughts. Since a drought period is associated with food shortages, any period where there are food shortages is therefore designated a drought, hence although in 2000 food shortages were a result of excessive rains and floods, the communities labelled it a drought year. Thus reference to documents was also necessary to ensure that researchers were on the same page with participants

Non-Governmental Organisations have also changed their modus operandi since the year 2000. Initially they were mostly involved in drought relief but now have expanded their initiatives to include disaster preparedness and mitigation. Some of them have been working on improving communities livelihoods through activities such as small livestock replacement and management, promotion of new farming methods such as conservation farming, use of drought tolerant crops, establishment of irrigation schemes, rehabilitation of boreholes, and supply of agricultural inputs. Thus, indeed there has been a change from purely reacting to a natural phenomenon to being proactive and pre-empting the repercussions.

Government organisations have also adopted the same approach. They are now actively involved in disaster mitigation and preparedness as well. They include rural district councils, DAs' office, Agritex, Veterinary Services, and EMA. Their major focus is on extension

services, capacity building in cropping and livestock production, as well as general management of the environment. Besides implementation of some drought mitigation initiatives, these local authorities also coordinate the activities of all NGOs that work in their districts.

However, the major negative aspect in the role of these institutions is that they have different priorities in as far as disaster management is concerned. These differences are a result of funding frameworks adopted by donors who provide the funds. Some organisations are into both coping and risk reduction issues whilst others have been focusing on risk reduction only.

IDGEC Framework in the Context of Bulalima - Mangwe

As noted earlier, Institutional Dimensions of Global Environmental Change (IDGEC) framework that was employed looks particularly at concepts of institutional fit, institutional interplay and Scale. Institutional interplay was captured through relationship mapping with farmers during ward focus group discussions. The focus group discussions required them to rate the level of institutional interplay and coordination using qualitative descriptions such as good, average or poor. Group discussion ratings suggested that farmers trust horizontal structures as opposed to vertical structures in drought risk management because of implied interaction at that particular level. They also revealed the local farmers' perception of institutions operating in drought response at district level as being poor in coordinating such activities. This assessment is consistent with what emerged from household questionnaires that summarised institutional interplay into three categories namely: conflict between institutions, collaborative interplay between institutions and weak interplay between institutions and the local community.

The nature of the interplay between the communities and external institutions varied with communal areas and resettlement areas within districts. Notably institutions with poor presence in the communities were mostly government departments. Farmers raised concerns on the shortage of resources for most of the government departments to fulfil their development objectives. This has resulted in poor road maintenance and networks, which has implications for the transportation of food and agricultural inputs in the district. In resettlement areas, farmers were worried about the limited number of institutions that service them especially NGOs, but they failed to understand that NGOs only operate where there is a need. Weak interplay between the local communities and government departments is a result of poor capacity to deliver services. Farmers pointed out that government departments have poor outreach due to lack of resources although in some cases where extension workers were able to get to the communities, the training and knowledge dissemination was good. Lack of drugs to control livestock diseases was also another major worry.

As for conflict between institutions, it was revealed that although donors and NGOs consult councillors upon entry into an area, also as part of protocol, they rarely respected councillors' inputs in local development issues after establishing themselves in such areas. Some NGOs were accused of lacking respect of local people, their priority needs and activities hence continued tension between some NGOs and the village heads.

Respondents also attributed limited NGO-NGO interplay due to duplication of activities. Once one NGO introduces an intervention that is similar to another NGO already operating in the same area, conflict may arise in the timing and frequency of calling community meetings.

However, there some to be some positive collaborative interplay between institutions at times especially government departments and even between some government departments and NGOs. The Department of Veterinary services and Agritex collaborate well with NGOs like World Vision and Practical Action in capacity building of smallholder farmers through

workshops on livestock and crop issues. At a local level, traditional institutions (village heads, headmen and chiefs) have a good working relationship.

In terms of institutional fit, three mismatches were noted. Firstly there is a mismatch between external responses and local norms and values. Donor responses to drought remain weak because external organisations do not fully integrate local councillors, chiefs and village heads. Consequently identifying beneficiaries becomes a major source of conflict between locals themselves and between external agents and locals. Farmers argued that local leaders understand the vulnerability context in an area and thus NGOs top-down programming does not address this.

Secondly, NGO policies/processes and perceptions of vulnerability do not fit into those of the local community. NGOs use broad categories for targeting humanitarian response, especially assets such as livestock. Households prefer block inclusion of all people in to humanitarian interventions. Government institutions used this approach in the past and it has always been effective. Selective targeting of beneficiaries, such as is used by NGOs was criticised for being based on a criteria that emphasises asset ownership, yet ownership of particular assets does not mean one is not in need of help. In short, local indicators for vulnerability do not match the NGO indicators of vulnerability in some cases.

Thirdly, there is still emphasis on maize production and yet it is less tolerant of the semi-arid conditions of the two districts. Farmers are into subsistence farming although a little surplus is sold to generate income. The promotion of maize as the staple grain in this dry area thus leaves farmers more vulnerable in terms of food availability. However, there may be exceptions where short-season and open pollinated maize varieties are promoted. Climate change has resulted in declining crop yields, water availability, increased crop and livestock diseases and increased dry spells yet, there is no evidence of policies that have a focus on water harvesting, or a marketing bias towards drought tolerant crops. The focus of organisations involved in drought response has not been informed by the apparent evidence of climate variability (for example high frequency of droughts and shifting rain season) thus negatively feeding back into the effectiveness of interventions meant to reduce farmers' vulnerability to droughts. It appears as if the threat and nature of drought is evolving faster than changes in institutional mandates thus creating a misfit between problem and response.

LIMITATIONS AND CHALLENGES

From interviews, a number of challenges faced by some institutions during implementation of disaster management initiatives were identified. The common constraint faced by government funded organisations was that of inadequate financial and material resources to implement programmes. Staff turnover is high as a result of poor remuneration hence high extension worker to farmer ratio. Thus extension workers are unable to cover all or most farmers in their respective areas. Most NGOs also have inadequate monitoring mechanisms due to a small staff complement which in most cases is based at district level but have no staff at ward or village level.

Both NGOs and Government departments also complained of political interference in their day to day activities and this sometimes derails implementation of disaster mitigation activities. The micro and macro-economic environment also impacted negatively in disaster mitigation and risk reduction. The global financial crisis affected funding inflows for most NGOs. Recurrent droughts have remained the major threat and made it difficult for communities to recover such that there is continuous need for drought relief.

Labour migration is also another impediment. A large percentage of the productive workforce migrated to neighbouring Botswana and South Africa. In the introduction it is noted that

between four to five million (able bodied) Zimbabweans are living in Diaspora and this highlights the magnitude of the problem. Exacerbating the problem further is the issue of HIV and AIDS. A significant fraction of the population in the two districts have been infected and or affected by the virus and hence also affecting drought risk reduction activities. In some cases household assets have been sold to meet medical expenses.

Lastly, it was observed that there are no budgets for disaster risk reduction in most institutions and this is a drawback in addressing problems associated with disasters. Despite these challenges, some government departments like Agritex and Veterinary Services, complimented by NGOs activities, have built strong extension/farmer linkages. Some government departments have actually created technical partnerships with NGOs and to some extent with the private sector in promoting drought risk reduction initiatives. A good example is the collaboration between government departments like Veterinary Services, Agritex and Rural District Councils with NGOs like World Vision and Practical Action in capacity building of communities in drought risk reduction. NGOs are financially strong hence have adequate resources to implement disaster mitigation activities. For some NGOs their initiatives are community owned and hence have community based facilitators, meaning the organizations are living with the communities and hence their initiatives are sustainable

RECOMMENDATIONS

Respondents pointed out that the following should be considered when designing frameworks and processes for drought risk reduction and management:

1. The local leaders such as village heads, chiefs and councillors should be co-opted into district drought management structures. In short it means there is need to address virtual organisations or virtual communities, whose existence is not governed by geographical boundaries only but by interests, positions, experience and knowledge. (Grabowski & Roberts, 1999)
2. Involvement of different institutions in the marketing and distribution of grain thereby ending the Grain Marketing Board's (GMB) monopoly in grain allocation.
3. To have drought mitigation structures at local level and these to be capacitated to do the job.
4. In policy design, policy makers should consult the farmers before formulation and implementation.
5. NGOs to work closely with each other and government departments to avoid duplication of activities. This would increase the effectiveness of all the organisations concerned.

CONCLUSION

Institutional designs should emphasise local structures, processes and participation since it is critical for community buy - in for drought risk reduction efforts. Thus participatory decision making and feedback to communities are keys to drought risk reduction policy making and planning. Government participation (e.g. supervision, programming etc) is crucial for effective coverage of 'vulnerable' rural communities. Maybe the aspect of Indigenous Knowledge Systems such as the use of locally based early warning systems needs to be promoted to effectively guide the farmers who believe in indigenous knowledge systems. Farmers have always have their own 'early warning' that provided them with information on an emerging dangerous circumstances and enabled them to action in advance to reduce the risks involved. (Basher, 2006)

However, the role of local and external institutions in drought risk reduction and management has remained limited, whilst the private sector is not much visible. Where the private sector has been involved, its interest is purely commercial and does not coincide with local farmers' aspirations and needs. The history of drought management in Bulilima and Mangwe districts reveals a predilection towards relief and post drought recovery activities rooted in promoting crop production. This has suppressed farmer's potential to be innovative and diversify drought response strategies. It is interesting to note that these current efforts to reduce the vulnerability of communities to disasters like drought are not sustainable. Proper monitoring and evaluation processes on the implementation and impact of these initiatives remain essential. All in all Bulalima and Mangwe communities have taken steps towards disaster resistant and disaster resilient communities (McEntire, Fuller, Johnston, & Weber, 2002).

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