Chapter Seven: Improving Pre- and Post-Disaster Management in Zimbabwe and Beyond: Some Critical Considerations

Effective disaster management requires a balanced focus on both pre-disaster preparedness and post-disaster recovery to mitigate risks and enhance resilience. In Zimbabwe, as in many other countries, disaster management faces many challenges, including limited resources and insufficient early warning systems. This chapter explores important considerations for improving pre-disaster preparedness, such as strengthening community engagement, enhancing early warning systems, and integrating disaster risk reduction into development planning. It also addresses post-disaster recovery strategies, focusing on building back better, promoting resilience, and ensuring that recovery efforts prioritize the most vulnerable populations. With lessons learnt grom the Tokwe-Mukosi flood disaster, this chapter aims to highlight the importance of a proactive, inclusive, and integrated approach to disaster management that can improve outcomes both locally and globally.

The study explored that the intersection of heavy rains, dam collapses, and lack of preparedness that beings into light the importance of proactive, inclusive, and well-planned disaster management. Devastation brought about by the Tokwe-Mukosi flooding vulnerable households how lack of disaster risk reduction can amplify the suffering of vulnerable communities. The findings call for urgent sustainable development initiatives that involve the communities themselves to prevent future tragedies. Conclusions and recommendations come from lessons learnt in the aftermath of the Tokwe-Mukosi Dam failure, identifying factors which may have led to the flooding disaster in 2014, Why the community was vulnerable to

the 2014 flood and why the 2014 flood affected many households in such a manner that it is proving difficult for them to recover.

The 2014 Tokwe-Mukosi flood disaster was not due to a single cause but a complex mix of both the presence of a hazard and human action or inaction. Although dam constructions and dam failures are relatively common, disasters arise when these negatively impact are vulnerable communities as in the case of Tokwe-Mukosi. A combination of heavy rains, dam construction (development), and existing social and economic conditions made the Tokwe-Mukosi community vulnerable to the 2014 flood. Inadequate project funding for the dam construction and disregard for social considerations or responsibilities by responsible government officials resulted in the 2014 Tokwe-Mukosi disaster.

Poor disaster management planning by responsible government departments in terms of relocation modalities resulted in the community remaining in an otherwise evidently hazardous location. Regardless of financial constraints to compensate each affected household, it is evident that there was no plan on where to relocate this community. If the community had been empowered with the knowledge of their intended relocation site, some or most may have relocated at their own cost to flee the obvious impending danger, especially those who were located within the actual dam perimeter. Compounded by otherwise valid encouragement from human rights activists, not to relocate unless compensated, the community remained "sitting ducks" in the face of a retrospectively obvious hazard.

The decision or oversight of not engaging the Tokwe-Mukosi community in the full processes of EIA resulted in them not being aware of the risk they faced from the dam construction. From a pre-disaster viewpoint, the community was made vulnerable because of a lack of information on flood risks in the area. In the pre-disaster

period, where education on disaster risk reduction should have been the focus; the community was left to construe their own versions of risks and potential benefits, adding to their unwarranted exposure to the flood hazard. This resulted in them not attempting to relocate themselves to safer areas within or outside their community in the face of increasing risk as the dam construction advanced.

The absence of an early warning system and the community not having been informed of emergency plans highlights deficiencies in disaster management guidelines or policy enforcement that resulted in more households than necessary being impacted by the flood. The failure to give formal community updates on the dam construction progress increased the community vulnerability from the most encountered risk during a dam construction project, flooding.

According to international benchmarking, the Chingwizi community can be classified as poor hence, most likely to be affected by the impact of any hazard. With the highest level of education being secondary schooling, most in the community do not have formal skills and rely on communal farming which has not enabled them to build resilience. The material poverty and lack of higher education limited the community's awareness of their rights and recourse to effectively challenge shortcomings in project implementation in their area.

The pre-existing socio-economic conditions in Chivi played a major role in highlighting how vulnerable the community was. Living in poverty made the community vulnerable to the flood and they are now living in poverty in Chingwizi that renders them more vulnerable to various hazards including food shortages. The community was dependent on agriculture that means their livelihoods were destroyed. With negligibly low incomes and low educational levels, the community is not able to pursue other livelihoods to generate

sustainable income. The 2014 flood impacted a vulnerable community that was not able to cope using the limited resources they had.

In must however be said that government coordinated evacuation of the flood victims saved lives as the flood victims lacked the capacity for self-evacuation. The material and food relief provided after the flood increased the coping capacity of the victims. The study reveals that the evacuation of the Tokwe-Mukosi victims became an immediate relocation as the Government of Zimbabwe had not yet planned on where the community was to be moved. Chingwizi had no prior provisions of basic community amenities such as school, clinic or potable water sources. The coping capacity and the resilience of the community was reduced as the flood victims were relocated without any monetary compensation that would help them rebuilt their lives. Without monetary or material compensation for their lost homesteads, the enshrined right to shelter would not be achieved in the short to medium term. The livelihoods adopted at Chingwizi generate less income than livelihoods pursued before the flood and there are no evident programmes to enhance community livelihoods.

The Tokwe-Mukosi (now Chingwizi) community was rendered vulnerable by the social, economic and political environment that existed before, during and after the flood disaster. The flood victims are now living in a social, economic, political environment that makes them more vulnerable than they were in Tokwe-Mukosi. In the absence of a well-planned and well-implemented intervention to promote sustainable livelihoods, the vulnerability to hazards may become imbedded in the community such that it would not only affect the current generation but those to come.

Disaster risk reduction revolves around public information and education; existence of efficient warning systems; disaster preparedness; mitigation and coping mechanisms. The lack of or

failure to apply these fundamental disaster management concepts in Zimbabwe made the Tokwe-Mukosi community vulnerable to the 2014 floods. The Government of Zimbabwe was not adequately prepared for the Tokwe-Mukosi Dam project in terms of project financing, implementing legally prescribed community engagement and awareness through prescribed EIA processes.

Regarding the reflections on the 2014/15 Tokwe-Mukosi Flooding Disaster in Zimbabwe, it is possible to derive recommendations based on the knowledge gained during and after the disaster. These recommendations should aim to enhance development efforts while simultaneously mitigating the risks associated with future disasters.

1. Enhancing disaster preparedness and early warning systems: Allocate resources towards sophisticated meteorological and hydrological monitoring systems capable of promptly identifying potential flooding occurrences and promptly alerting vulnerable communities. Conduct continuous training initiatives for local communities regarding disaster preparedness, evacuation procedures, and response strategies.
2. Improving the durability and robustness of infrastructure: Prioritise the development of flood-resilient infrastructure in areas prone to flooding, including the construction of flood barriers, spillways, and drainage systems, to reduce the impact of similar disasters. Sustainable urban and rural planning involves incorporating disaster risk reduction strategies into development plans for both urban and rural areas. This includes designing settlements, especially those located in flood-prone areas, with a focus on resilience.
3. Improving community involvement and fostering collaboration with stakeholders: Implement participatory planning and decision-making by involving local communities, including marginalised groups, in the processes

of disaster planning and decision-making. This will ensure that their knowledge and needs are considered when developing strategies for development and disaster management. Enhance the efficacy of disaster response and recovery endeavours by fostering better coordination among government entities, non-governmental organisations (NGOs), local authorities, and international organisations through multi-stakeholder collaboration.

4. Enforcing policies and strengthening institutional capabilities: Evaluate and revise policies related to the management of potential disasters. It is important to ensure that national and regional policies concerning disaster management are in line with the most effective methods used worldwide and are regularly revised to incorporate new and emerging risks. Enhancing the capabilities of local institutions by offering training and resources to local disaster management institutions to improve their capacity to respond efficiently to disasters, including by enhancing resource allocation and coordination.
5. Rehabilitation and Adaptability after a Catastrophic Event Developing Programs for Restoring Livelihoods: Create specific livelihood restoration initiatives that prioritise the reconstruction and expansion of income streams for communities affected by the flooding, with a particular emphasis on those reliant on agriculture, which suffered significant damage. Ensure that individuals and families who have been displaced are provided with enduring assistance, including access to housing, education, healthcare, and employment prospects, to facilitate a sustainable recovery.
6. Adaptation to Climate Change: Incorporate climate change adaptation strategies into development plans, integrate climate change adaptation strategies into national and local development planning to tackle the growing occurrence and

severity of disasters such as flooding. Advocate for the adoption of sustainable land and water use practices to mitigate the susceptibility of communities to climate-induced disasters, particularly through the promotion of sustainable agricultural and water management techniques.

7. Financial Mechanisms for Mitigating the Impact of Disasters: Create provisions for establishing funds specifically designated for disaster contingencies. Establish dedicated funds at both the national and regional levels to guarantee prompt financial reactions to disasters, thereby minimising the economic consequences on affected communities.

The purpose of these recommendations is to tackle both the immediate response to disasters and the long-term planning for development to reduce the impact of future disasters. These recommendations are based on the knowledge gained from the Tokwe-Mukosi flooding disaster which is one case study which suggests that further research in several other areas is needed to increase our knowledge of development and disasters and thereby enhancing our resilience.

The study on the Tokwe-Mukosi flooding highlights the significant interplay of severe rainfall, dam failures, and insufficient preparedness, which worsens the vulnerability of marginalised communities. The destruction faced by these households shows the urgent need for proactive, inclusive, and properly planned disaster management strategies. In the absence of thorough disaster risk reduction strategies, at-risk populations continue bearing the consequences of such disasters. The results necessitate sustainable development initiatives that emphasise the participation of impacted communities in decision-making processes, thereby ensuring mitigation of future tragedies through a collaborative and informed approach. By addressing these shortcomings, we can strive to enhance resilience and protect livelihoods in disaster-prone regions.