Institutional responses to climate change: Case of drought in Msinga, South Africa

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Abstract

Recognizing the impact of natural disasters, in 1987 the UN General Assembly designated 1990-2000 as the International Decade for Natural Disasters (IDNDR) and set a goal to reduce the loss of life and damage resulting from the growing number of disasters (United Nations, 1999). Conventions on combating the impact of natural disasters on communities have been drawn and signed by member states. South Africa as member of the UN has also been a signatory to the conventions and pledged to adhere to the conventions. This paper seeks to examine the South Africa’s government’s policy aimed at mitigating the effects of drought on rural communities through case study of Msinga villages in KwaZulu-Natal Province, paying special attention to droughts that have been recorded and prevailing in the area.

The literature demonstrated that on paper South Africa has the best of policy with regard to natural disaster, but hardly put into practice. In the case of drought in Msinga, the findings demonstrated that there is poor capacity in government to deal with disasters and this has serious repercussions for poor rural communities. Disaster management requires disaster reduction, planning, and capacity to reduce the losses borne by impoverished households. This process will be more effective if there is efficient mobilization of resources, rapid responses, and a long-term strategy to prevent drought and reduce the risks of vulnerable groups, rather than transferring risks and this is what is lacking in the implementation of the South Africa’s disaster management. Furthermore, the new legislation, the Disaster Management Act of 200 is surrounded by long and complicated bureaucratic processes. It is important that any forms of financial and bureaucratic bottlenecks are eliminated so that assistance reaches people more quickly and is based on developing a long-term programme targeting the reduction of risks from the drought prevailing in Msinga. It is also important that NGOs in the area are empowered and involved in disaster management and are able to play their full role.

1. Introduction

Apart from high debt burdens, political opportunism and mismanagement, natural disasters have been identified as some of the key factors contributing to poverty, migration, job losses in the agriculture sector, conflict over resource ownership and use, famine and underdevelopment in Africa (Rahmato, 2003, Mekonnen; 2006, Solomon, 1996, Bollig 2006, and Ullah, 2004, and Blaikie; et al., 1994). Africa has 33 of the 50 poorest countries in the world (UN, 2000) and is the only region where disasters such as drought, floods, and HIV/AIDS are not well managed and the ill-effects not decreasing. Climate change and variability has emerged as one of the most critical challenges to food security and poverty alleviation.

For over two decades, there has been public debate around the key issues of climate change and variability and how it has led to social dislocations, causing human and material losses.
This has been recognized at all levels of decision-making, including the United Nations, the African Union, as well as sub-regional organizations such as the Southern African Development Community (SADC) (Bolling, 2006). These continental and regional institutions committed themselves to combat the vagaries of climate change and variability by developing mechanisms and policies to deal with the problems. In response to disasters prevailing in Africa and around the world, declarations, conference and policy recommendations have been made recommending proactive intervention to disasters. This included developing long terms programmes directed at eradicating poverty (United Nations, 1999).

South Africa is signatory to the UN International Decade for Natural Disasters (IDND) Convention has pledged to adhere to the provisions of the Convention (1990 cited in United Nations, 1999). Consequently, it is very important to assess the extent to which South Africa’s disaster management policy is effective. Misinga is used here as a case study as there is evidence that the area has been adversely affected by climate change and variability.

The paper argues that South Africa’s disaster management policy remains weak and has very little physical presence on the ground. The paper shows that in terms of disaster preparedness, disaster mitigation, relayed disaster warning and disaster relief and assistance, South Africa has observable weaknesses and as such, the affected communities remain vulnerable to the vagaries of climate change and variability.

2. Methodology

To analyze and review government’s disaster management policy and how these are translated into practice, the researcher conducted intensive interviews with key government officials in the area. These comprised two Local Councilors, one official in charge of water and disaster management, two representatives of local organizations and four traditional leaders.

Interviews with these authorities centered on their perception of disaster management policy and legislation and how this policy has been translated into practice in the case of drought prevailing in Misinga and the role they play in such process. Official sources of information, on South Africa’s government disaster management policy documents were reviewed. Government disaster management policy was important as it provided rich information which was then analyzed and questioned in terms of its applicability to drought in Misinga.

The instrument used to gather the data was an interview schedule presented to key informants from community leaders who are also indigenous farmers. These key informants were selected because of their potential to provide necessary information that is relevant to this study (Bouma, 1996). Ten respondents were chosen as they are placed in key positions that allowed them to interpret community vulnerability to drought and who understood how drought is managed. These are again members of the broader communities and indigenous farmers.

Because of the sensitive nature of the subject, and the fact that most testimonies are critical of government’s role around climate change and variability, the identity of the informants will be protected. Consequently, the names used for respondents are pseudonyms.

3. Misinga and the occurrence of drought

The study is located in Misinga Local Municipality which is part of the UMsinyathi district municipality in KwaZulu-Natal. It is situated in the northern part of the province, and
is among four local municipalities of UMzinyathi and covers 2504 km² of land. Msinga is considered to be the poorest and most underdeveloped area in the district in terms of infrastructure and social facilities (Msinga Integrated Development Plan (IDP), 2005/2006). Msinga comprises six Traditional Authority areas, namely, Qamu, Mchunu, Bomvu, Ngome, Mahaso and Mthembi in an area of 2 504 km² (Msinga IDP Review, 2005/2006). It has a population of 170,000 (Census, 2001) resulting in a population density of 67 people/km. Two in five (42%) persons are unemployed and half of the population does not have access to basic water services (Msinga Integrated Development Plan, 2004/2005). The area has the second highest levels of HIV/AIDS infection in UMzinyathi (Msinga IDP Review, 2004/2005).

Oral traditions seem to indicate that Msinga has experienced climate variability over the years and the tendency has been towards lesser rainfall and increasing frequency of drought. A study conducted by the Institute of Natural Resources in 2007 reveals that Msinga is characterized by an annual rainfall of between 600-700mm. In terms of international standards, this indicates drought of high magnitude (Institute of Natural Resources, 2007). The South African Weather Services Indicator (2008) demonstrates that the northern part of KwaZulu-Natal, which includes Msinga, is subject to dry conditions. The erratic nature of rainfall in most of Msinga makes it risky to invest in the production of crops such as maize, vegetables and sorghum which are the main sources of food in the area. Msinga suffers intermittent and periodic droughts, with the last officially recorded drought occurring in 2004 (Drought Information Bulletin No 1/2004). However, despite the last drought officially recorded in the area, communities in Msinga continue to experience the effects of drought after this date and its affects are severe. Climate variability has had a serious impact on the livelihood conditions of the rural population of Msinga. People have been forced to adopt varying strategies for survival to cope with climate variability. Most importantly, such a situation has underscored the need for government intervention through robust coping and mitigation strategies.

4. The South African state and Disaster Preparedness

Disaster preparedness encompasses all aspects of disaster management. According to the IDNDR’s Scientific and Technical Committee, disaster preparedness involves policy commitment, hazard, vulnerability and risk assessment; creation of education and training initiatives; establishment of national committees; and the implementation of initiatives involving city officials and local level organizations as well as members of communities (United Nations, 1999).

The UN IDNDR’s Scientific and Technical Committee claims that one of the most essential elements of disaster preparedness is the development and implementation of appropriate policies and disaster response plans (United Nations, 1999). In South Africa, the objectives of the Disaster Management Act 2002 to provide for:

1. an integrated and coordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters and post-disaster recovery;
2. The establishment of national, provincial and municipal disaster management centers;
3. Disaster management volunteers;
The objective of implementing the 2002 Disaster Management Act was to improve South Africa’s disaster risk reduction policy deficit and focus on the shift from emergency response to risk-reduction in accordance with the UN IDNDR’s Scientific and Technical Committee. The new approach to disaster management, reflected in the Disaster Management Act (2002) focuses on pre-disaster risk reduction, which includes the adoption of measures to prevent certain hazards or potential disasters. It also includes prior mitigation of the effects and consequences of potential disasters together with measures to ensure adequate preparedness to respond to disasters once they occur (United Nations, 1999).

Preparedness is regarded as the most fundamental component of anti-disaster measures and a necessity to address the consequences of hazardous events (United Nations, 1999). Disaster preparedness encompasses measures taken before a disaster aimed at minimizing loss of life, disruption of critical services, and damage when disaster occurs. Preparedness also encompasses a number of factors. One of these factors is policy commitment. This entails the extent to which the South African government is committed to confronting issues of disaster with special reference to drought in Msinga? The IDNDR stresses that every government has the sovereign responsibility to protect its people, infrastructure and national, social or economic assets from natural hazards (United Nations International Strategy for Disaster Reduction, 2002). In South Africa, in terms of the Disaster Management Act, 57 of 2002, each sphere of government has been given specific responsibilities with strong emphasis on the elements of prevention, preparedness, mitigation and risk-reduction (Disaster Management Act, 57 of 2002). Each municipality was also required to compile a disaster management plan which, in terms of section 26(g) of the Municipal Systems Act, 32 of 2000, must form part of its overall Integrated Development Plan (Municipal Systems Act, 32 of 2000). The National Government was to issue, in due course, the necessary guidelines by means of a national framework as well as Regulations in terms of the Act, to provinces and municipalities (Municipal Systems Act, 32 of 2000).

However, evidence indicates that in spite of the expressed good intentions government structures in South Africa have not implemented this policy effectively in Msinga. This comes out very clearly from the evidence that came out from the study area. The Disaster Management Act seems to have achieved very little. Where attempts have been made to intervene, they have been performed in fragmented ways, vaguely understood by the communities and in some instances conflicting with the needs of the communities and its leadership. Government policies and strategies as applied to drought in Msinga lack political commitment, a desire for openness and for community participation. There have been no early attempts to devise policy plans (Anonymous government official, 2008, Manzi). The lack of policy commitment in Msinga is illustrated by the testimony of [Manzi] who said:

I acknowledge that we as government have never taken the issues of drought seriously in Msinga. People have been suffering from this disaster for generations. People and their livestock have been dying, but no action has ever been taken. Only you will hear that drought has been declared disaster in some areas and provinces, such as Eastern Cape, but in this area, nothing has happened (Msinga, May 2009, Anonymous local official, 2009).

According to this respondent, the policy commitment has not been translated into proper
and clear guidelines to deal effectively with the continued occurrence of drought in the area. It seems that local policy-makers receive almost no financial and administrative support from provincial and national government when it comes to the question of drought, despite this being a mandate of government and municipal structures.

The paradox of the situation is that the South African government committed a substantial amount of money to deal with drought in South Africa and in KwaZulu-Natal in particular. For instance, in October 2003, the South African government approved an allocation of R250 million for drought relief. In November, the government increased the allocation for drought relief assistance by R250 million. The total allocation up to the end of 2003 was R500 million. A further allocation of R500 million was considered in the next financial year for long-term intervention (Drought Information Bulletin no.1/2004). In 2003 the government allocated R1.2 billion for a food emergency scheme to be used in 2004-2006 (Drought Information Bulletin no.1/2004). On 5 December 2003 the government announced an emergency water provision programme and municipalities received emergency assistance to help maintain domestic water supplies for both commercial and subsistence farmers. In terms of this programme, affected municipalities in KwaZulu-Natal received R21.6 million and a further R8.2 million was available for immediate allocation (KwaZulu-Natal Drought Report February 2004). National Cabinet approved a further R250 million from which the affected areas in KwaZulu-Natal were allocated R49.05 million on 18 February 2004 for support programmes (KwaZulu-Natal Drought Report February 2004). However this intervention focused on relief rather than on long-term intervention. Despite this massive financial injection, the findings of this study reveal that the funds did not reach Msinga. This is confirmed by one of the local municipality ward councillors who claimed:

Issues of finances are a serious problem. In our municipal coffers, I do not think that there is any money available specifically for disasters. When drought hits, people will ask us for assistance, and we have to apply from provincial government, but it is very hard to get any funds. Only what we have is to provide people with water, using the cans with municipal water tanks. I think that even that water is insignificant, but it is also unsafe for people to drink (Anonymous local official, 2009).

This opinion is supported by that of a community leadership who claim to be unaware of any government disaster and drought programme. One member of a local organization, who also asked to remain anonymous, stated:

Here, people are working in the dark. What you are talking about regarding government drought programme does not exist here. We only hear that there is a department of disaster management, but I do not know what they do. What I only know is that drought is serious in this area. People have to defend themselves, but I don’t think that government has done anything and can do anything about it. We have heard sometimes ago, that the government has intervened in other areas during drought. But here, nothing has ever happened (Anonymous member of local organization, 2009).

During the period in which the funds were committed, many farm workers lost their jobs as a result of drought and many members of rural communities had to leave and seek work away from home (IRIN, 14, June, 2007). Such acts of
labour migrancy confirmed and reinforce the traditional pattern of the movement of people from the countryside to the urban centres that began during the colonial period. Most importantly, they are an indication of the continued vulnerability of rural residents to climate change and variability, and the ineffective nature of government implementation policies.

Local government officials, local organizations, church leaders and traditional leaders interviewed for this study argued that a declaration of drought in the area is often a publicity exercise, as nothing is usually done after the declaration (Interview, 2009). In addition to funding limitations, human capacity issues may further delay the completion of drought assessments. There seem to be contradictions and discrepancies on the funds claimed to have been allocated by the government and what municipalities receive on the ground. This suggests that it may take a considerable period of time before each municipality can conduct its own hazard and risk assessment. This is problematic because without this information the government cannot implement a targeted strategy to ameliorate the effects of disaster.

The UN IDNDR Scientific and Technical Committee suggested that local and national authorities need to integrate hazard assessment more fully into their overall development plans (United Nations, 1999: 6). These approaches, which should be rooted in financial subsidies from either the national or provincial government, involve delegating decisions and implementation tasks to the most appropriate level, beginning at the local level with individuals and households (United Nations, 1999: 6). This suggestion stems from the notion that poverty places people in precarious situations and unsustainable means of survival that can create a range of hazards that cause disasters, or at least aggravate what may have otherwise been minor calamities (Davies, 2000, cited in United Nations, 1999). As such, individual households need to become involved in the hazard assessment process. The government of South Africa has provided an enabling environment for an effective disaster risk reduction system through legislation that is consistent with UN ideals, but very ineffective on implementation.

In the context of Msinga, the findings from the study area demonstrate that there was no assessment of drought and its impact on the communities. Financial limitations have also been indicated as one of the major factors limiting the capacity of the local municipality to effectively carry out drought vulnerability and risk assessment. This brings us back again to question what is written on papers and translated into reality of the ground. Community members are not aware of any government programme on drought, despite this being recognized as a major disaster. According to a ward councillor:

In this municipality, we do not have any funds which are readily available for disasters such as drought. There is not any programme that assesses the damage caused by droughts. Drought is so serious. I think, if there is any assessment done about drought in this area, I think that Msinga will be ranked as number one most affected area, not only in South Africa, but in Africa, even far from Ethiopia and Kenya as far as I know” (Interview with local official, 2009).

An examination of government documents revealed that there is no record of the damage caused by the drought in Msinga. As Bond (2002) acknowledged, South Africa is well prepared in terms of disaster management theory, but ill-prepared in terms of putting this theory into practice. There is a reason to believe
that lack of political will, lack of skilled human resources and financial resources cripple the implementation of disaster management policies.

Since the shift from emergency management to disaster risk reduction, there is an increased need for the development of human capacity in the multidisciplinary field of disaster management, as national governments are now obliged to give the local authorities more responsibility than they had in the past. In order to meet this demand, a number of education and training initiatives were developed by IDNDR (United Nations, 1999c). The approaches ranged from practical community-based training initiatives to postgraduate education programs (United Nations, 1999c).

Exploring the presence of education and training initiatives in Msinga, the findings demonstrated that there are no education and training initiatives and no attempt has ever been made to implement such training. When the researchers asked whether there are education and training initiatives in Msinga, a municipal councilor replied:

*Here, we do not have any initiatives regarding drought. How can we have such initiatives while there are no funds for such programmes? These programmes need money to be implemented. In the municipality we do not have project and initiatives of such kind. We cannot carry out a project of this magnitude without sufficient funds (Manzini, Dube, 2009).*

In General Assembly resolution 44/236, in which the IDNDR was founded, member states, including South Africa, were asked to formulate national disaster mitigation programs, establish national committees or focal points, mobilize support, increase public awareness, pay due attention to health care and related forms of essential social and economic infrastructure and improve availability of emergency supplies. The formation of multi-sectoral national committees or focal points was considered to be the best means for realizing these goals at the local level (United Nations, 1999). According to the national committee, most countries adopted the progressive disaster risk reduction principles advocated during the IDNDR, and only a few countries continued to focus on the more limited concepts of emergency response (United Nations, 1999).

The South African government has adopted the UN resolution and the proactive approach. In theory, it has a well-established national committee. These developments suggest that the government is committed to disaster risk reduction and is attempting to build disaster risk reduction capacity in provinces, metropolitan areas, districts and local municipalities. While it is true that there are departments in charge of disasters in municipalities, they have no clear mandates. They are badly coordinated and not visible to the public. While they may be called departments of disaster management, when asked about their role, they indicated that they deal with the problem of water, not drought or any other disasters. This was of concern to many officials who participated in the study. They argued that there is no clear direction as to how such departments function. There were also concerns about the lack of funds to effectively carry out the activities related to water and its delivery to the communities in the area.

5. The South African State and Disaster Early Warning

An effective early disaster warning includes an accurate warning to the public from a variety of sources, such as radio, newspapers, TV and community meetings, including a clear and informed statement of instructions for effective action to minimize the consequences of the hazard, and a timely disaster declaration,
creating quick access to provincial and national resources (United Nations, 1999c). These coordinated activities are critical for early warning to become an essential element of any comprehensive disaster prevention strategy (United Nations, 1999c). When asked whether an early drought warning was relayed to the rural population when drought is about to occur, a local councilor said:

*Here we do not have such kind of system. We only know about drought, when communities are starting complaining about the shortage of water and when water is dried up. The government has no programme about early warning in this area. How the government can have such programme while there are not even intervention measures?* (Sizwe, Ngcobo 2009).

It seems that the South African government in 2002-2004 did not attempt to issue drought warnings to the rural population of Msinga. According to the same local Councilor:

*The government did not put some preventive measures in place before the actual disaster struck, people have nowhere to get information about drought and how they could avoid it. If there should be drought early warning I think that people should be well prepared and drought could not affect them as now they are affected (Anonymous local official, 2009).*

It is apparent that the lack of early warning systems has aggravated communities’ vulnerability to drought, as they are not well prepared to weather the shocks from drought. The councilor’s statement is similar to that of the local NGOs, who claim that the population lacks information about drought. The lack of government early warning and inadequate capacity of indigenous knowledge systems to predict drought has aggravated communities’ vulnerability to drought and ill prepared them to respond to drought. A member of an NGO called Msinga Top argued that:

*What people are lacking in this area is that they do not have information on when drought is about to happen. People in this area are just confused. And what makes it worse is that the majority of the people living in this area, do not have access to information such as radio, TV and news people and most of the people are even illiterate to know such information. What I think that the government should do? It should have some form of platform where local leaders are informed about drought early, so they can inform the communities (Anonymous, 2009).*

This study revealed that the lack of effective early warning resulted in households facing increased risks of death of livestock, illness and loss of livelihood. Taking into account their social-economic circumstances, their existing vulnerability is heightened. The situation calls for effective interventions that are able to minimize risk and increase resilience, an objective that Alexander (2000) regards as a major principle of natural disaster management.

While it is important for the government to provide early drought warning to the community, it is however important to remember that, early warning on its own, can play a very minimal role, if social and economic conditions of vulnerable communities are not adequate. The lack of adequate assets and any other form of sustainable livelihood, present communities with few options even if is know that drought or any other disasters are about to happen.

6. The Role of the South African State in Disaster Relief and assistance
Short-term intervention of many disaster management plans is the provision of food supplies and emergency supplies. In any disaster the fulfillment of basic needs is a priority. This approach remains problematic as it serves very little to those affected by natural disasters. When the relief supplies are exhausted the affected return to the same state of vulnerability. In the case of drought in South Africa the government report indicates that food and supplies have been provided to rural communities in northern KwaZulu-Natal, which includes Msinga (Drought Information Bulletin no.1/2004). The findings of this study, however, contradict this assertion. An old woman in the focus group argued that:

We have heard of such aid, and we are always told that people from the government will help us keep our livestock and crop alive but we never had seen any of those people here. Our councilor promised us food and money, up to now we are still waiting. Did you bring us any money or food? We are all hungry as you can see (Interview with traditional leader, 2009).

This seems to contradict the communities’ claims that they have not received any form of assistance from the government or any other sources. The limitations of the assistance provided are acknowledged by some officials, however, they argued that the assistance contributed very little in alleviating the effect of drought on the communities and fuelled conflict between members of the communities as those who received the assistance is because were supporters of dominant political party in the area.

7. Coping and Mitigation Initiatives of city officials and local level organizations

The scientific and technical committee reported that once local authorities became aware of the purpose of the IDNDR, they demonstrated an increasing willingness to participate in the UN Decade’s activities (United Nations, 1999). The committee also reported that local communities’ participation has been an important contributor to the Decade’s overall success (United Nations, 1999). As a final recommendation, the scientific and technical committee suggested that disaster risk reduction should become a central component of many local-level policies, including those that target social vulnerability, urban risk reduction, land use planning, and hazard assessment (United Nations, 1999). This final suggestion demonstrates the IDNDR’s commitment to vulnerability reduction through social empowerment, which is a disaster risk reduction strategy.

The findings of the study have demonstrated that there are no local organizations or clubs dealing specifically with issues of disaster and drought in particular. This contradicts the claim by local officials that there are departments that deal with disasters in Msinga. Formal disaster management organizations do not exist in the communities. Therefore, the need to form such organizations is an imperative, as it can assist
the communities to share knowledge on disaster, in particular drought and its management.

Examining South Africa’s government poor responses to drought in Msinga, there is reason to believe that there are a number of factors that might have hampered government efforts to effectively respond to drought. According to testimony of one of the participants, political infighting between the IFP and ANC in the municipality has led to a situation in which the area has been ignored. The following quote supports such assumptions:

People in this area, can’t get any assistance from the councilor. As you can see, many people in this area are now ANC members. Because the councilor is an IFP, he does not like anyone who belongs to ANC. Go and see where there are members of the ANC, you can’t get any services, while many villages where there are many IFP’s you will found people have access to many things, not us here (Anonymous concerned member of the communities, 2009).

During the course of this study and in discussions with members of the community, it emerged that for example during the severe droughts in 2000 and 2003-4, the central government made drought assistance to the communities of Msinga, but because of the infighting between ANC and IFP, the assistance was not made available to the affected communities. It emerged that some food supplies rotted in stores and were not distributed to the affected people (Msinga, 2009, concerned traditional leader). It reads:

When people were starving and children dying from famine, we heard that government has sent truck full of food to distribute to these poor people, but people were not supporting that political party the official decided not to distribute the food.

While the government responses to natural disasters especially to floods, for example in the Northern Province (Khandlhela, 2002) which also was market by difficulties, in Msinga little attempt had been made. There is reason to believe that political infighting between the ANC and IFP in the area may have hampered government effort to respond to drought in Msinga.

8. Conclusion

While it is recognized that the droughts noted in this study have occurred naturally, to some extent their impact depended on the management and the amount of preparation undertaken for such occurrences. This paper demonstrated that in theory, the South Africa’s government is well prepared in terms of disasters management but ill-prepared in terms of putting this theory into practice. There are limitations in government in responding and long terms strategies programmes to drought in Msinga. The challenge for the South African government in regard to disaster management is to establish an effective and community-based national framework for its response to drought, which ensures a coordinated, participatory, transparent and accountable approach across all branches of government and communities.

The findings demonstrated that the poor capacity of government in dealing with disasters has serious repercussions. Disaster management requires disaster reduction, planning, and capacity to reduce the losses borne by impoverished households. This process will be more effective if there is efficient mobilization of resources, rapid response, long-term strategies to prevent drought and reduction in the risks of vulnerable groups, rather than transferring risks.
Furthermore, the new legislation, the Disaster Management Act, have hampered service delivery in this case drought, therefore it is important that new legislation and Disaster Management Act, should ensure that any forms of financial and bureaucratic bottlenecks are eliminated so that assistance reaches people more quickly and is based on developing a long-term programme targeting the reduction of risks from the drought prevailing in Msinga. It is also important that NGOs in the area are empowered and involved in disaster management and are able to play their full role.

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