## Tsholotsho Flood Survivors: Three years on after the disaster caused by Cyclone Dineo,

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#### **Abstract**

Rapid and slow onset disasters have periodically affected Zimbabwe over time. In the 2016-2017 agricultural season flooding as a result of cyclone Dineo affected Tsholotsho resulting in the displacement of people, loss of life for both people and animals and a reconfiguring of livelihoods. A qualitative research employing a phenomenological design examined the state and lives of the Tsholotsho disaster survivors two years after the flood with a view to understanding the needs of the people and establishing how the community has moved over time to restore, rebuild and diversify their livelihoods. Key informant interviews with the Provincial and District Administrators; Focus group discussions with the District and Ward Level Civil Protection Committees; Secondary analysis of sectoral reports, A Transect walk of the camp; Household and Community FGDs, and in-depth household interviews were conducted to gather data from the flood survivors. The study established that Tsholotsho flood disaster survivors faced a myriad of challenges, chief among them the reconstruction of livelihoods, food insecurity, poor educational opportunities for the children post the emergency and broken family systems owing to the maintenance of dual homes as well as gender-based violence.

### Introduction

Floods are the most common hazard leading to morbidity and mortality throughout the world (Fitzgerald & Hou 2014). Armah (2010) acknowledges that Sub-Sahara Africa is considered to be a vulnerable region to climate variability including flooding and droughts. Flash floods are a threat to most deeply impoverished areas that do not receive enough precipitation for agricultural purposes. Zimbabwe has been prone to disasters, both of rapid and slow onset nature. Flooding is already one of the most widespread of hydro meteorological hazards. The Intergovernmental Panel on Climate Change (IPCC) predicts that climate change is likely to cause an increase in flood hazards in many areas of the world (McCarthy *et al.*, 2001). Tsholotsho, which lies in Matabeleland North to the west of Zimbabwe, is prone not only to droughts but to flash flooding as well. Sub-Saharan Africa, that includes Malawi, Zimbabwe, South Africa, Zambia and Mozambique, is considered to be most vulnerable to climate variability and natural disasters that include drought and flooding. Flooding is a recurrent problem in Tsholotsho. The area was also affected in the 2013-2014 agricultural season leading to heavy losses in human and livestock life.

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The need for comprehensive research around disaster response is paramount (Brown 2015). All floods are unique in that the regions affected have different social, demographic, economic, and population health characteristics (Du et al 2010). It is critical therefore to examine the different experiences of individuals. Ismail, Bahari & Mutang (2017) maintain that each survivor's experience is unique in the sense that disasters affect men and women and children differently. This is because of the different roles they occupy and the different responsibilities given to them in life as well as the differences in their capacities, needs and vulnerabilities especially the needs of children and those living with disabilities.

#### The Literature

Disasters can be grouped into human induced and natural. Put together, these include floods, droughts, cyclones, landslides, earth quakes, armed conflicts, fires, volcanic eruptions and epidemics. Yang, Dietza, Yangc, Zhangd & Liua (2018) however, maintain that natural disasters are not entirely "natural. This therefore implies that there is an element of causation in every disaster that affects humanity. Ferris (2010) observes that disasters whether triggered by natural hazards or human behaviour or by the interaction between the two, affect millions of people for long periods of time. Ismail, Bahari & Mutang (2017) concur that in post flood disasters management, besides assessing the psychological impact for the survivors, strengthening family and community resilience from traumatic loss is important for optimal recovery. Flooding is often a perennial problem for constantly hit areas such as Tsholotsho and this should give the government the opportunity to adequately prepare for such disasters. Murape (2009) acknowledges that in Tsholotsho flooding is not a recent hazardous event; it has happened before and tends to recur. Because it is a recurring problem, the call is on the people to be prepared for disasters. DaBreo, McLean & Thomas (undated) maintain that community-based preparedness and planning allow us to manage the potential hazards following a disaster event. Individually, we can prepare our homes and families to get through those critical times.

# Research design and ethical considerations

This study employed a phenomenological design which is qualitative in nature. Both primary and secondary data was gathered with a view to understanding the state of the flood survivors and their recovery process two years after the disaster. Structured interviews and questionnaires coupled with direct observations (through transact walks) were employed for collecting primary data. Because choosing a methodology hinges on the research problem, interviews and observations were found to have specific relevance to understanding the state of affairs in Tsholotsho as they provide an opportunity to understand and explain complex phenomena through the eyes and lens of the respondents. Drawing on Jupp (2006)'s impression, purposive sampling was employed to select the key informant interviewees from Tsholotsho. Purposive sampling allowed researchers

to identify knowledgeable informants who gave rich and relevant insights into the state of affairs two years after the flood. Random sampling was employed to select households to complete the questionnaire.

This research draws broadly from the research area of gender-based violence which is highly sensitive, with distinct ethical challenges, and requires careful preparation, attention to legal issues and thoughtful dissemination of the research findings (WHO, 2007). Resultantly this research drew from WHO (2007)'s guidelines for ethical and safety recommendations on the collection of information on sexual violence in emergencies which include:

- 1. The benefits to respondents or communities of documenting sexual violence must be greater than the risks to respondents and communities.
- 2. Information gathering and documentation must be done in a manner that presents the least risk to respondents, is methodologically sound, and builds on current experience and good practice.
- 3. Basic care and support for survivors/victims must be available locally before commencing any activity that may involve individuals disclosing information about their experiences of sexual violence.
- 4. The safety and security of all those involved in information gathering about sexual violence is of paramount concern and in emergency settings in particular should be continuously monitored.
- 5. The confidentiality of individuals who provide information about sexual violence must be protected at all times.
- 6. Anyone providing information about sexual violence must give informed consent before participating in the data gathering activity.
- 7. All members of the data collection team must be carefully selected and receive relevant and sufficient specialized training and on-going support.
- 8. Additional safeguards must be put into place if children (i.e. those under 18 years) are to be the subject of information gathering.

Ethical approval to conduct the study was obtained from the Research and Ethics Committee of the Bindura University of Science Education. The research was reviewed and approved by Bindura University of Science Education Institutional Review Board and is consistent with the above cited WHO guidelines on research on sexual violence in emergencies. Approval from government authorities in Matabeleland North was secured from the Office of the Resident Minister prior to conducting the study, as well as the Ministry of Women Affairs.

## **Findings**

Eight hundred and sixty-nine people (869) comprising women and men were directly affected by the floods. More women than men were affected by the floods. The above finding is in line with

the assertion by WHO (2015) who highlight that in most emergency settings, women and children account for the greatest numbers of displaced people.

## Housing in the aftermath of floods

Reconstruction of houses and livelihoods after the flood was key to ensuring a quick return to normalcy. In most cases helping the citizens to reconstruct and rebuild their asset base is largely the prerogative of national governments aided by development partners. Tuwilika (2016) contends that the primary responsibility for citizens affected by disasters rests with the national government. The respondents highlighted that government through the Ministry of Public Works led post reconstruction efforts by constructing decent houses for the affected families. At the time of this research, three hundred (300) houses out of a target number of three hundred and sixty-nine (369) had been constructed and were now habitable. A transact walk through the resettlement area revealed that the outstanding sixty-nine houses were at various stages of completion ranging from foundation stage to lintel stage. From the focus discussions with the various respondents it was discovered that the allocation of houses to beneficiaries was not sensitive to the different vulnerable groups as more widows and single parents appeared not to have been prioritized in the early allocation as they led the research team to their stands/ houses that were still incomplete and at various stages of development. Furthermore, the respondents noted that they were removed from their livelihoods as the new settlement area could not accommodate their livestock and there were no fields to till. Respondents maintained that as a result of the above development they were forced to trek back to their old homes for animals and fields thereby maintaining a dual home ownership scheme. Running two homes has associated problems that are not good for the well-being of the family and this according to respondents included increased incidences of gender-based violence as partners lived apart. Yang et al (2018) also discovered that post-disaster reconstruction led by the government generated unintended effects on human well-being in China. This finding in some way gives credence to the view by Bilau et al (2018) that many stakeholders have identified permanent housing reconstruction as one of the least successful humanitarian interventions as many housing interventions fail to achieve their intended outcomes.

# Restoration of Livelihoods after the floods

Rehabilitation of livelihoods after a disaster is key to recovery. Longley (2006) maintains that rehabilitation is often regarded as the process that links relief and development of which the implicit aim is to return to former, supposedly stable and desirable states of affairs. Most of the respondents (98%) highlighted that their livelihoods were affected by the natural disaster. They further noted that no emergency relief fund to recapitalize and re-energize the livelihoods was launched. Respondents also noted that long-term post disaster options and rehabilitation for survivors were not only limited but lacking. One respondent had this to say:

"Akulanto abayiyenzayo. Thina siyahawula lapha emzini" (They have not done anything [to restore our livelihoods]. We are suffering [wallowing in poverty] here, (respondent 5)

Respondents further highlighted that for optimal recovery from the floods to be realistic, a recovery programme in Tsholotsho that directly supports food security, including support for women and men to establish livelihoods and rebuild assets would have helped tame poverty in the area. However, the respondents appeared very doubtful about the ability of the government and the development partners to quickly support any recovery initiatives given the failing economy. Wiest, Mocellin & Motsisi (1994) maintain that where physical and emotional losses are severe and traumatic, stress levels interfere with recovery. The failure by government and development partners to initiate the rebuilding of people's livelihoods was a cause for concern and a huge disregard of the Nansen Principles of 2011 that stipulated that close attention to economic vulnerability must be paid attention to in resettlement actions, to ensure that livelihoods of resettled residents are maintained, or ideally enhanced, by the resettlement process.

## Politics and power dynamics

Respondents highlighted that the resettlement and allocation of houses to survivors was not done following the old power dynamics where a headman and his subjects would be settled in one area. Respondents noted that in the new settlement, the allocation of houses was not tied to headman ship. Respondents further noted that this system had some inherent challenges of exercising authority and compliance issues where the headman's power is diluted. In some instances, individuals would not take instructions from the headman close by as he was 'not' their headman. Furthermore, the mixed settlement approach destroyed social webs of support. This departure from the norm caused many problems to those resettled. Wiest, Mocellin & Motsisi (1994) observed that most of the world's societies are still organized principally in terms of kinship, at least at the local level. They further maintain that people in all societies turn to family and close kin in times of special need.

### Livestock and livelihoods

The importance of livestock among the Zimbabwean people cannot be overemphasized. Livestock are of utmost importance for status, income and livelihoods. Tuwilika (2016) acknowledges that livestock are of utmost importance for status, income, livelihoods, as well as survival of populations and cultures. Most of the sampled households (90%) indicated that on average they lost seven beasts each while less than 3 of the sampled households noted that they lost all their cattle and goats. One of the respondents had this to say:

Ngendaba yemanzi, khatesi ngingumuntu nje mtanami. Zonke inkomo zami zafa, angila lutho (Because of the floods now I am just poor, I lost all my cattle I don't have anything).

Respondents further highlighted that, post-flooding, the remaining livestock succumbed to diseases leaving them very poor. The above point is buttressed by Navarre (2006) who notes that

various diseases can be contracted by livestock in post-flood events such as: Blackleg which affects cattle, sheep and goats. This is more so in areas where grass is short and animals graze very close to the ground. Lost livestock affected the respondents leaving them uneasy and uncertain about their future as cattle are highly valued in Ndebele society. Steinfeld et al., (2006) note that livestock systems are a significant global asset with a value of at least US\$1.4 trillion, employing 1.3 billion people and directly supporting the livelihoods of 600 million poor smallholder farmers in the developing world.

# **Emotional Instability in the aftermath of floods**

Following the floods, some respondents exhibited anger, helplessness, depression, anxiety, and withdrawal symptoms as the floods had wreaked havoc not only on their assets but also on their social standing in society. Respondents reported relational conflict as very common. One of the respondents had this to say:

"I have lost literally everything. I don't know why I should still live. What do I live for? Coming to terms with the death of my son, my only bread winner is very difficult." (male respondent, 52 years). For the majority of the respondents, getting closure to the difficulties inflicted on them by the floods is very difficult. The psychological impact of the loss was reportedly too immense to swallow. Ismail, Bahari & Mutang (2017) summarized the pain that individuals go through when they encounter disasters by noting that it's a cascade of sorrows.

Most of the sampled households were subsistence farmers who grew mainly maize and small grain crops for the staple diet of isitshwala, sadza or thick mealie meal porridge. Respondents noted that the floods affected their farming in a very serious way. Following the flood, food was highlighted as an acute problem in the affected areas. Most of the sampled households (94%) highlighted that their crop was destroyed by the floods. They also indicated that in most instances households are food secure for just between 2 to 4 months at most as they battled recovery. Poor nutrition was highlighted by respondents following the destruction of food supplies and livelihoods. The disruption of livelihoods was reported to have impacted on household incomes and the respondents' capacity to purchase food. Lack of disposable income was highlighted as one of the after effects of the flood disaster. Respondents noted that preparation for farming seasons has largely been poor owing to the after effects of the flood disaster. Respondents were asked about programmes that had been introduced after the floods to build community resilience and recovery. Ismail et al (2017) acknowledge that strengthening family and community resilience from traumatic loss after such catastrophic events is important for optimal recovery. The respondents noted that to date no programmes had been initiated to strengthen family and community resilience. Ideally the destruction of crops by the floods would have made it imperative for community members to diversify their agricultural livelihoods. This however, has not been the case for the Tsholotsho community as most of them instead streamed back to their old homes and livelihoods. In the aftermath of the floods, many respondents highlighted that they did not have

the financial resources or insurance coverage to compensate for the loss of property and damage to their homes and livelihoods.

### **Education in the aftermath of the floods**

Education is increasingly viewed as the "fourth pillar", or a "central pillar", of humanitarian responses, alongside the pillars of nourishment, shelter and health services (Norwegian Refugee Council et. al.,1999: 26; Midttun, 2000a: 3–4; ICWAC, 2000: 9). Children are vulnerable and dependent, and they are developing, not only physically but mentally and emotionally. "The sudden and violent onset of emergencies, the disruption of families and community structures ... deeply affect the physical and psychological wellbeing of refugee children" (UNHCR, 1994: 5–6). Uprooted adolescents are at risk of sexually transmitted diseases, unwanted pregnancies, mental health problems, violence and substance abuse ... social stigmatization [and] ... recruitment into armed forces or groups. (United Nations, 2000a: 11) Education is likewise a forward-looking activity that can lessen the incidence of alcohol and drug abuse, teenage pregnancies, prostitution and so on. Schools represent a mechanism to get "survival messages" to the community and to identify and protect children at risk.

All sampled households indicated that they had school going children at both primary and secondary level. All the households indicated that their children were greatly affected by the floods and the effects were still being felt at the time of the interviews. Respondents maintained that two primary schools and a secondary school had been permanently closed and the children were moved to Tshino Primary School which was over enrolled. Respondents highlighted that no immediate psychosocial needs of children were being addressed and supported by the respective departments mandated by the responsible Government Ministry. At the school level, respondents highlighted that during the early stages of relocation, students that had survived the floods were being taunted and being referred to as *abamanzi* meaning those 'from the waters.' The practice is said to have been discontinued following the intervention by the school authorities. Despite an attempt at coexistence within the school, respondents highlighted that resources were over stretched. The tents that were pitched as temporary classrooms had visibly given in to the effects of the weather. Most were torn. Respondents further highlighted that because the floods occurred during the academic term, pupils lost many contact hours. Resultantly the pass rate for the school plummeted.

### Water and Sanitation

There has been a protracted debate on the issue of the right to water and sanitation. The debate dates back to the Mar del Plata Conference of 1997) which declared that "all peoples, whatever their stage of development and their social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs". Access to water and

sanitation is key in an emergency. The Global Wash Cluster (2009) maintains that access to safe drinking water and sanitation is fundamental for survival. The state of water and sanitation during and after the emergency was explored. Respondents highlighted that generally safe water was unavailable to most of the households following the floods in Tsholotsho. Unavailability of safe water was cited as a major problem in the resettled areas. A key informant indicated that women found it difficult to manage hygiene issues in the home owing to limited water for domestic use. Respondents noted that the piped water scheme that was introduced in the area was not effective as the water pump was down most of the time leaving households exposed to the dangers of unsafe water. Furthermore, most households had constructed latrines thereby posing a serious challenge to people's health and hygiene. UNICEF (2011) contends that when there are no latrines, governments and relief agencies should help by providing temporary places to go to the toilet, such as defecation fields, trench latrines (dedicated hand-dug and screened pits) and soak away pits for urine (hand-dug, stone-filled holes for boys and trenches for girls).

#### Marital discord

Respondents reported that following the floods and out migration, there had been marital discord in many of the families resulting in separation, desertion and divorce. Respondents highlighted that owing to out migration in the aftermath of the floods, a number of men out migrated to Botswana and South Africa looking for employment. Many of these men according to the respondents had not only stopped supporting their families but had deserted them exposing them to further emotional turmoil. Some of the respondents reported relying on their children for support. Deserted women were often very bitter as they had to contend with raising and providing for the families by themselves. Wiest, Mocellin & Motsisi (1994) acknowledge that in societies with strong patriarchal ideologies, a woman abandoned is a woman scorned. Most of the respondents noted that they were left with very little resources, but with the added burden of raising dependent children. They had not recovered from the shock of the floods. The father role in traditional Ndebele society is critical in raising up a child. Lesejane (2006) cited by Richter et al in United Nations (2011) acknowledges that while having a child might represent evidence of masculinity for men, in most parts of the world a man becomes a father, and is treated with the respect attached to the role, when he takes responsibility for his family and becomes a model of appropriate behaviour for young children.

### Coping and recovery strategies in the aftermath of floods

Respondents highlighted that while they were still counting their immense losses; they had developed community-based coping and recovery strategies, which included out migration into Botswana and South Africa offering seasonal labour and informal credits.

Out migration was highlighted as a coping strategy for households affected by floods. Respondents highlighted that following the floods there was increased out migration into Botswana and South Africa as people sought to eke a living. Migration is generally considered an important livelihood strategy. As Hussein & Nelson (1999) argue, migration forms a central component of rural people's risk mitigation strategies. Respondents pointed out that throughout migration, their bread winners would send remittances back home to rebuild and help households recover from the shocks of disaster.

Gerald and Dorothy maintain that remittances are important for supporting developing countries and households, and recently have taken a more visible role in disaster mitigation and recovery. Frankenberger (1992) cited in Kamal (2013) notes that households take three sequential series of activities as stress becomes more prolonged: first, reduce their food consumption at minimal level; second, employ divestment or the gradual disposal of assets and finally, embark upon migration.

Respondents' perception of personal risk to floods was explored. Most of the respondents (75%) who trekked back to their old homes appeared resigned to fate and said they had no alternative other than going back. One of the respondents said;

Asilanto esingayenza khonapha. We are in a fix. There is no better way to die.

Contrary to the view by Penning-Rowsell, (2003) that people are short of memory and that after some time their worries decrease, many victims of the Tsholotsho floods appeared to have surrendered themselves to fate by returning to their old livelihoods.

### **Conclusions**

This research examined the experiences of flood survivors two years after the floods. It sought to highlight how floods impacted on the people and how they had coped in the aftermath of the disaster. The results suggest that in the aftermath of disaster, the government had constructed houses for the survivors although these were not sufficient to meet the needs of all of them. This research further proved that allocation of the constructed houses did not take into account the vulnerability status of individuals as single and widowed women comprised the majority whose houses were incomplete. This research also established that water and sanitation issues after the disaster had not been adequately addressed. Portable water was still scarce and toilets had not been fully built at the time of this research. Portable water did not meet the Sphere standards of at least 20 litres of water per day per individual. Brown et al (2012) observe that evidence suggests that providing safe water, safe excreta disposal, and basic hygiene measures such as hand washing are effective interventions both within emergency settings as well as in longer-term development. The Global Wash Cluster (2009) notes that lack of access to basic services such as water and sanitation is increasingly considered as a denial/violation of human rights. This poses a huge risk to the health of the people two years after the disaster. This calls for the urgent need to provide sustainable sanitation solutions in the resettlement area.

Respondents demonstrated that people had not been generally prepared for the floods. That people have lived with the floods over time appears not to spur the individuals into action. SuSanA (2012) notes that natural hazards such as extreme rainfall (leading to floods) and earthquakes do not necessarily result in disasters. They only turn into disasters when human society is unprepared for them, where infrastructure and planning has not been designed to withstand or buffer against them and if society cannot respond or learn adequately. This therefore calls for investment in disaster risk reduction. This study established that owing to failure by government to provide alternative livelihood options for the affected people, the people streamed back to their old homes to till the fields giving rise to the ownership of dual homes. Given the reluctance by the people to abandon their old livelihood options it is critical to take to heart a warning by SuSan A (2012) who observes that disasters like this must thus act like a "wake up" call to trigger more investment in risk reduction, which also decreases cost and scale of response in future.

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