



Research Paper

An exploration into livelihood options after disasters: A case of Chimanimani district, Zimbabwe.

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Abstract

The impact of natural disasters on rural areas has recently increased especially in Southern Africa. The main question of importance is on how to effectively improve the livelihood resilience of disaster-affected communities. Instead of just restoring communities to their pre disaster state, the post-disaster recovery phase is now widely seen as an opportunity for regeneration and progress (Khasalamwa 2009). For instance, the term building back better has been used by both the government and aid organizations to describe their post-disaster recovery programming. This approach is based on the notion that the recovery period presents a window of opportunity for long-term vulnerability reduction, disaster risk reduction, and improved development. Régnier et al. (2008) highlights that experience with livelihood recovery projects has been somewhat limited and that successful efforts should be highly localized so that economic and livelihood recovery may become an increasingly important component of the post-disaster recovery process. The links between disaster recovery, resilience and livelihoods are clear, a successful livelihood strategy must incorporate mechanisms for coping and bouncing back when another disaster emerges. Using the sustainable livelihoods approach (DFID 1999, Scoones 2003), this paper seeks to explore the various livelihood options available for disaster-stricken areas in Manicaland province of Zimbabwe. The study design is qualitative and used both primary and secondary data in order to obtain the research objectives. Semi-structured interviews and direct observations were employed for collecting primary data. The study provides tangible homegrown livelihood solutions to humanitarian agencies, local government and civil protection unit. Results show that households are involved in strategies such as livelihood diversification and migration in response to the cyclone Idai.

Keywords: Rehabilitation · Livelihoods · ResilienceChimanimani · Livelihood Diversification

*Received 10 May., 2025; Revised 20 May., 2025; Accepted 22 May., 2025 © The author(s) 2025.
Published with open access at www.questjournas.org*

I. Introduction

Disasters can cause extensive disruption to livelihoods through the destruction of productive infrastructure, assets, and stock, break-down of lifeline systems such as utilities, communication services and financial systems, reduction of labor and customer pools, and disruption of markets and supply chains. While there are diverging opinions on post-disaster macroeconomic recovery, research on post-disaster livelihoods indicates that recovery can be influenced by the extent of the physical damage caused by a disaster and by levels of individual and household economic insecurity. The post-disaster recovery period has increasingly been viewed as a time for renewal and improvement, as opposed to simply returning communities to pre-disaster conditions (Khasalamwa 2009). For example, both government and aid organizations have used the phrase “building back better” to describe their post-disaster recovery programming; the “building back better” approach is based on the idea that a “window of opportunity” for vulnerability reduction, disaster risk reduction, and improved re-development, is created during the recovery period (Kennedy et al. 2008).

While economic and livelihood recovery has become an increasingly important component of the post-disaster recovery process, Régnier et al. (2008) found that experience with livelihood recovery projects up to that time had been somewhat limited and that successful efforts were highly localized. Our research also found that emphasis has often been one-dimensional, with a focus on the speed of recovery, funding distribution mechanisms, or coordination between governments and humanitarian organizations. While these are all important components of recovery operations, we found a continuing lack of emphasis on the vulnerability reduction outcomes of recovery programming for impacted communities. For example, one humanitarian organization representative interviewed noted that: “nobody in their job performance gets measured in terms of

the impacts and changes they are making in the communities – that’s disappointing”). These results suggest that analysis of livelihood recovery programming is useful in order to determine whether the programming has resulted in positive outcomes, including vulnerability reduction, for impacted households and communities.

Building-back-better in the aftermath of major disasters, including cyclones, has often proved to be a major challenge to many governments and stakeholders. Evidence has shown that post-disaster recovery efforts taken without consideration of a build-back-better goal have often reconstituted the same pre-disaster conditions and vulnerabilities (Mannakara and Wilkinson 2014). For instance, Cyclones Idai and Kenneth have revealed the need to build-back-better due to unaddressed previous vulnerable conditions. Previous disaster recovery measures have tended to concentrate on just restoring communities to their pre-disaster state. Instead, post-disaster recovery, including reconstruction and rehabilitation, is an opportunity to not only restore communities (Khasalamwa 2009), but also to create safer, sustainable, and more resilient communities underpinned by the concept of “build-back-better” (Clinton 2006). To build-back-better, governments, stakeholders, and disaster-impacted communities need to create long-lasting, resilient, and sustainable communities. Often recovery initiatives have failed to effectively restore disaster-impacted communities.

While there are diverging opinions on post-disaster macroeconomic recovery, research on post-disaster livelihoods indicates that recovery can be influenced by the extent of the physical damage caused by a disaster and by levels of individual and household economic insecurity. Furthermore, small and localized businesses/livelihoods might struggle to cope and recover, especially if they are part of the informal economy and lack insurance and/or access to capital. These latter points encapsulate many of the livelihoods found within the developing world, making them especially vulnerable to disasters. The increased focus on livelihood vulnerability by practitioners and academics has led to a broad consensus that livelihood assistance should be prioritized in post-disaster situations, especially within the developing world. This has led to the incorporation of the sustainable livelihood’s framework within disaster response plans to support the rehabilitation and restoration of livelihoods.

The increased focus on livelihood vulnerability by practitioners and academics has led to a broad consensus that livelihood assistance should be prioritized in post-disaster situations, especially within the developing world. This has led to the incorporation of the sustainable livelihoods’ framework within disaster response plans to support the rehabilitation and restoration of livelihoods. It has become widely accepted that governments, donors and NGOs should use the ‘opportunity’ presented by the disaster to go beyond the pre-disaster state by increasing economic efficiency, productivity and resilience, and supporting the creation of new and more inclusive employment opportunities.

The colossal devastation and displacement brought by cyclones has not spared Zimbabwe, which continues to experience natural hazards such as tropical cyclones, droughts, and floods, and at times the hazards generate disasters. Such hazards are expected to increase both in frequency and intensity due to climate change, with cyclone-induced flooding one of the most common and devastating events, causing nearly half of all victims of natural hazards (Rana and Routray 2018; Mhlanga et al. 2019). During 2000 Cyclone Eline, floods claimed more than 700 lives, left more than 500,000 people homeless, and caused USD 1 billion in infrastructural damage in Zimbabwe and Mozambique combined (Wamukonya and Rukato 2001). The most recent tropical cyclones 2017 Cyclone Dineo and 2019 Cyclone Idai, that hit Zimbabwe also caused flooding and left a trail of destruction in communities, creating socioeconomic challenges among the people. Chimanimani District experienced destructive Cyclone Idai from 14 to 17 March 2019. The cyclone caused high winds and heavy precipitation in the Chimanimani District and heavily impacted at least half of its total population of about 135,000 (2012 Census) in 15 of the 23 wards (UNICEF 2019). The cyclone triggered landslides, as well as riverine and flash floods, leading to deaths and destruction of livelihoods and properties. As reported by the Chimanimani District Development Coordinator, Cyclone Idai claimed about 300 lives, more than 325 people were reported missing, and approximately 4000 people were displaced (Matsvange et al. 2020). The cyclone killed over 340 people, displaced 51 000, whilst many other victims went missing (OCHA 2019). The disaster damaged approximately 634 km stretch of roads, 140 schools and 1481 homes (Chatiza 2019). It destroyed common survival forms, including food security, education, health, and other facets of human existence (OCHA 2019). The disaster occurred when communication networks had been cut off because of the cyclone’s earlier effects. Subsequently, Eastern Chimanimani was cut off from the rest of the world. External intervention efforts became impossible.

Despite this evidence of the devastation of cyclone Idai on livelihoods, studies that have sought to understand the efforts made by survivors to reconstruct their livelihoods in the aftermath of the cyclone remain limited. The uniqueness of this study is that it traces the livelihoods of the survivors of cyclone Idai who live in a constrained environment. Unearthing survivors’ means and ways in the reconstruction of livelihoods remains important in informing policymakers on the needs, existing strategies, capabilities and capitals that can be utilized to build resilience and sustainable livelihoods for survivors in post-disaster situations. (Kabonga, et al 2021)

Aim of the study

This study seeks to establish an understanding on how to effectively improve the livelihood resilience of disaster affected communities.

Objectives of the study

- To examine the viable livelihood options immediately after a disaster
- To explore the viability of these livelihood options using the sustainable livelihoods approach
- To examine how livelihood options contribute to community resilience after disasters
- To understand

II. Literature Review

The concept of livelihoods became widely used within academia in the 1990 (Scoones 2009). There is no universally endorsed definition to fully capture the concept of livelihoods (Scoones 2009). The most commonly used definition of livelihood is the one offered by Chambers and Conway which suggests that “A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living (Chambers and Conway 1991). The term “livelihood” seeks to capture not only what people do to make a living, but also the resources that enable them to do so, the risks they face in managing their resources, and the institutional and policy context that either supports or hinders their pursuit of a viable or improved standard of life (Mutenje 2010). Thus, the concept of livelihood is about individuals, households or communities making a living, attempting to meet their various consumption and economic necessities, coping with uncertainties and responding to new opportunities (de Haan and Zoomers 2005) cited in Mutenje (2010).

Livelihood provisions are short term measures to provide cash and consumables that households can use to manage their subsistence needs. This is essential to both resuscitate local markets and to limit the need for households to sell off productive economic assets out of desperation, thus leading to further economic deterioration.

Livelihood protection targets the restoration of pre-disaster livelihoods through replacing assets, capital and infrastructure lost in the disaster so that people can resume their pre-disaster livelihoods. Such programs generally involve mapping out the impact of a disaster upon livelihoods and providing aid to beneficiaries with pre-disaster livelihood experience. Livelihood promotion aims to improve the overall economic situation of disaster affected persons through a combination of increasing the revenue generation potential of pre-disaster livelihoods, diversifying the range of livelihoods available, helping persons with pre-disaster livelihood experience transition to new (and more beneficial) livelihoods, and encouraging the entrance of people without pre-disaster livelihood experience into the productive economy. This latter step represents an ‘opportunity for combining disaster reduction and development interventions in one unifying approach’, and is an example of linking reconstruction, recovery, and development

Vulnerability to hazards is often defined as a pre-existing condition, influenced by a variety of social, economic, and political structures (Cannon, Twigg, and Rowell 2003; Pelling 2003). Vulnerability can be defined as the “characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard” (Wisner et al. 2004). According to Khasalamwa (2009), focusing on vulnerability allows for an exploration of “variations in exposure to hazards as well as variations in people’s capacity to cope with hazards”. By focusing on the socially constructed nature of vulnerability, the larger-scale processes that are a reflection of the power relations in a given society are emphasized (Hewitt 1997).

Recognizing the role of vulnerability during the disaster recovery period allows programming to build on the previous knowledge developed in the field of vulnerability studies, and also provides a framework for identifying the goals and objectives of recovery efforts (Lizarralde, Johnson, and Davidson 2010). Reducing vulnerability during the post-disaster reconstruction and recovery period has been identified as a key strategy to reduce the likelihood of future disaster events (Birkmann 2006; Joakim 2011; Pelling 2003; Wisner et al. 2004). The importance of reducing vulnerability during the recovery period was highlighted by Clinton (2006) when he noted “a key test of a successful recovery effort is whether it leaves survivors less vulnerable to future hazards”. Yet in some cases, evidence has indicated that the post-disaster relief and reconstruction activities perpetuated systems of marginalization and vulnerability (Mustafa 2003; Wisner et al. 2004).

As vulnerability arises out of the social, economic, and political context that differentially distributes access to assets and power, as well as exposure to hazards, economic and livelihood activities play an important role in the production and manifestation of vulnerability. A livelihood can be defined as comprising “the capabilities, assets and activities required for a means of living” (Chambers and Conway 1992). Livelihood strategies and activities impact the level of income, access to resources, and assets that individuals and households can utilize in their response to hazardous events (Khasalamwa 2009). When disaster events damage

and destroy livelihood activities, these activities need to be restored, often through the assistance of government and humanitarian organisations (Mannakkara, Wilkinson, and Potangaroa 2014). Through effective livelihood interventions, vulnerability reduction should be achieved in order to result in improvements in the everyday living conditions of impacted populations. The literature suggests that vulnerability reduction should form a central component of the framing of livelihood recovery interventions. Unfortunately, in the face of trying to fulfil immediate basic needs and implement recovery programming under critical timelines, systematic planning and analysis is often ignored (Anderson and Woodrow 1998). Further, Mulligan (2013) notes that there are “few examples of good ‘transition planning’ to ensure that projects and programmes could be continued when the lead agency withdrew when they did withdraw, many funded projects and programmes collapsed”. This supports Edgington’s (2010) assertion that there is rising concern related to the lack of assessments and studies on the long-term impacts of recovery programming.

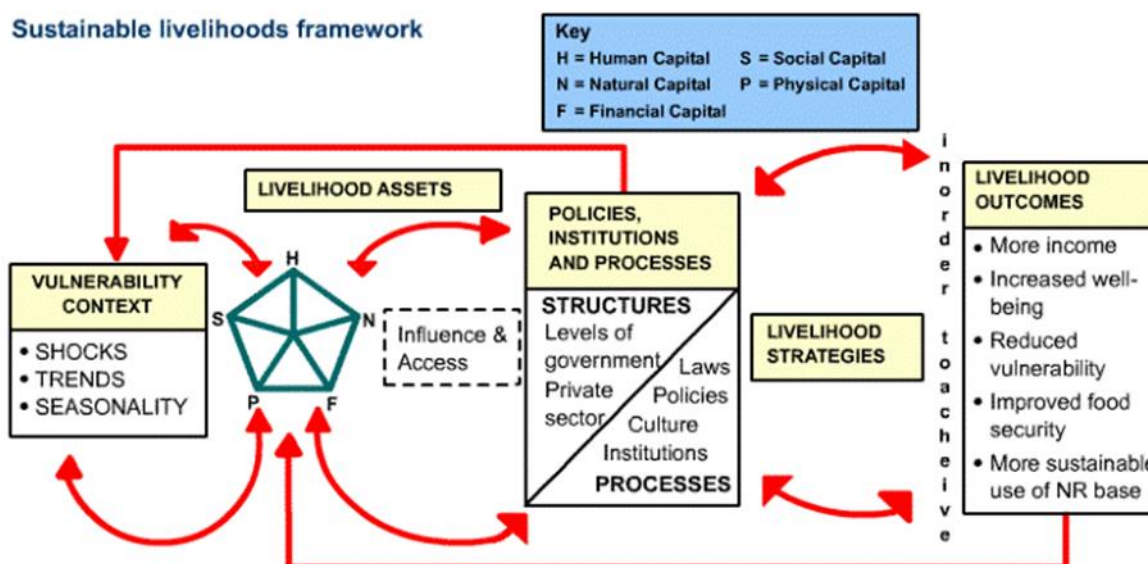
Conceptual/Theoretical Framework

Sustainable Livelihoods

Sustainable livelihood is secured ownership of, or access to, resources and income earning activities, including reserves and assets to offset risks, ease shocks and meet contingencies (Bairwa 2014). In the sense of linking social, economic and environmental issues, a sustainable livelihood can also be defined as when it can cope and deal fruitfully with the security of ecology, efficient economy and equal society (Singh and Hiremath, 2010). It can also be added that Sustainable livelihood refers to those livelihood activities that can cope and recover from stresses and shocks, maintain and enhance local and global assets, on which livelihoods depend, imparting bequests and opportunities for future generations (Ashley & Carney, 1999). Sustainable livelihoods are recognized as key determinants of food and nutrition security (Frankenberger & McCaston, 1998).

Sustainable Livelihood Approach

This study is guided by sustainable livelihood approach. According to Allison (2014), the livelihood approach recognizes the seasonal and cyclical complexity of livelihood strategies; supports to tackle access constraints to assets and activities that complement existing patterns; and identifies ways to make livelihoods more capable to cope with adverse trends or sudden shock and improve rural development policy and practice. The households’ ability to undertake various livelihood strategies depend on the different assets they own (Scones, 2009). Sustainable livelihoods are obtained when households are able to cope with uncertainties and shocks and able to improve the assets which they depend upon and also able to leave a bequest for the future generations. (Ashley & Carney 1999). The Sustainable Livelihoods Framework (SLF) forms the core of the Sustainable Livelihoods Approach and serves as an instrument for the investigation of rural households’ livelihoods (Amberntsson 2011). It serves as a good guide for livelihood analysis, implying that livelihoods are made up of the abilities, assets, and activities required to create a living. The terms “livelihood assets” and “capital” are interchangeable because they are both vital components of the SLF because they provide the foundation for people to build their livelihoods and achieve their objectives (Babington, 1999). Assets, together with the environment, determine the opportunity set of options for livelihood strategies (Ellis 2000)



The sustainable livelihood framework (DFID 1999)

Livelihood Diversification

In their quest for survival and to enhance their living standards, rural households establish a diversified portfolio of activities and social support skills, which is referred to as livelihood diversification (Ellis, 1997). Few people get all of their income from a single source, hold all of their money in a single asset, or spend all of their assets in a single activity, therefore diversity is the norm (Barrett et al., 2001). Livelihood diversification is further seen as an attempt by individuals and households to find new ways to raise incomes and reduce environmental risk (Hussein and Nelson, 1998). Livelihood diversification includes both on- and off-farm activities undertaken to generate income additional to that from the main household agricultural activities. Households may diversify through the production of other agricultural and non-agricultural goods and services, sale of waged labour, or self-employment in addition to other strategies undertaken to spread risk (Ellis 1997)

Resilience

In addition to the SL framework, social vulnerability, resilience, and social capital which have become dominant concepts in disaster scholarship provide a helpful supplementary framework for understanding the impacts on, and recoveries of, livelihoods following disasters. Wisner et al. (2004) define vulnerability as “the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of natural hazards” (Italics in original). The social vulnerability literature shows that some groups in society are more exposed than others to disasters and, therefore, more likely to suffer from their impacts (Wisner et al. 2004; Hewitt 1997). Thus, disasters are seen to exacerbate already existing inequalities. The disadvantaged and marginalized households in the communities are likely to have limited resources to safeguard their livelihood assets and may have fewer financial resources and opportunities to return to the status quo ante (Tierney 2019; Wisner et al. 2004). However, vulnerability scholarship can pathologise people and overlook their agency and adaptive coping capacities which they can use in the disaster recovery process (Hewitt 1997). Indeed, having already lived in miserable conditions, they may have developed everyday resilience to cope with such hardships, providing resources to draw on during disaster (Uekusa and Matthewman 2017). Similarly, the concept of resilience has also become a mantra in recent years in the aid and development sector, and is central to debates within the field (Levine et al. 2012; Manyena et al. 2011). It gained popularity due to its strengths-based conception in contra-distinction to the concept of vulnerability. While various definitions have been offered by different scholars and organisations, we use the following in this paper (DFID 2011).

Disaster Resilience is the ability of countries, communities and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses—such as earthquakes, drought or violent conflict—without compromising their long-term prospects. Resilience has been accepted by key international policies for Disaster Risk Reduction and development, such as Sendai Framework and Sustainable Development Goals. The etymological meaning of resilience is ‘to jump back’, derived from the Latin word *resilio* (Klein et al. 2003) or *resiliere* (Sudmeier-Rieux 2014). Resilience is, therefore, commonly viewed as the ability to “absorb the shocks” and “bounce back” from disasters. Nevertheless, resilience is not free from criticism. First of all, it has become a buzzword in the humanitarian-development sector (Alexander 2013). The strongest criticism of resilience discourse is that it is aligned with the neoliberal project. In this regard, the idea of resilience is orchestrated to deflect the state’s responsibilities to its citizens. Instead, victims are ‘responsibilised’. They must prepare for disasters, manage post-disaster trauma, and recover on their own (Davoudi 2018; Tierney 2015), often absent adequate resourcing. As with resilience thinking, the role of social capital in disaster recovery has received much attention in recent years). Social capital is generally defined as social trust, networks, and relationships that people can draw upon. Several studies have revealed that families and communities having high social capital are more likely to bounce back after disasters (Akbar and Aldrich 2018; Bhandari 2014; Nakagawa and Shaw 2004). These studies have shown that such communities with strong social connections and high levels of trust are likely to exchange knowledge, skills, finances or material resources (including labour) for rebuilding and recovery efforts and provide emotional support to cope with the stress. Hence, social capital is considered a crucial component. However, many scholars (see, for example, Bankoff 2015; Roberts 2019) have noted that social capital alone is insufficient to make a family or neighborhood resilient. Moreover, social capital is also predicated on exclusions: only some people are able to connect, only some are allowed to belong, and only some are trusted.

Livelihood Diversification

Diversification refers to income strategies of rural households in which households increase their number of economic activities regardless of the sector or location (Start, 2001). A household may own several livelihoods, despite each member specialised in a certain occupation. Income diversification denotes the augmentation of the variety of economic activity (agricultural and/or non-agricultural) at a specific moment. (Ellis, 1998). Livelihood diversification is characterised as an active social process wherein individuals or

households engage in the diversification of activities, both agricultural and non-agricultural, while continuously adapting a varied portfolio over time to ensure survival and enhance living standards. (Ellis, 2000b).

III. Materials and Methods

This section outlines the materials and methods that were adopted in the study. It covers description of the study area, the research approach, sampling strategy, data collection techniques, and ethical considerations for the study

Description of the Study Area

The climate in Chimanimani is warm and temperate. The mountainous eastern areas include the second-highest peak in Zimbabwe Mount Binga, which rises to 2440 m above sea level and experiences high rainfall of up to 1,400 mm per year (Government of Zimbabwe 2016; Chingombe and Musarandega 2021). The area is prone to tropical cyclones as it lies in the overland path of the cyclones from Mozambique and the Indian Ocean (DCP 2013). The topography is extremely rugged, with ranges of peaks and ravines that cause resistance to the movement of tropical cyclones. As a result, most of the strength of Cyclone Idai was directed at the eastern highlands of Chimanimani, concentrating heavy rains in the district. Chimanimani District's population stands at 134,940 and this population is 95% rural (ZimStat 2013). Communities in the district rely mostly on subsistence farming for livelihood. There are also commercial farmers in the district who grow crops to feed the province and nation. Communities also maintain sugarcane and banana plantations along streams and wetlands, which are a source of household food security and nutrition. Research has revealed that the district, apart from being prone to flooding, are also subjected to severe drought (Bongo et al. 2018).

Research Approach and Sampling

The study adopted a qualitative approach since the aim was to explore and learn livelihood options of the communities after Cyclone Idai. The qualitative research approach produces results mainly in the form of descriptive textual information (Kirton 2011). This research approach investigates issues such as people's opinions, feelings, and values; interpretations and responses; behavioral patterns; process and patterns; and often employs case studies, including critical incidents (Kirton 2011). Participatory action research (PAR) principles guided the execution of the research process. Participatory action research involves a cyclic process of research, reflection, and action (Marshall and Rossman 2006) that "offers a critique of, and challenge to, dominant positivist social science research as the only legitimate and valid source of knowledge" (Maguire 1987). The data collection process followed a multistage sampling technique, one that involves two or more stages of random sampling based on the hierarchical structure of natural clusters within the population. Clusters are natural groupings of people within a population for example, households (Sedgwick 2015). The qualitative study conducted key informant and household interviews, community mapping, focus groups, photographic descriptions, and other participatory approaches over the course of three months.

The study was conducted in the far eastern part of the Chimanimani District in Zimbabwe. A case study design focusing on community settings was used. The selected communities are: Ngangu, Rarthmore, Charleswood, Manase, Chisengu, Chikukwa, Charter, Ndima, Thorndon, Cambridge, Machongwe, Nyabamba, Dzingire, Rosecommon, and Ndakopa. The selection criterion was based on the fact that these districts were severely affected by Cyclone Idai in March 2019.

Data Collection Techniques

Both primary and secondary data were gathered to explore the problem of building-back-better in post-disaster recovery. The secondary data analyzed involved journal articles, special reports, books, and book chapters. This literature focused on disaster risk reduction, building-back-better, and post-disaster recovery. The study also considered publications on the Sendai Framework. This helped the researchers to construct new concepts and advance their theoretical framework (Noor 2008). To complement available secondary data, the study gathered primary data from the field using in-depth interviews and focus group discussions (FGDs). A total of 4 focus group discussions (FGDs) were conducted in the selected wards. Village heads assisted the researchers in selecting participants for the FGDs from the household survey sample, based on their availability and willingness to participate. The focus groups were fairly gender balanced, and each FGD had between 8-10 participants.

The participants discussed the causes of the cyclone, magnitude and impact, exposure, vulnerability conditions, the coping mechanisms, and the challenges they faced during and after the cyclone. In addition to the FGDs, 15 semi structured interviews were administered to 15 key informants: the provincial and district development coordinators, a rural district council officer, two chiefs, headmen, and village heads respectively, as well as an officer from the Social Welfare Services Department, Ministry of Women's Affairs, Environmental Management Agency, and Ministry of Youth Empowerment, the district schools inspector, three

representatives from the nongovernmental organization (NGO) sector, and two emergence shelter supervisors. The use of semi structured interviews allowed the researchers to generate descriptions of the Cyclone Idai affected communities, complementing the data generated through the household surveys and the FGDs.

IV. Findings and Discussion

The findings indicate that Cyclone Idai-induced floods seriously impacted human lives, infrastructure, and livelihoods of communities that had been living with flood risk and vulnerability. Build-back-better considerations were absent in much of the post-disaster recovery effort to address the cyclone disaster impact. Recovery should ensure the elimination of preexisting vulnerabilities and increase resilience to future hazard events (Palliyaguru and Amaratunga 2008; Mercer 2010). True recovery creates resilient, safer, and more sustainable communities through building-back-better, because when future disasters occur, the built environment and social settings of communities are disrupted less severely (Dube 2020). However, the floods and landslides disturbed the subsistence farming of food crops like maize, yams, beans, and vegetables. There was an overall decrease in commercial crop yields like bananas, hence significantly impacting people's livelihoods. Those thriving in the transport industry were concomitantly affected when agricultural produce plummeted for extended periods. Most banana fields were destroyed in Ndima, Ngorima, Machongwe, and Chikukwa leading to a slow recovery trajectory.

Livelihoods in developing countries are generally informal, subsistence-based, and farming or agro-entrepreneurship centred. Therefore, a high proportion of the population in developing countries engage in the informal sector economy, predominantly in agriculture, including livestock and fisheries (Coate et al. 2006; Daly et al. 2020; NPC/GoN 2015; Thorburn 2009). Further, their livelihood strategies are diversified (see Chatterjee and Okazaki 2018; Chhotray and Few 2012; Daly et al. 2020). Therefore, people in developing countries have multiple sources of livelihood which they live on, such as agriculture, small/micro-enterprises, wage labour or employment (temporary or permanent), and remittances (Eadie et al. 2020; He et al. 2018). After a catastrophe, livelihood recovery is often initiated with aspirations to build back better and strengthen resilience; however, many cases around the world reveal that such slogans tend to fade away quickly, and survivors return to their previous state of vulnerability due to the status quo or business-as-usual phenomenon (Chhotray and Few 2012). In this regard, Chhotray and Few argue that repetitive or recurring hazard contexts, poor institutional support, weak grassroots adaptive capacity, and a lack of sustained support are the main reasons for the lack of transformative changes to livelihoods even long after the calamity has taken place.

Chimanimani District has a mixed economy. Primarily subsistence agriculture and small-scale horticulture production in the communal areas are the main economic activity. The narrative accounts of the cyclone survivors indicate that small-scale horticulture producers in Chimanimani lost pumps, pipes, and generators for individual small irrigated plots and crops including sugar beans, potatoes, and bananas due to Cyclone Idai. One of the FGD participants said: "We lost a lot of farming equipment especially in small irrigation areas. Crops were washed away. Fields have been degraded and our livelihoods are at risk. I am not sure if we are going to recover what we have lost to Cyclone Idai." Participants recounted that, in addition to heavy physical, social, and economic losses, Cyclone Idai also killed people and livestock. Some people were reported missing.

In the immediate aftermath of the cyclone a widespread relief intervention was initiated by the Government, NGOs and national and international humanitarian agencies. Relief materials (foods, household goods, tools, clothes, etc.) had been distributed for about two years in order to reduce the sufferings of the Aila affected people. All the interviewed households had received relief for at least a year to meet their basic needs, but the amount was very limited. Furthermore, the relief operations were not well-coordinated at community level which led to overlaps and gaps. Most of the respondents received relief from the NGOs and the local Union Parishad, which was helpful in maintaining their livelihoods. However, all this played a minor role in restoring their livelihoods. The poor households were not therefore satisfied with such provision as they feel uncertainty of the sustainability of their livelihoods; instead, they want long-term employment opportunities. As one respondent noted: "... both government and NGOs provided different types of relief but they did not create any long-term working opportunity for the community people, by whom we might sustain our livelihoods".

Livelihoods 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 (Longley, 2006). After the phase of emergency assistance, initiatives were taken to rehabilitate the livelihoods of the affected communities. The impact of the disaster was greater on the already resource poor households as they had fewer resources to recover their livelihood. In response, the Government, NGOs and international development agencies were working to rehabilitate and recover the livelihoods of vulnerable communities affected by the cyclone through livelihood support and restoration of the damages

Diversification of livelihood strategies is commonly employed to cope with temporary crisis. Livelihood diversification is a process by which rural families construct a diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their standard of living (Ellis, 1998). People attempt to diversify their income portfolios into both on- and off-farm activities in response to a risk, when primary activities fail to satisfy their subsistence needs (Hussein and Nelson, 1999). The main disaster-coping strategy of almost all groups in the coastal zone is diversification of income sources. Instead of households depending on one or two activities, they now spread their working age adults over different activities and if possible, localities, thereby ensuring that problems in one area of their livelihoods have a lesser impact on them.” Livelihood diversification strategies of a household are determined by a wide range of factors such as ability of households to access credit (Dercon and Krishnan, 1996 cited in Hussein and Nelson, 1999). As such, researchers suggest that formal and informal institutions, social networks and NGOs also shape some aspects of livelihood diversification. Diversification of livelihood activities appeared as a key factor because intensification of primary activities is not possible in the SIZ. Livelihood of the region has unique characteristics as it tremendously depends on SRF about 18 percent of households in the area depend on the forest, although agriculture is still the mainstay of the economy in the region . Almost all the male respondents predominantly depended on the forest for maintaining livelihoods, although they really wanted to reduce their dependency on the Sundarbans.

V. Conclusions and recommendations

The Cyclone Idai disaster exposed policy gaps in Zimbabwe’s disaster risk management system. The interviews with the key informants revealed that Chimanimani District, like any other district in the country, observed a number of policies. Some of those policies were national while others were local instruments. The study is sought to explore the livelihood options after disasters .

This research identifies a set of socio-political factors and unequal access to the necessary capitals impeded the process of coping and recovery of the households. The interviews suggest that there is need for initiatives that seek to address these root causes of the households’ vulnerability. Most of the respondents highlighted that vulnerability was already existing and the disaster further exposed them. local coping and recovery strategies, such as livelihood diversification and migration proved to be the main livelihood alternatives for recovery.

The Government and NGOs took initiatives with the support of the international development partners in order to increase the coping and recovery capacity of the community but it only partially satisfied their consumption, so that the long-term impacts of such responses were not enough to recover livelihoods. This research identifies a set of socio-political factors and unequal access to the necessary capitals impeded the process of coping and recovery of the households. The interviews suggest that there were no initiatives to address these root causes of the households’ vulnerability. Most of the respondents cast doubt on the initiatives of disaster recovery as they did not lead to long-term recovery. Moreover, long-term relief and rehabilitation programmes hindered the local recovery process. Local coping and recovery strategies, such as informal credits, livelihood diversification and migration proved to be the main livelihood alternatives

The most important component of coping and recovery of the poor households is rather access to natural resources such as forest, land and water. The Government of Zimbabwe, the UN, and NGOs’ rehabilitation projects hardly considered the access to resources in order to reduce disaster risks and promoting early recovery ,rather their focus was on immediate response to the disaster without considering the long-term sustainability of livelihood strategies. Coping and recovery strategies based on indigenous strategies have been far more significant than external assistance. Following many generations of experience, people of the study village have learned to cope with disasters in their own ways. Although they have limited options, people are increasingly searching for alternative livelihood strategies to adapt to the reality of severe disruption of their livelihoods. Due to lack of financial and physical capital, households increasingly rely on natural, human, social capitals, but these capitals are not enough for making them resilient. Risk reduction strategies therefore need to capitalize on the inherent social and cultural capacities of the communities.

The results of the research suggest that livelihood programming initiated by government and NGOs should consider taking an integrated approach to livelihood programming, particularly when interventions are focused on developing entrepreneurial activities. Varying forms and levels of assistance should be provided over an extended period of time and in a manner which is sufficient to allow for maintained livelihood sustainability once assistance programming has completed. While it is difficult to define appropriate timelines for recovery interventions, as each disaster presents different conditions, a clear understanding of the capacities and needs of impacted populations can help to determine appropriate length and type of strategies implemented. A holistic and integrated approach can be defined through the consideration of four key livelihood supports:

- Provision of capital and credit facilities to support the initial phases of starting a business.
- Provision of training to promote skills to make quality products.
- Marketing and networking support to promote the sale of products.

- Implementation of a diversity of livelihood options.

In addition, Recent disaster recovery literature from government and humanitarian organisations has discussed “building back better” and using the “window of opportunity” to reduce vulnerability and improve upon pre-disaster conditions. Our research suggests that recovery programming offered by government and humanitarian organisations resulted in limited improvements in livelihood conditions for much of the impacted population in the Yogyakarta case study. Although livelihood programming was an identified part of the overall recovery effort, our results found a lack of holistic and longer-term projects, and a related lack of attention paid to interactive relationships between physical and socio-economic reconstruction efforts. The effectiveness of programming was also influenced by pre-existing capacities and networks – in particular those of local leaders, community dynamics, and unpredictable external factors such as weather and pestilence. The results of this study suggest that organisations involved in livelihood programming promoting entrepreneurial activities, whether government or non-government, should make every effort to integrate a holistic strategy to facilitate vulnerability reduction. As appropriate to local contexts, we argue that effective strategies will emphasise well-informed and early intervention, and will focus on replacing assets, providing capital and credit to jumpstart entrepreneurial activities, capacity and skill building, as well as developing markets and networks to support and develop longer-term and sustainable changes in the socio-economic conditions of disaster affected populations.

Coping and recovery strategies based on indigenous strategies have been far more significant than external assistance. Following many generations of experience, people of the study village have learned to cope with disasters in their own ways. Although they have limited options, people are increasingly searching for alternative livelihood strategies to adapt to the reality of severe disruption of their livelihoods. Due to lack of financial and physical capital, households increasingly rely on natural, human, social capitals, but these capitals are not enough for making them resilient. Risk reduction strategies therefore need to capitalize on the inherent social and cultural capacities of the communities.

The results highlight that livelihoods recovery aid/assistance provided by the state and non-state actors was a crucial, useful and appreciated disaster recovery strategy in resource-poor settings; however, there can be problems in their implementation that may wittingly or unwittingly follow established vectors of inequality, in turn amplifying them.

The study found that livelihood assistance in the study area was predominantly related to human capital, physical capital or financial capital (referring to the asset pentagon of the SL framework). Social capital—for example, sharing of food—was evident during the emergency phase following the earthquake (see Karki et al. 2022b) and during the housing reconstruction process—for example, the mutual exchange of labour (see Karki et al. 2022a; Gautam and Cortés 2021; Panday et al. 2021). However, this important capital was less recognised and underutilised in the livelihood recovery programming/process. We reiterate that social capital—and natural capital too—are also crucial for sustainable livelihood recovery and resilience. We also acknowledge that mobilising these capitals is challenging due to social exclusions (e.g. caste and gender-based discrimination) and the unequal distribution of natural resources between different caste and ethnic groups.

Further, the research revealed that the “replacement” or “restoration” concept (the idea of regaining what was lost or damage ed by a disaster) is problematic as it overlooks the pre-disaster vulnerability of poor and marginalised households who experience disproportionate disaster impacts. We also showed how this phenomenon benefits the elites or relatively better-off people in communities. Therefore, this suggests that without pro-poor recovery policies and programmes, pre-disaster inequalities between the haves and have-nots are likely to continue, if not grow, in post-disaster environments.

Congruent with Daly et al. (2020) the study shows thatthe need to link livelihood relief, rehabilitation and recovery/development. This necessitates the adoption of a holistic livelihood recovery process rather than piecemeal and fragmented livelihood assistance. Further, any new commodity or technology should be carefully assessed to ensure its suitability, viability, and effectiveness in the contexts in which they are to be used so that such initiatives do not create unnecessary dependency on either the market or external actors. Now, the paper argues that local people’s position and ability to own or have control over the means of production is crucial for resilient livelihoods.

Further, it showed that the earthquake survivors had to go through a second disaster (the Covid-19 pandemic) before fully recovering from the devastating impact of the earthquake. In this regard, it is critical to address the needs of the most marginalised households who were hit hard by two life-threatening disasters, one after another in a relatively short period of time.

Finally, in contrast to what may commonly be believed, disaster survivors are, as has been shown, not passive recipients of humanitarian assistance. Therefore, they should be recognized and encouraged for their willingness and ability to bring about positive changes in the livelihood situation of their families and communities.

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