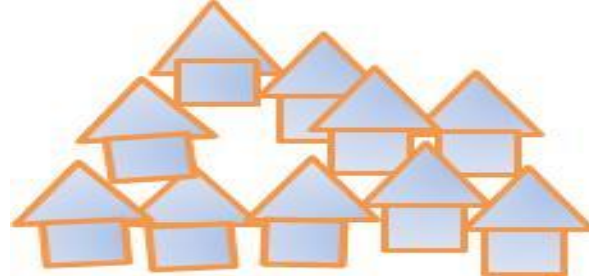
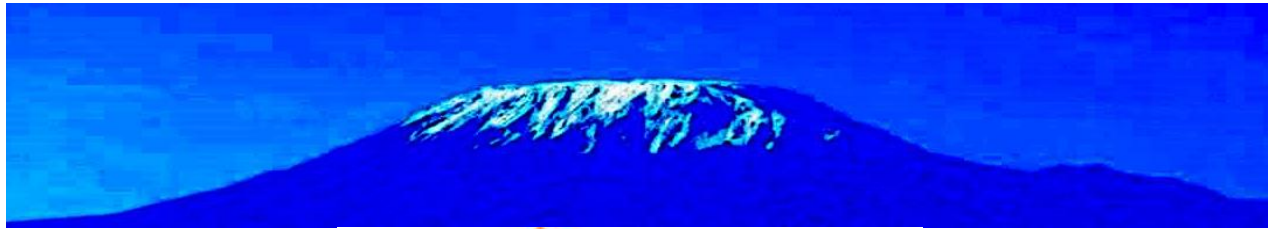


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## Drought Risk Reduction Strategies in Rural Zimbabwe: Opinions of Mhondoro-Ngezi District Communities

Farai Ngwaru<sup>1</sup>

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### Abstract

This paper highlights the perceptions of Mhondoro-Ngezi rural communities regarding drought risk reduction strategies. The study was motivated by personal experience as a minister of religion deployed in Mhondoro-Ngezi District. The researcher witnessed the area becoming increasingly prone to drought leading local people to reduced livelihoods both at household and community levels. Set in a rural community of Zimbabwe, Mhondoro-Ngezi District has a population of about 102 342 (Zimbabwe National Statistical Agency, 2016). A purposive sample of 8 key informants was selected for interviews. In addition, four Focus Group Discussions (FGDs) from 32 respondents were purposively selected. Data was analysed qualitatively according to emerging themes. Results showed that drought was really a cause for concern for rural communities in Mhondoro-Ngezi District. Hence, local knowledge regarding mitigating the effects of drought was considered important and sustainable. The study recommends that the central government of Zimbabwe should help rural communities develop mechanisms for water harvesting so that people have safe and sufficient water for domestic and agricultural use. It should also support their effort to grow drought tolerant crops by providing short season seed, agricultural equipment as well as food processing technologies. The study would generate new insights into drought risk reduction strategies, thereby contributing to the growing body of literature in drought management issues. As a result, scholars and scientific researchers in related areas of study can access such theoretical and empirical information and enrich their understanding of drought risk reduction practices in rural African communities

### 1.0. INTRODUCTION

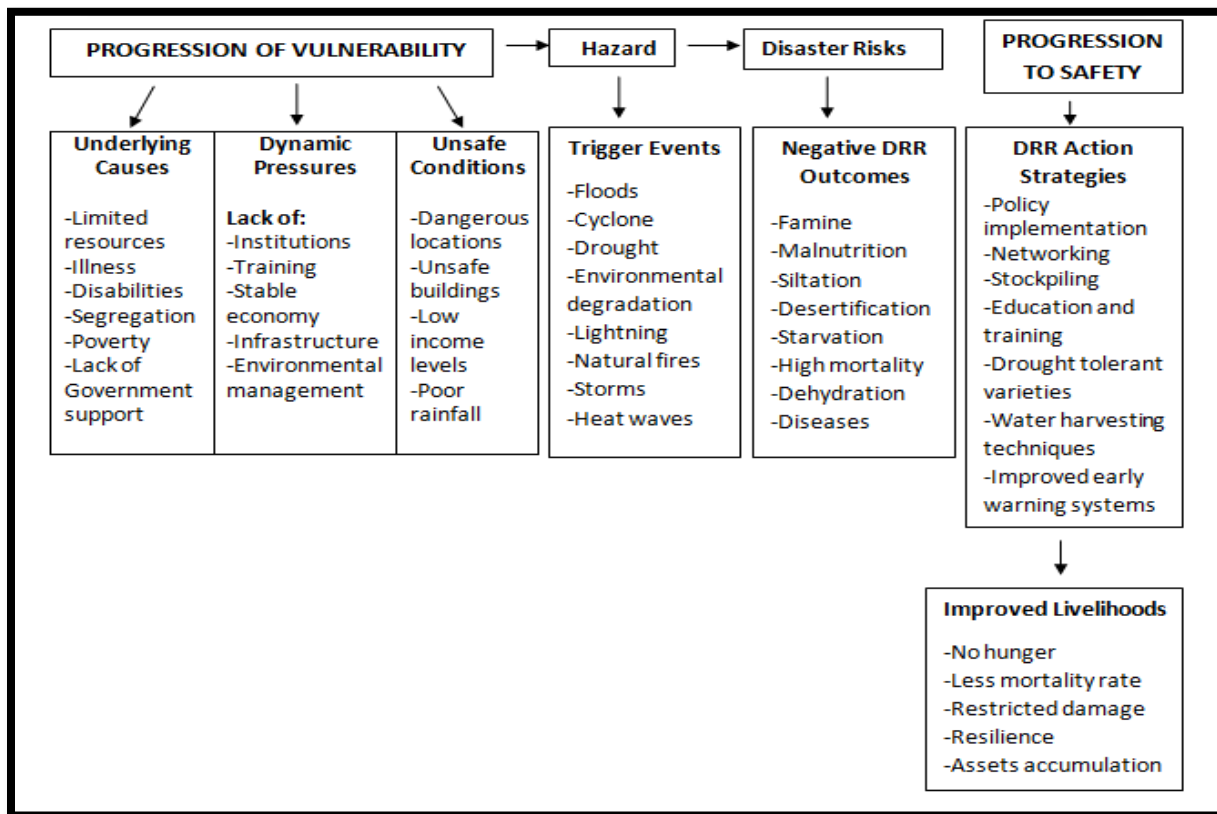
Recent trends show that drought has become a natural threat disturbing the livelihoods of rural populations worldwide. Over the past decade, drought has affected 4.4 billion people, claimed 1.3 million lives globally (Rufata *et al.*, 2015; English *et al.*, 2016). According to Aldrich *et al.* (2014), during the same period, it has caused economic losses of more than 2 trillion United States dollars worldwide. In Africa, it has affected more than 45 million people in the last 5 years of which over 5.3 million are in Zimbabwe (Boscarino, 2015). Bongo (2015) maintains that between 2008 and 2018, six drought events were reported in Zimbabwe, with 6,448 deaths. This has immensely reduced Zimbabwe's Gross Domestic Product (GDP) by about 9 percent over the past 5 years (Dube, 2016). Gautier *et al.* (2016) acknowledge that droughts have a significant negative impact on the livelihoods and wellbeing of rural communities. As has been the case worldwide, efforts to assess how rural communities in Zimbabwe mitigate the effects of droughts are considered important. Accordingly, the study aims to examine communities' drought coping strategies in reducing the negative effects of drought.

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## 2.0. THEORETICAL UNDERPINNINGS OF DISASTER RISK REDUCTION

This paper is informed by the Pressure and Release (PAR) Model developed by Blaikie *et al.* (1994). The PAR Model is used in this study as a tool to show how disasters occur when natural hazards affect communities that have their own vulnerabilities. It brings to light trigger events that affect individuals, households and communities as well as their livelihoods base so that they can avoid them as much as possible. Conversely, it serves as a pro-active measure to a disaster and in turn ensures the protection of the community. Hewitt (2007) maintains that the PAR Model sees people as actors who respond differently to the impacts of disasters. Hence, it advocates for empowering the affected communities by vouching for their participation in drought risk reduction activities. For these reasons, it was adopted in this study. Figure 1, presents a diagrammatic illustration of the modified PAR Model.



**Figure: Pressure and Release Model** (adopted from Modified from Wisner *et al.* (2004)

The conceptual framework (Figure 1) depicts the interaction of the independent variables and the dependent variable. In this study, the independent variables are the determinants namely; lack of government support, education and training as well as environmental management while the dependent variable is drought. The framework illustrates that the lack of collective interaction of the independent variables on the dependent variable would lead to the output of vulnerability, that is, famine, malnutrition, siltation, starvation and high mortality rate of both humans and animals.

On the other hand, the framework shows that to an extent the progression to safety independent variables have collectively influenced the dependent variable on increasing DRR action strategies. then the probability of higher level outcomes like policy implementation, networking,

education and training, drought tolerant varieties, water harvesting techniques and improved early warning systems were expected leading to improved livelihoods where there will be no hunger, less mortality rate and high level of resistance and resilience. The interconnectedness of the independent variables' effects on the dependent variable depicts a system relationship.

### **3.0. METHODOLOGY**

The research methodology provides a work plan for the research process. It is presented in five sub-sections. These are description of the study area and justification, research design, sampling procedures, data presentation and analysis as well as validity and reliability.

#### **3.1. Description of the Study Area and Justification**

The study was conducted in Mhondoro-Ngezi District in Mashonaland West Province of Zimbabwe in 2018 and 2019. Mhondoro-Ngezi is a 16-ward district covering approximately 932741 square kilometres. The district had about 23 630 households (Zimbabwe National Statistics Agency, 2016). The study focused on Mhondoro-Ngezi District because the extreme weather events such as persistent droughts heighten the need for Zimbabwe to strengthen its DRR interventions in that area. Secondly, the district is one of the poorest in terms of food insecurity in the country and has an average food poverty level of 66.3% (Madamombe, 2014). This is based on the continual vulnerability of the communities to drought when it is possible that the government of Zimbabwe can improve the livelihoods of the communities in the region.

#### **3.2. Research design**

A descriptive survey design was adopted for this study because it provided room for the researcher to observe phenomena in the participants' natural and unchanged environment (Kombo *et al.*, 2006). Descriptive design is interactive and people become active participants and the researcher goes 'native'. It rejects the notion that reality is out there for the researcher to pick, but that reality is within the people themselves because it is them that make their own reality. It is them who can define who they are. It was adopted because it is critical for people being researched to give their own meaning to their experiences, that is, the emic perspective (insider's point of view). This is consistent with the PAR model which encourages communities to define their own vulnerabilities and capabilities, not outsiders. It was also preferred for this study since detailed descriptive information was needed as a basis for better understanding of communities' drought risk reduction strategies. The process of data collection was done over a period of eight weeks.

#### **3.3. Sampling procedures**

A purposive sample of 8 key informant interviewees was selected to provide qualitative data. These were purposively selected based on their positions in the community or district. Such attributes could come from direct experience or the nature of their duties in the area. The representativeness (political and social position) of an individual exposed them to disaster risk reduction in the district, making them rich sources of information. Special consideration to balance gender was upheld. Each of them was interviewed individually using a pre-developed interview schedule and guide. Furthermore, a total of 4 Focus Group Discussions (FGDs) from 32 respondents (that is 8 respondents for each FGD) were purposively selected from the list that was obtained from the local District Administration offices with the help of local leaders who located them. The representativeness (social or religious) of the individual relative to society was considered in making judgments about the suitability of FGD participants. It was ensured that all interest groups were represented in the FGDs and the gender dimension was taken into consideration, thus four females and four males participated in each of the four FGDs informed by the scheduled discussion guide.

### **3.4. Data analysis and presentation**

Data analysis is a crucial step in conducting research because it is a transformative process which changes raw data into interpretable findings (Lofland *et al.*, 2006). It therefore, brings order, structure and meaning to the mass of collected data. In this study, thematic analysis was adopted. Related topics were categorized; hence, major concepts or themes were picked. Information that was relevant to the research questions and objectives were identified. A coding system based on samples of collected data was developed and major issues or topics covered were classified. The coded material was placed under the major themes or topics identified and all materials relevant to a certain topic were placed together. Data from interviews and FGDs was grouped, processed, analysed and presented according to emerging themes. A narrative report was written enriched with direct quotations from key informants and focus group discussions.

### **3.5. Validity and reliability**

Validity refers to the accuracy and trustworthiness of instruments, data, and findings in research. Reliability reflects consistency and replicability over time. Combining interviews and focus group discussions increased validity of collected data as the strength of one method compensated for the weaknesses of another (Kombo *et al.*, 2006). The interviews and focus group discussions were tape-recorded in order to capture the exact words of the participants. Relevant literature was reviewed to verify uncommon data. However, that was not meant to disprove the data, but to verify trends. Where there were differences with the prevailing literature trends, data was verified by revisiting some of the participants for confirmation.

## **4.0. RESULTS**

The findings are presented in two sub-sections. These are; the vulnerability level of Mhondoro-Ngezi community to drought and the coping strategies used by communities to reduce the negative impacts of drought in the area.

### **4.1. The vulnerability level of Mhondoro-Ngezi community to drought**

Mhondoro-Ngezi District falls under natural region 3 which is characterized by annual rainfalls of 500-750 millimeters (Food and Agricultural Organization, 2017). Lately, the area has witnessed sporadic droughts, prolonged mid-season dry spells and fluctuating rainy seasons (Madamombe, 2014). The communities' main livelihoods are derived from subsistence farming which is usually affected by drought. Recurrent droughts are the main drivers of food insecurities (Mashizha *et al.*, 2017). The frequent adverse dry weather conditions cause widespread crop failure, loss of livestock and starvation of people. In addition, the number of people suffering from malnutrition due to prolonged drought periods or uncertainty in rainfall due to climatic changes has been increasing. Droughts caused individuals, households and communities to lose their livelihoods and sources of water and subject them to acute food shortages and health issues.

It was noted in this study that droughts have repeatedly affected Mhondoro-Ngezi communities' water resources. As a result, individuals walked long distances in search of water for domestic use and watering of gardens. It discovered in this study that during drought seasons most households relied on water obtained from open wells that are dug in the dry river beds, locally known as "*mifuku*"<sup>2</sup> (sand abstraction), for domestic use and watering their nutritional gardens.

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<sup>2</sup>*Mifuku* are sources of water from holes that are dug on silted dry river beds

This practice was mostly notable along Muzvezve and Ngezi rivers. One of the village health workers asserted that:

*“Mifuku-sourced water is very safe because the river sand would have filtered it, making it clean, safe and fit for domestic use and watering our nutritional gardens without any harm. The distance that we walk to and from these river banks has taught us to use water sparingly and conservatively”.*

#### **4.2. Strategies used by Mhondoro-Ngezi rural communities to reduce their vulnerability to drought**

Communities in Mhondoro-Ngezi District adopted innovative coping strategies to cope and reduce the devastating effects of droughts. The study findings showed that *kusunza* and *kupemha*, water harvesting, education and training, awareness campaigns, growing of drought resistant crops, the *Zunde raMambo* concept and the food for work programs could reduce the negative impacts of drought in the area.

##### **4.2.1. Kusunza and kupemha**

Interviews with community leaders showed that when confronted by drought both men and women engaged in *kusunza*<sup>3</sup> and *kupemha*<sup>4</sup> to ease the negative effects of drought. One of the community leaders asserts that:

*“Kupemha might sound an awkward and unacceptable practice; it helps vulnerable people in times of food insecurity to acquire food. It also strengthens the social networks bond of people in rural communities where an individual’s predicament becomes everyone’s concern and burden. We were taught from our very tender age to share the very little that we had. These are the values that we abide by today even in times of food adversity”.*

However, interviews with one of the ward councillors revealed that the number of individuals and households willing to assist those who beg for food had significantly decreased, making Mhondoro-Ngezi communities more vulnerable to food insecurity.

##### **4.2.2. Water harvesting**

The study showed that Mhondoro-Ngezi communities believed that water harvesting was one of the strategies that could reduce the effects of drought in the area. According to the District Agricultural Technical and Extension Services (AGRITEX) officer, such knowledge has been influenced by the work of private voluntary organizations in the district like the Methodist Development and Relief Agency (MeDRA) which encouraged communities to engage in soil and water conservation strategies that promote sustainable agricultural livelihood activities. Such initiatives do not only ensure food security; but build on the farmers’ knowledge, skills and experiences in the face of the harsh climatic conditions that prevail in the region.

The focus group discussions showed that a significant number of respondents practiced water harvesting techniques. They harvested water from roof tops diverting it into water tanks. Some dug pits during the rainy period to store water for future use. This guaranteed that they had a significant amount of water stored up for domestic use as well as watering nutritional gardens. Interviews with community leaders showed that during drought periods the stored water would

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<sup>3</sup>*Kusunza* is the purchasing of grain or batter trading for grain.

<sup>4</sup>*Kupemha* is the adversity-induced begging.

sustain them for about five months depending on the volume of the tank and the amount of water in the reserve pit.

#### **4.2.3. Education and training**

It was also noted in this study that communities in Mhondoro-Ngezi District believed that programmers of DRR could use education and training to ensure that natural hazards would have little impact. This is in support of the PAR Model which highlights the need for local government institutions to ensure that vulnerable communities have appropriate training, knowledge and experience in disaster preparedness and management (Izumi *et al.*, 2011). The Mhondoro-Ngezi legislator asserted that:

*“Due to the intensive work done by local Agricultural Technical and Extension Services (AGRITEX) Department, residents of Mhondoro-Ngezi District have learnt and adopted some modern methods of farming such as conservation farming. Such sustainable farming methods were taught through “master farmer” training programs done at ward level. However, not all people benefited as only the literate could undertake it because it was conducted in English”.*

The assertions by the legislator showed that there was need for the government and its partners to raise knowledge among Mhondoro-Ngezi communities and assess their educational needs pertaining to natural hazards. Involving such communities in educational planning and implementation creates not only awareness but commitment to agreed drought risk reduction strategies.

#### **4.2.4. Awareness campaigns**

Interviews with community leaders revealed that awareness campaigns could be an effective way of reducing disaster risks. The awareness campaigns in Mhondoro-Ngezi District would heighten the community's desire to engage in activities to mitigate the negative effects of droughts. It is a source of strength for any future endeavors to increase preparedness as the community might reduce the negative impact of natural hazards. As such, community members' awareness of risks helps them to plan for activities that reduce their vulnerability and improve their livelihoods and wellbeing.

Awareness campaigns are fundamental parts of disaster preparedness that can contribute to the creation of Community-Based Disaster Risk Reduction (CBDRR) programs at the rural grass-roots level. Since it is a tool which enables local priorities to be identified and leads to the design of actions that contribute to disaster risk reduction, it would be logical for any future programming to use awareness by the community as a starting point.

#### **4.2.5. Growing of drought tolerant crops**

It was indicated in the study that participants grew drought tolerant crops so as to save them from hunger and malnutrition. The growing of drought tolerant crops was upheld by the District AGRITEX officer who supported the growing of small grain crops such as pearl millet, sorghum and finger millet as they can be stored for a long time. He asserted that:

*“There is need for communities to continue growing small grains like pearl millet, sorghum and finger millet which are drought tolerant and can be stored for a long time. For instance, finger millet when properly dried can be stored up to a period of five years”.*

However, interviews with community leaders revealed that harvesting and processing of small grains especially finger millet and sorghum was labour intensive from land preparation, planting,



weeding, up to harvesting and processing stages. Another challenge raised was that of quelea birds which attack small grains. Furthermore, low yields of small grains were a major obstacle to the adoption of small grains in Mhondoro-Ngezi District. As such, communities viewed small grain production as having lower returns than maize even though it was easily affected by drought. One major disadvantage of small grains cited by the District Grain Marketing Board manager was the limited marketing opportunities. There was no ready market for small grains.

Focus group discussions also pointed out that the young generation was not used to food made from pearl millet and could not prepare it properly. The findings of the study showed that people's consumption levels of small grains were very low in the study area. The crop was widely promoted, but it did not fill the food security gap left by maize production. The effort put into the promotion of small grains did not equal the benefits, in other words, it did not improve food security in Mhondoro-Ngezi District.

#### **4.2.6. Zunde raMambo concept**

Further evidence from the study shows that Mhondoro-Ngezi communities yearned for home grown solutions to the devastating effects of droughts. Research participants suggested that the *Zunde raMambo*<sup>5</sup> concept should be revived. It is a safety net which is grounded in the tradition of the communities under the custodian of the local chief. The local chief runs a communal field with the support of the villagers which pool labour to grow crops mostly finger millet, sorghum and pearl millet. It is the chief who also maintains the granary or storehouse of the harvest from the *Zunde raMambo* field. When there is drought or households which do not have adequate food they are assisted from the safety net. The concept is meant to ensure food security in times of need among the vulnerable populations. All the respondents in one of the focus group discussions confirmed knowledge of the concept but none of them had ever benefited from it. They maintained that:

*"The Zunde raMambo concept if implemented successfully could help in reducing the plight of the vulnerable populations during droughts and other times of need. Thus, there was dire need to support the concept with resources by both the government and other humanitarian organisations".*

They added that the *Zunde raMambo* concept should be decentralized and executed at lower levels such as villages and wards. However, interviews with one of the religious leaders revealed that the *Zunde raMambo* concept was still relevant but has been affected by modernization, nepotism, corruption and greediness of the chiefs. He remarked;

*"It is true that the Zunde raMambo is still relevant today since the traditional structures are still present in our communities. Its real meaning has been distorted by modernization which promotes individualism. It used to work long ago because people were united as one family and the chief was respected as the custodian of the community cultures and values. Now the scenario is different. The chiefs are fraught with party politics, corruption, nepotism and greediness. Hence, we are cursed with the adversities of erratic rains causing droughts. The Zunde raMambo itself is equally affected by droughts".*

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<sup>5</sup>*Zunde raMambo* translated to mean the chief's communal field which will assist vulnerable individuals and families in times of food shortage.

The above excerpt shows that the *Zunde raMambo* concept was no longer observed as it used to be, with the traditional leaders being diverted from their original mandates. They have been absorbed in party politics, nepotism and favouritism. The *Zunde raMambo* itself is not immune to the effects of drought. Thus, there is dire need to revive its essence and efficacy. The government and other humanitarian organizations should engage and support rural communities by providing them with agricultural inputs and implements, water harvesting technologies and irrigation services so as to enhance the *Zunde raMambo* concept for sustainable livelihoods.

#### **4.2.7. Food for work program**

The community headmen asserted that one of the strategies used by Mhondoro-Ngezi communities to ease the negative effects of drought involved the concept of “food for work”. This implied that members of the community would provide their labour in a particular activity as a pre-condition for receiving food aid. This approach was lauded as a sustainable way of ensuring food security in communities because some members of the community did not have enough money to buy food. The approach, thus, provided an alternative way of ensuring that communities were well sustained. Interviews with key informants indicated that the long-term benefits of community participation in “*food for work*” programs involved the prevention of diseases related to malnutrition. One of the nurses’ in-charge was quoted saying;

*“...food for work initiative is a blessing in disguise since some members of the communities do not have sustained food supplies to support their families. Through this initiative, they can access food for their survival...”*

It was found out in this study that the approaches were beneficial for communities in Mhondoro-Ngezi District especially in times of droughts. Tinarwo (2011) concurs with this approach that the benefits of “food for work” to DRR on recipient communities are that, it encourages communities to choose a strategy of boosting their livelihoods. In addition, food-aid paid in cash was used by members of the communities to buy other food items and even to pay for school and clinic fees.

### **5.0. DISCUSSION**

Given the fact that persistent drought affected the wellbeing and livelihoods of rural communities in Mhondoro-Ngezi District. There could be lack of collaboration between the local government and local communities in reducing the negative effects of drought in the district. Community drought risk reduction strategies need to be complemented by viable disaster preparedness at national level for it to be sustainable. At risk communities should be engaged and actively participate in drought risk reduction issues so that they enhance the coping strategies and reduce the negative effects of drought that affect their livelihoods and wellbeing. The government and its partners should involve local communities from the planning through to the implementation and review stages so that they will be equipped in easing the negative effects of drought.

This approach has been used with success in China, with rural communities going beyond mere attendance in drought risk reduction activities but also owning the projects (Sim *et al.*, 2017). In the end, such projects became long-term and sustainable (Shaw *et al.*, 2009). The same could be employed in Mhondoro-Ngezi District and anywhere else in the world, with communities playing an active role so that they build their own skills in projects that militate against droughts thereby reducing its negative effects and heighten sustainable livelihoods in their regions.

The engagement in local enterprises like the *Zunde raMambo* concept should be upheld and be supported and monitored by the government. This is one of the coping strategies that help the vulnerable individuals and households which do not have sufficient food. It is also important for rural communities like Mhondoro-Ngezi to grow drought tolerant crops that can do well with little rains as a strategy to lessen the adverse effects of drought. A case for the use of local initiatives in drought risk reduction is presented by Muyambo *et al.* (2017) who maintain that communal farmers in Southern Africa should support indigenous knowledge systems regarding drought risk reduction initiatives. Communities in Mhondoro-Ngezi District should uphold the values inherent in their cultures regarding seed varieties and local ways of farming as strategies to reduce their vulnerability to droughts and ensure food security.

Corruption and nepotism in the administration and distribution of the *Zunde raMambo* food aid process from traditional leaders demonstrates how traditional power has been used in Mhondoro-Ngezi District to manipulate vulnerable people for the benefit of those in power. It has lost its intended purpose of assisting those who run short of food. Yet under normal circumstances, traditional leadership is expected to be custodians of honesty and transparency and provide the linkages and connections that facilitate access to government and Non-Governmental organizations aid and resources for the reduction of the negative effects of drought (Musevenzi, 2012; Bongo *et al.*, 2015).

Climatic change and variability have become a feature of today's world, exposing Mhondoro-Ngezi rural communities to poor livelihoods. Hence, government should engage in providing them with some basic education and training on climate change and variability that seem to have affected the rainfall patterns, thus making them even more vulnerable to climate-induced disasters like drought (Gross, 2012). Such vulnerabilities emerge from their sources of livelihood, which are largely dependent on agriculture. Yet, most of them, despite efforts to harvest water, depend on natural rains for farming. Rainwater has become unreliable for agricultural purposes in Southern Africa (Nangombe, 2016). It is imperative that the central governments should invest in building dams and drilling boreholes as a strategy to sustain agricultural activities and enhance sustainable livelihoods of rural communities like Mhondoro-Ngezi District.

## **6.0. CONCLUSIONS AND RECOMMENDATIONS**

The study concluded that drought risks were an area of concern for communities in Mhondoro-Ngezi District. However, the study concludes that communities of Mhondoro-Ngezi District were well aware of their requirements when it comes to drought risk reduction in the area. The bottom up approach to drought risk reduction programming would be well informed of these needs to reduce the adverse effects of drought. Such an approach would help to make such interventions relevant to the needs of the local communities. The government of Zimbabwe should assist rural communities to diversify their livelihoods strategies so as to reduce their vulnerabilities to food insecurity as most of them depend on agriculture for livelihoods which is susceptible to drought.

To reduce the negative effects of drought in Mhondoro-Ngezi District, the study recommends that the government should help the community develop mechanisms for water harvesting so that people have safe and sufficient water for domestic and agricultural use and boost their livelihoods. The government and its partners should help rural communities in their efforts to grow drought tolerant crops by providing short season seed, agricultural equipment as well as food processing technologies as a way to ease the adverse effects of drought. Furthermore, there is need for advocacy and training from the government to influence and support policies that address climate change and variability issues, which have increased the incidence and severity of drought. It should improve capacity in terms of resources and appropriate skills

through vocational training centres for livelihoods diversification to boost agricultural and non-farming activities for sustainable development. The government should discourage people from engaging in *Kupemha* (adversity-induced begging) which is a bad practice, but should promote and support income generating projects like nutritional gardening and poultry which is sustainable and increase food security. The results of this study would assist rural drought risk reduction planners and decision makers to make informed decisions and policies regarding drought risk reduction activities in Mhondoro-Ngezi District. This is to improve community wellbeing and livelihoods.

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## **THE POLICY BRIEF**

### **Drought Risk Reduction Strategies in Rural Zimbabwe: Opinions of Mhondoro-Ngezi District Communities**

The incidence of drought in Mhondoro-Ngezi District has caused significant suffering for the local population. It led to malnutrition and loss of lives. Drought also reduced pastures and predisposed the community to reduced livelihoods for the community as livestock are deemed important rural communities. It also reduced the level of education in rural communities as school children failed to attend lessons due to hunger.

To reduce the negative effects of drought, community leaders should enhance community involvement as it is essential in the community development process. Nobody can appreciate local opportunities and constraints better than the local communities themselves. As such, there is need for communities to be involved in the identification and resolution of drought vulnerability issues. High levels of knowledge sustain the community's readiness to respond to drought situations. In the same manner, readiness to take action in response to drought situations depends on the level of awareness that the same community holds.

The district should create Community-Based Drought Risk Reduction Committees (CBDRRCs). The availability of CBDRRCs can enhance community's development and preparedness. Rural communities should also have a written drought plan. The presence of an up to date and viable drought plan which includes a well-structured protocol and communication system would give a rough estimation of the drought preparedness of a community.

It could be learnt from the study that drought preparedness is a process that needs to focus on the capacities of the local population. Whatever situation of disadvantage a community might be in, the local population still possesses some source of strengths that can be used to enhance their survival. Communities should not just sit back when confronted with drought situations. Community leaders should engage in life-saving activities such as planning, organizing and engaging the government and organizations which can provide food relief. Rural communities should play a significant role in mitigating the effects of drought through contacting the relevant response teams, carrying personal responsibilities to offer material and financial assistance and keep food reserves for use in drought situations.

The study recommends that the government should institute a mechanism where Members of Parliament (MPs) provide a quarterly report to parliament on the status of drought in their

constituencies. Such an approach could help address issues to do with drought in vulnerable communities. The government should assist rural communities to create CBDRRCs which would engage in public awareness campaigns to reduce the negative effects of drought. The CBDRRCs should make efforts to involve all members of the community in preparing for drought as well as drafting of the drought risk reduction plan. There should be clear communication channels regarding drought response which should be communicated to all members of the community. Drought professionals and policy makers should capacitate rural communities through education and training in drought risk reduction strategies so as to increase the capacity of communities to address drought issues. The improved quality of drought response by communities would lead to higher levels of community development, safety and well-being.