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Hindrances and Opportunities to Effective Linking of Local Community and National Disaster Risk Reduction Strategies in Zimbabwe: Lessons from Rural Communities in Mhondoro-Ngezi District

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Abstract: Theorists hold the view that any disaster situation presents challenges as well as opportunities for personal and community growth. This paper aimed at eliciting the views of rural communities in Zimbabwe regarding challenges and opportunities emerging from linking local community and national disaster risk reduction strategies in Mhondoro-Ngezi District. It was found that lack of political will, weak governance, bureaucratic rigidities, poor mobilisation and lack of fiscal resources were some of the factors that militated against effective disaster risk reduction (DRR) programming in Mhondoro-Ngezi. Despite the challenges, opportunities were also identified such as the use of internet and social media that programmers can capitalize on to build resilience and enhancement of preparedness for disasters and their management. It is concluded that the resilience of the people in the study area emanate from their knowledge that community participation in DRR activities provide opportunities both for personal and community growth.

Keywords: Challenges, Local community; Livelihoods; Opportunities

1. Introduction

The frequency, magnitude and impact of natural disasters are increasing worldwide. This has led to substantial disruption of social, economic and environmental community activities that promote livelihoods leading people to abject poverty (Holmberg, 2011). The types of hazards that trigger these disasters vary from the unexpected occurrence of tsunamis to more predictable seasonal floods and periodic storms (Elliott et al., 2014). Other less immediate and slowly evolving hazards such as droughts and environmental degradation affect even more people with potentially greater cost for the future livelihoods (Cuny, 2013). In many sub Saharan countries, development is repeatedly interrupted by natural disasters which can retard human and social development. It is mostly the rural dwellers that are worst affected thereby decreasing their chances of dragging themselves out of the clutches of poverty (Manyena, 2014).

2. Background

Zimbabwe is a sub Saharan country which has become increasingly prone to a number of natural hazards such as droughts, lightning, storms, floods, pests and diseases (Mogosti *et al.*, 2012). In the same regard, Unganai *et al.* (2012) maintains that climate change is increasing the severity and unpredictability of these hazards and the impacts are further worsened by unsustainable human practices which include overgrazing, deforestation, veldt fires and poor land management. These natural hazards affect people's livelihood activities, and lead to hunger, extreme hardship and loss of life (Matutu, 2014). In addition, due to drought and floods, agricultural fields, livestock, irrigation schemes and nutritional gardens are

negatively affected as infrastructure such as bridges and roads are usually washed away (Barrett, 2006). Dube (2016) attributes the damaging effects of natural disasters partly to inadequate community disaster risk reduction initiatives, lack of effective government initiatives and the poor integrated national DRR approaches. However, despite all these setbacks, Chapoy (2017) views disasters and crisis situations as offering opportunities upon which enhanced preparedness and resilience can be built.

For Zimbabwean rural communities, recovery from a disaster can provide a mechanism for addressing many of the factors that contribute to poor health status; drought induced poverty and increased vulnerability to natural disasters. Despite that, the disasters are inherently tragic; they can create new resources and opportunities to advance the design and realization of resilient communities. The disasters could also provide opportunities for individuals and groups to work together and realise that they might not be entirely helpless in the face of hazards and crises. As advanced by Nolen (2014:2), "one such opportunity is the synchronization of strategic planning across multiple disciplines and sectors that occur during disaster recovery, providing a mechanism for engaging the whole community in the re-design process".

The destruction of infrastructure and the subsequent disruption of social systems may in some cases lead to significant shake-up of facilities, services and organizational structures. In some cases, it leads to the adoption of optimal arrangements and the discarding of unhelpful ways of dealing with problems (Nolen, 2014). Furthermore, resources relevant to the particular disaster may be mobilised and used to mitigate the effects of disasters when they occur. Accordingly, this paper is based on the study that sought to understand how periods of incessant droughts and

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floods in rural Zimbabwe may have led to resilience of the communities based on the development of social capital and skills that communities use to fight the effects of poverty. In particular, the study sought to explore opportunities available for linking local community and national disaster risk reduction strategies in Mhondoro-Ngezi district in Zimbabwe.

3. Description of the Study Area and Justification

The study was carried out in Mhondoro-Ngezi District, situated in Mashonaland West Province of Zimbabwe. The district has annual rainfall of 500-750 mm (Food and Agricultural Organisation, 2017). Of late, the district has experienced some reccuring seasons of drought and extended mid-season dry spells (Madamombe, 2014). The recurrent unfavourable weather conditions have caused extensive loss of livestock, crop failure and starvation of people in the district. It was anticipated that because of extreme weather events in Mhondoro-Ngezi district such as incessant droughts and floods, the Government of Zimbabwe would heighten the need to strengthen its DRR interventions in the area.

4. Methodology

This study adopted a mixed methods approach that included both quantitative and qualitative methodologies. Two hundred and seventy two (272) respondents were randomly drawn to fill in the questionnaires. Furthermore, 6 respondents were purposively selected for in-depth interviews and three Focus Group Discussions (FGDs) composed of 6 members each were conducted. A self-administered questionnaire was utilized to collect quantitative data over eight weeks. Qualitative data were gathered through face to face in-depth interviews and FGDs. Quantitative data were analyzed using descriptive statistics and results were presented in graphs and charts. Conversely, qualitative data were thematically analysed. Statistical package for social sciences (SPSS) version 24 was used to analyze data.

5. Findings

The findings are presented in three sub sections. These are the socio-economic and demographic characteristics of the respondents, the impediments to disaster risk reduction programming and the opportunities in disaster risk reduction programming.

5.1 Socio-economic and Demographic Characteristics of Respondents

The majority of the respondents were females (52.4%) while male participants constituted 47.6% of all respondents. The majority of the participants in Mhondoro-Ngezi District (78.7%) were of the age of 46 and above. Study results also indicate that a substantial number of the participants were married (72.3%) while widowed were 19.5% and single 8.2% respectively (Table 1).

In terms of education attainment, 21.9 % of the respondents were primary school graduates, 50.7% of the respondents had secondary level education, Furthermore, 27.4% of the respondents had tertiary level of education. As shown in Table 1, many of the respondents of this study had secondary level of education. The education levels attained by the respondents implicitly demonstrate the low levels of education the rural communities have. These low levels of education may increase people's vulnerability to disaster risks. Zimmerman *et al.* (2015) argues that persons with high levels of education have a greater understanding of the risks involved in hazards than those who have lower levels of education.

In terms of occupation, the majority (53.7%) of the respondents were unemployed, followed by those who were self- employed (31.5%) while the formally employed constituted the least number of respondents (14.8%). Since many of the respondents were not formally employed, they were thus involved in the informal sector as their livelihood strategy.

Table 1: Socio-economic Demographic Information of Respondents

	Respondents		
Socio-economic Demographic Characteristics of Respondents		Frequency	Percentage
Sex	Male	187	47.6
	Female	197	52.4
Age	<26 Years	26	5.6
	26-35	21	4.5
	36-45	50	11.2
	46-55	80	20.7
	56-65	131	35.2
	>65	76	22.8
Marital Status	Single	37	8.2
	Married	281	72.3
	Widowed	66	19.5
Educational Qualifications	Primary Level Education	81	21.9
	Secondary Level Education	194	50.7
	Tertiary Level Education	109	27.4
Occupational Status	Formal Employed	57	14.8
	Self Employed	121	31.5
	Unemployed	206	53.7
	1-3	144	37.5
Size of	4-6	162	42.2
Family	7-9	71	18.5
	>9	7	1.8

Source: Survey Data

The study reveals that 42.1% of the families had 4-6 members, 37.5% of the families were of 1-3 members, while 18.5% were of 7-9 members and only 1.8% had family members above 10. A household of more than 4 members would imply more expenditure as there would be a high number of dependants that needs to be fed and looked after and thus the need for such families to diversify their income sources so as to survive (Apata, 2011).

5.2 Impediments to Disaster Risk Reduction (DRR) Programming

A number of factors were found to militate against effective DRR programming in Mhondoro-Ngezi District. Lack of

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resources (14.4%) and lack of political will (12.6%) were some of the leading factors that militated against effective DRR programming in Mhondoro-Ngezi (Figure 1). On a much smaller scale, bureaucratic rigidities, weak governance as well as limited knowledge about DRR also contributed to the poor state of DRR activities in Mhondoro-Ngezi District. Bureaucratic rigidities often led to delayed responses to disasters by the government and its agencies. Most of these rigidities could be linked to poor political system and the lack of political will on the part of government. Poor politicking has often led to disimbursement of resources to areas of need while poor governance contributes to a negative attitude towards humanitarian programming.

5.2.1 Lack of Resources

Lack of resources both human and fiscal was mentioned by the majority of the respondents (14.4%) as the main cause of poor state of DRR programming in Mhondoro-Ngezi District. The lack of resources has been found to elevate the incidence of disasters in many developing countries (Lukamba, 2010). Apart from the household respondents, the District Administrator concurred that Mhondoro-Ngezi Rural District Council faced perennial shortages of financial and human resources in their efforts to provide programming for disasters. Capacity building, full decentralisation packages and internal organisational structures of rural local authorities are some of the fundamentals that are central to building disaster resilient communities. These were lacking in Mhondoro-Ngezi District. Nevertheless, for Zimbabwe, even if there was a political will to bring development to communities in the country, this would not have happened given the fact that the government was facing liquidity problems and required external help to fund its key deliverables.

5.2.2 Lack of Political Will

Key informants revealed that lack of political will was an obstacle for proper implementation of DRR in Mhondoro-Ngezi. According to the key informants and group discussants, the Government officials were to blame because they did not value the welfare of communities. These corrupt officials would personally use funds that were allocated for DRR in rural communities. A local nurse at one of the local clinics asserted that;

"I feel the government must take the blame for the suffering that is endured by our local communities. Sometimes you wonder if they really know that the communities need them! The lack of political will means there will always be a shortage of safe water, drugs and other important resources that are meant to make communities safe. Most of them are corrupt".

In cases where there is lack of political will, communities often lack leadership and resources for use in preparing for disasters. This has been found elsewhere that lack of political will leads to poor quality of life (Roberts, 2010; Cabell *et al.*2012; and Van Niekerk, 2014). In Mhondoro-Ngezi District, one of the community members has this to say;

"The politicians only come and dish out fertiliser and seed when it is election time. Apart from such times, we never see them here. All they do is lying to us, with promises of jobs so that we can help them get votes. So, they can leave us alone".

The above quoted excerpt implicitly shows how angry the community is with the politicians' work. Poor political - will can be multifaceted. For example, apart from poor handling of disasters, the question of youth welfare is not handled as required such that there is a large segment of youth who are unemployed, a situation that make them and their families vulnerable to disasters. Findings from the interviews with district officials also support the notion that there is lack of political will, fewer resources such that the communities cannot fend for themselves thus becoming exposed to both manmade and natural disasters. Community leaders also indicated that lack of political will leads to lack of accountability such that the welfare of communities is left to private players with the government only making some occasional contributions.

5.2.3 Weak Governance and Bureaucratic Rigidities

The study findings showed that weak governance has been responsible for the poor coordination of DRR activities in Mhondoro-Ngezi District. The weak governance is compounded by the bureaucratic rigidities that often lead to delayed government's responses to disasters. These two issues could be linked to poor political system and the lack of political will on the part of government on dealing with calamities. What can be attested by this study is that the government works by following a structured system of protocols before any implementation can be given a green light. This state of doing things is not devoid of problems as Chikoto et al. (2016) acknowledges that in Zimbabwe, the government has in most cases been guilty of being reactive rather than proactive in disaster prevention. This happens even when crisis situations require immediate reaction from the government.

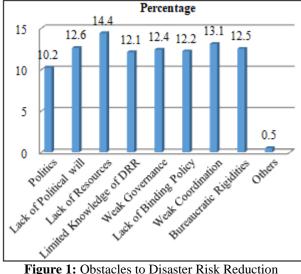


Figure 1: Obstacles to Disaster Risk Reduction Programming

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5.2.4 Limited Knowledge of Disaster Risk Reduction

The majority of the people in Mhondoro-Ngezi District did not have enough knowledge of disaster risk reduction (12.1%). This lack of knowledge on disaster risk reduction could be attributed to limited pro-activity by the government towards disaster mitigation. For DRR activities, it is important to pay particular attention towards enhancing professional skills and knowledge of key personnel in disaster management and also to strengthen capacities for risk assessment. Despite these requirements, this has not been the case in Mhondoro-Ngezi District. Issues of knowledge apply to members of the community and disaster response teams alike, this is not the case for Mhondoro-Ngezi District. The training of medical personnel for emergency medical response often includes extensive adherence to basic life support, something that precludes rural communities. But for the community members who are not professionals in the DRR set up, shared learning through horizontal linkages could be a solution to the lack of knowledge as it increases access to information (Reed et al. 2013) whilst a lack of sharing of experiences between actors and a lack of connectedness to different scales of government limits the opportunities to learn and develop higher levels of knowledge and skills that are vital for survival during disasters.

5.2.5 Party Politics and Government Administration

Many respondents of Mhondoro-Ngezi District believed that they have been let down by poor politicking and lack of commitment by political leaders when it comes to DRR activities in the area. The respondents asserts that politicians would only come to Mhondoro-Ngezi District when it is election time and that this the time that they would make many promises that are never fulfilled. The issue of politics negatively influencing disaster preparedness also received considerable commentaries from community leaders. This is alarming as Grove (2014) argues that the politics of disaster preparedness focuses on the policies that govern preparedness and response to disasters by the government and the community. More importantly, the political aspect of any DRR is expected to allocate resources for DRR activities such as preparedness, response and recovery. The Mhondoro-Ngezi District Administrator had this to say;

"DRR should be assigned to a particular government ministry because the government cannot allocate the responsibility of looking after its citizens to non-state players alone Even in situations where non-state actors play a major role, government remains the leader and coordinator of such response and recovery activities".

Disaster risk reduction and response in Zimbabwe falls under the Ministry of Local Government, Public Works and National Housing. The Department of Civil Protection within the said Ministry is tasked with initiating and coordinating responses to disasters. The current operating system in mitigating disasters involves the inputs from the Government, private stakeholders and NGO's whose regular activities involves elements of disaster risk prevention and community development. At lower levels of administration, the work of the Department of Civil

Protection (DCP) is complemented by the Provincial and District Administrators. The DCP is thus a coordinating body that synchronizes the activities of several stakeholders in the event of disasters. However, the official Civil Protection Act (Chapter 10.06) which gives legitimacy to the work of Department of Civil Protection (DCP) falls short of building national and community resilience to disasters.

According to the Mhondoro-Ngezi District officials, some of the key weaknesses of the Act include inactive community participation in DRR, unavailability of dedicated and adequate resources to implement DRR programmes, centralization of power and resources and the focus on 'natural' hazards rather than on vulnerability and resilience of communities. It is imperative that the Act be revised so that it aligns with the prevailing international best practices in disaster legislations. This view is supported by other writers such as Bonanno (2004) who argue that disaster legislation alone is not sufficient unless it is backed by sufficient mechanisms that monitor the implementation of strategies to meet a particular vision. Hence, policies and statutes must support the efforts of the community to become self sufficient in terms of development and enhancement of livelihoods.

5.3 Opportunities in Disaster Risk Reduction Programming

Despite the challenges that exist in any community set-up regarding disaster preparedness, there are always opportunities that can be exploited to build resilience and to enhance the preparedness for disasters. Such opportunities are often derived from the technological, political, economic and social spheres.

5.3.1 The Emergence of Technology Oriented Communication Systems

The study revealed that the communities in Mhondoro-Ngezi have access to information especially through smart phones and radios. These technologies provide alternative, cost effective and timely ways of communicating in times of crisis and disasters. Most of the interviewees both lay persons and professionals, assented to the fact that the use of social media is an effective tool for information dissemination in times of disaster and even during preparations for disaster mitigation. One teacher has this to say;

"I think the government should take the opportunities presented by social media such as "WhatsApp" to disseminate information about potential disasters in the area. Just as we have groups for families, church members and social soccer, each village head could have such groups and use them to inform members of the community about DRR activities. Sometimes it will not be even necessary to call for a meeting as some important messages can be disseminated to such groups".

Social media engages users to participate in, comment on and create content as means of communicating with other users and the public. It is this characteristic that has made

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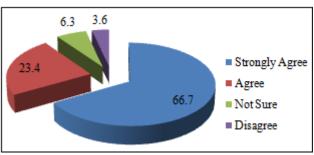
social media a valuable means of communicating during emergencies and crisis situations. The Environmental Management Agency (EMA) official pointed out that;

"Social media has been mostly used in the response phase of disaster management but rarely so in the other important phases of mitigation, preparedness, and recovery".

Social media thus presented opportunities that only needed to be exploited in enhancing community and national disaster risk reduction strategies as well as improving rural livelihoods. Social connectedness among members of families and communities in Mhondoro-Ngezi District can still be used effectively to pass messages about DRR around. Other researchers (Ngamassi *et al.* 2016) have observed that in Zimbabwe, despite the advantages of timeliness and cost effectiveness of social media use in disaster mitigation among others, it is still underutilised in the disaster and humanitarian projects.

5.3.2 Participation in DRR Programmes Enhances Readiness and Resilience

Respondents in Mhondoro-Ngezi District believe that participating in community disaster programming could help them and their families prepare for natural disasters. The majority (66.7%) of respondents strongly agreed that, participation in DRR programmes enhanced readiness. This is supported by other authors for example, Akinbami *et al.* (2016) who argues that community participation that includes rehearsals and drills enhance readiness and knowledge of hazards and disasters and further enhance the skills of rural communities to be ready to respond appropriately in case of a call-out.



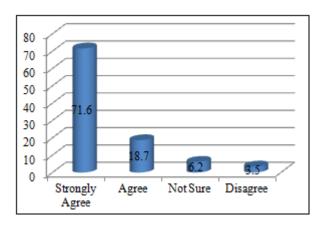
Source: Survey Data

In addition, community participation also helps to identify possible obstacles especially those emanating from the community practices. Some of the participants in the FGDs noted that programmers were able to understand the cultures and resultant belief systems that could present either obstacles or opportunities for DRR programming in Mhondoro-Ngezi District. It was acknowledged that the active participation in DRR activities by the communities would be beneficial to them.

5.3.3 Community Participation as a Ground for Skills Development

Most of the participants in this study (71.6%) had the view that taking part in community efforts to build on resilience against disasters was beneficial in that it equipped them and their peers with lifelong skills that improved their livelihoods. This is supported by other authors (Luthans *et*

al. 2004) who believe that taking part in community projects not only build on skills but also builds the psychological and social capital of families and communities. Thus, DRR approaches based on community participation are also instrumental for the acquisition of skills important for everyday life and even for future personal development such as teamwork and leadership that enhances DRR and livelihoods.



It were observed through FGDs that community participation would create employment and preoccupy the youths and thus avoiding them from engaging in social ills and vices. They believed that employment would improve the livelihoods of communities, while according to one of the school head, "preoccupation with productive tasks also helps the young populations avoid the use of drugs". In this way, the participation in community projects indeed helps to improve the livelihoods of communities.

5.3.4 Formation of Strong Social Connections

Strong social ties often develop as people with a common fate work together. The same is true in time of and after disasters. This study established that indeed, members of the community believed that opportunities for building strong social ties always existed in times of disasters. One of the Agricultural Technical and Extension Services (AGRITEX) Officer has this to say;

"I think people meet and form strong social connections when a disaster occurs. This enables communities to work together in the future. In the case of people in this area they have been able to form co-operatives that focus on nutritional gardens; these gardens provide sources of food as well as income".

Indeed, social connections are the bedrock upon which social capital is built (Reininger *et al.*, 2013). As a result, communities in Mhondoro-Ngezi could utilise this approach if fully supported to enhance their disaster preparedness through improved livelihoods (Helmore *et al.*, 2001). Such approaches have been used with success especially in low income rural populations for example in Mexico (Reininger *et al.*, 2013). If effected, this could give hope that similar communities in Zimbabwe could benefit from such endeavours.

6. Conclusions

Since most of the challenges to DRR programming in Mhondoro-Ngezi are attributed to insufficient government

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support, the study concludes that it remains difficult for communities or private organisations to coordinate such activities. This is based on the assumption that programming for DRR remains the responsibility of government, which should then coordinate the activities of private partners in the processes. In addition, respondents were of the opinion that community participation was instrumental to effective DRR in Mhondoro-Ngezi. What comes out of this study is that the community of Mhondoro-Ngezi is ready and could only be waiting to be engaged by the government for DRR activities in the area to bear fruit.

It has been established that besides the presence of challenges towards disaster preparedness and mitigation, ample opportunities abound that could help in disaster management. Technological, political, economic and social spheres are but the venues to improve disaster mitigation. Technologically, the emergence of social media was realised to be an important discovery as this enhanced cost effective but timely ways of communicating among local community groups and between the government officials. For farmers in the area, the internet was said to be useful in accessing information about the weather conditions. Thus social media presented opportunities that only needed to be scaled up so as to enhance community and national disaster risk reduction strategies as well as improving rural livelihoods. The use of the social media seem to fit within the Ubuntu/Hunhu African ideology that advances that people should live together, work together and celebrate together (Sibanda, 2014). The adoption of *Ubuntu* based African indigenous practices and of building communities could greatly augment the use of social media in Mhondoro-Ngezi District.

Furthermore, social media offers opportunities to reach many people in a short space of time appear to be feasible. It could be used for surveillance, monitoring, and situational awareness and as one of the early warning systems (Flynn *et al.*, 2011; Keim *et al.*, 2011 and Wendling *et al.*, 2013). Thus it could be used as a tool for providing information and instructions, with real time alerts and warnings. It can also be used to mobilise individuals, households and communities during and after a disaster.

Opportunities for the development of leadership and work skills also exist during disaster and crisis situations. Many of the interviewees in Mhondoro-Ngezi District were of the opinion that community participation during disasters would in a way enhance social ties. Indeed, effective DRR depends of political, social and economic capitals (Bhandari, 2013; Reininger et al., 2013). Examples from elsewhere show that most of the DRR interventions by governments are mostly top-down (Sim et al., 2017). This appears to be true for the study area of Mhondoro-Ngezi District as the community does not own the DRR activities. This is a great disadvantage as Fung (2006) strongly advises that if communities are not involved in programmes and projects meant to benefit them, they will always feel as if they do not own them. And thus see no reason to be worried about the success or failure of such undertakings.

Community participation also offers opportunities for building political capital through interaction with government and political leaders (Schugurensky, 2000). Since the communities in Mhondoro-Ngezi District are aware of this possibility, this implicitly means that they are also ready to participate in projects that are initiated by the government as long as they involve the participation of communities. Such an approach would have long term benefits for the people, local and central government. For communities, long term projects would ensure food security through relevant agricultural technologies coupled with indigenous knowledge. On the other hand, central governments will save funds as projects initiated become self-sustaining, thus ensuring food security and resilience by communities.

7. Recommendations

The paper recommends that the government of Zimbabwe imbibe the advantage of the technological awareness and the tele-density among populations in rural Zimbabwe to create awareness of DRR initiatives especially in drought and flood-stricken areas. Government could also take advantage of the awareness by communities that participation in DRR enhances personal skills and increases social capital and initiate community based DRR activities. recommends that government makes it a policy that DRR activities adopt a participatory approach, with consultations at all levels of the DRR endeavours. This is to ensure that all members of the community are involved in the development of sustainable strategies to disaster risk reduction. Given the lack of political will for DRR in Mhondoro-Ngezi district, it is recommended that government should institute a mechanism where members of parliament (MPs) provides a monthly report to the parliament on the status of DRR activities in their constituencies. Such an approach could help address the key areas emerging out of DRR especially in vulnerable communities. Furthermore, the government of Zimbabwe is encouraged to address issues of poor politicking, lack of resources and bureaucratic hurdles to DRR activities. This paper further recommends that initiating studies could focus on the preparedness of communities in Mhondoro-Ngezi to participate government initiated DRR programmes and projects.

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