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# The Reconstruction of Livelihoods by Survivors of Cyclone Idai in the Chimanimani District of Zimbabwe

# 10

Itai Kabonga, Smart Mhembwe, and Cowen Dziva

## Abstract

Cyclone Idai remains the most severe cyclone to befall Zimbabwe to date. The tropical cyclone led to loss of human life and livestock, and massive destruction of property and livelihoods. The magnitude of the cyclone left many survivors displaced, heartbroken, shocked, traumatised and in a quandary regarding how to survive after the disaster. This chapter documents how survivors of the debilitating cyclone Idai are reconstructing their livelihoods in the aftermath of the disaster. The study uses the sustainable livelihoods framework (SLF) to understand the survivors' utilisation of human agency as they search for livelihoods in the aftermath of cyclone. The utilisation of the SLF allowed the researchers to analyse the assets used by survivors of cyclone Idai in the reconstruction of livelihood strategies and the vulnerability context in which the livelihoods

being reconstructed are embedded. For this qualitative study, data were obtained through interviews with survivors of cyclone Idai, observation and review of documents. The study was confined to the Ngangu and Kopa areas of Chimanimani district in the Manicaland Province of Zimbabwe. The study established that survivors of cyclone Idai are pursuing agriculture, alluvial gold panning, informal trading, migration, gambling and prostitution as livelihood strategies. The survivors' reconstruction of their livelihoods is based on diversifying their livelihood strategies albeit with a myriad of challenges. In light of the challenges, the study recommends resourcing and capitalisation of survivors in areas where they have comparative skills and capacities to ensure the sustainability of post-cyclone Idai livelihood reconstructions.

## Keywords

Reconstruction · Livelihoods · Cyclone Idai · Chimanimani · Survivors

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## 10.1 Introduction

Incidences of natural disasters are on the increase with wider implications on the survival of people and the environment in every region of the world,

especially as a result of increased floods and tropical cyclones (Oxfam International, 2013). Zimbabwe has been previously affected by natural disasters in the form of cyclones and floods, notably cyclones Eline, Gloria and Dineo. Even with this experience, cyclone Idai of 2019 stands to be by far the most horrendous and perilous when one looks at the trail of destruction it left in Chimanimani, Chipinge and other parts of Zimbabwe (Government of Zimbabwe, 2019a; Chatiza, 2019). An estimated 340 people lost their lives as a result of cyclone Idai (Chatiza, 2019). Some were killed by collapsing houses while others were swept away by flooding roads, streams and rivers. Other impacts of cyclone Idai range from loss of property and destruction of amenities, road network, agricultural land and crops (Government of Zimbabwe, 2019a, b). In relation to agriculture, arable land and infrastructure at smallholder irrigation schemes were destroyed thereby affecting farmers and surrounding communities who relied on them for food security and income gained from performing casual labour (RINA, 2019). Farmers also lost their livestock including cattle, sheep, goats and poultry.

Globally, disasters cause both direct and indirect effects on people's livelihoods (Yang et al., 2018). Similarly, the economic and social well-being of the general populace, infrastructure and the environment are heavily affected, thereby straining government finances and services to the needy (Lal et al., 2009; Yang et al., 2018; Chapagain and Raizada, 2017). In the same vein, Idai significantly destroyed people's livelihoods in the Chimanimani district (Government of Zimbabwe, 2019a; Chatiza, 2019). When cyclone Idai hit the Chimanimani district, formal and informal enterprises on which people relied for survival and employment were destroyed (RINA, 2019). For many entrepreneurs, their market stalls and workshops were destroyed, and tools of trade washed away by the floods. Similarly, social amenities, shops and industries which residents depended on for basic needs in the Ngangu and Kopa area were destroyed by cyclone Idai. Several houses were totally or partially waterlogged and destroyed by the sudden water surge

in the affected areas (Government of Zimbabwe, 2019b). As a result, people's cereal/grain reserves and savings in the form of cash were either contaminated or washed away (Chatiza, 2019). This destruction of economic safety nets negatively affected survivors' access to basic services and needs including food, shelter, water, education and health facilities.

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 utilised to build resilience and sustainable livelihoods for survivors in post-disaster situations.

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## 10.2 Literature Review

In Sri Lanka, the 2004 Tsunami disaster destroyed the livelihoods of people especially those who were settled along coastal areas such as fisher folk, rice farmers and coconut producers (Oxfam International, 2008). Interestingly, most of the affected communities were able to recover and restore their livelihoods through the assistance and support rendered to them by, mainly, aid agencies (Oxfam International, 2008). On the other hand, when the Philippines was hit by a tropical cyclone Onday, in 2009, it witnessed its poverty levels doubling in the years that followed as communities struggled to recover from the noticeable devastating impacts of destroyed homes, schools, hospitals and livelihoods (Oxfam International, 2013). The Oxfam study further noted how communities lost their businesses, jobs and services while children missed school and girls became vulnerable to risks of early marriages and other vices. Under such circumstances, it is critical to note that aid agencies focus more on emergency relief whenever disasters struck.

Thus, immediate necessities in the form of food, water, shelter kits and hygiene kits are often provided by aid agencies (Chapagain & Razada, 2017; Kamal, 2013; Joakim & Wismer, 2015). Even with this support, little attention has been paid to the long-term recovery of affected communities (Kamal, 2013; Chapagain & Raizada, 2017). The limited attention often emanates from resource constraints, lack of disaster preparedness strategies, the remoteness of areas affected and policy and implementation shortfalls among other reasons (Chapagain & Raizada, 2017).

The aftermath of cyclone Idai, just like post-disaster situations in other countries, created a humanitarian crisis in which survivors heavily relied and continue to rely on humanitarian aid (Government of Zimbabwe, 2019a; Chatiza, 2019). In the majority of cases, the humanitarian aid came in the form of tents, drinking water, food hampers, clothes, blankets and utensils among other goods urgently and mostly needed by affected communities (RINA, 2019; Chatiza, 2019). Survivors also received financial aid in the form of cash from NGOs to boost their livelihoods and cater for their monetary needs (Joakim & Wismer, 2015). These interventions sought to boost the survival strategies of survivors, consequently reducing vulnerabilities (Kamal, 2013; Chandrasekhar et al., 2019). In some cases, survivors' children get scholarships and other forms of educational support to continue with their education (Kamal, 2013; Joakim & Wismer, 2015). Able-bodied men and women survivors also went for casual employment in public works to reconstruct and restore infrastructure in affected areas (Kamal, 2013). With these opportunities and capacity building for disaster risk reduction, many survivors' potentials are strengthened for quick recovery and the building of resilience.

However, many post-disaster interventions have been subjected to criticism due to their narrow focus on the reconstruction of physically damaged public amenities. In a way, the post-disaster interventions tended to focus on the short-term needs of survivors as opposed to their long-term needs. In many post-disaster situations, there is relatively little attention to the reconstruction and rehabilitation of survivors'

livelihoods, particularly of the poor and marginalised, whose livelihoods depend on fewer assets due to their subsistence level of consumption (RINA, 2019; Hallegatte et al., 2017). The situation is worsened by the fact that the measurement of the severity of disasters is arrived at through focusing more on the socio-economic impacts, where assessment is done by looking at the value of disaster inflicted damages on buildings, infrastructure, equipment and agriculture production, but without necessarily providing detail on how people's well-being has been affected (Hallegatte et al., 2017).

An attempt to focus on the poor has largely concentrated on the inclusion and exclusion criterion for beneficiaries. As Kamal (2013: 40) observed, during the post-cyclone Alia period in Bangladesh, access to services and opportunities was not fairly made available as those who were well connected to decision-makers benefitted most ahead of the most deserving poor. Kamal further lamented how "most vulnerable people failed to enjoy work opportunities as the selection process was captured by the local power brokers" (Kamal, 2013: 40). Most services and investments by emergency actors (NGOs, CSOs and others) were short lived and not enough for survivors to rediscover sustainable livelihoods. This, therefore, limited the effectiveness of the support to sustainably improve survivors' capacity for resilience and long-term enhancement of their self-recovery. This study reveals complaints regarding how aid from non-state actors was sometimes hijacked by politicians and community leadership ahead of their intended beneficiaries after cyclone Idai.

The above observation however has proven to be a common trait in disaster-stricken communities considering also that in Nepal much of the food aid and money that was provided by both foreign agencies and other governments in the aftermath of an earthquake that occurred in 2015 were not properly utilised in a way that benefitted those who were severely affected (Chapagain & Raizada, 2017). Post-disaster rehabilitation and reconstruction interventions spearheaded by externals are criticised for failing to consider the "social feasibility" of survivors (Kamal, 2013).

In Bangladesh, NGOs failed to come up with projects and programmes compatible with “local needs and aspirations, existing livelihood strategies, economic and social structure, gender differences and the culture of affected communities and households” (Kamal, 2013: 40). Furthermore, when Nepal experienced floods and landslides in 2011, only 6% of the very poor people managed to access government support as compared to 90% of the well off, an indication that coverage of the poor by social protection is often low as they tend to receive less post-disaster support (Hallegatte et al., 2017). Besides the above challenges, poor people often have difficulties accessing aid which is usually limited in supply against a multitude of desperate survivors who largely rely on such aid for survival.

Against these problems, survivors are often propelled to pursue alternative strategies to reconstruct their livelihoods after disasters. In addition to reliance on aid after cyclone Aila in Bangladesh, survivors also invoked their individual resources and social networks in rehabilitating and reconstructing their livelihoods (Kamal, 2013). Despite this evidence of increased efforts to reconstruct livelihoods by survivors of disasters through external aid, there remain limited studies that seek to understand this phenomenon in post-cyclone Idai disaster. Emerging academic and grey literature after the 2019 cyclone Idai in Zimbabwe (Chari & Ngcamu, 2019; Mashizha, 2019; Mhlanga, et al. 2019; Chatiza, 2019) failed to provide a nuanced analysis of how survivors utilise their capitals and capabilities to reconstruct livelihoods. Thus, literature has focused more on the post-disaster impacts on peoples’ livelihoods without focusing on the strategies adopted by affected communities in restoring their livelihoods.

### 10.3 Materials and Methods

This explorative study was based on qualitative evidence gathered in the Chimanimani district, mainly from the Ngangu and Kopa areas. The qualitative approach chosen was appropriate for this little known phenomenon, where the topic

needed to be explored in small “case” areas like Ngangu and Kopa. These two areas were heavily affected when cyclone Idai hit Zimbabwe in 2019. Data for this qualitative study were mainly gathered from the interviews conducted through administering household questionnaires for 2 weeks to survivors of cyclone Idai in the Ngangu and Kopa areas. During the 2-week period, slightly above 50 questionnaires were administered to heads of households, who were purposively and conveniently selected. While the questionnaire administration was envisaged to take the semi-structured interview form, many of the interactions that followed turned unstructured as survivors ended up narrating their ordeals and reconstruction efforts without following the structured format. With consent from survivors, some conversations were recorded for later transcription. The study also benefited immensely from field observations through transect walks in camps to observe the activities that survivors were engaged in trying to reconstruct their livelihoods in the post-disaster period.

The study also benefited from interviews with key informants, including humanitarian workers from government, NGO officials and community leaders, to fully understand survivors’ recovery processes. A total of 10 key informant interviews were conducted by the authors. The authors also reviewed reports, communications, journal articles and books on cyclone Idai and similar disasters of this nature around the globe and this helped in shaping the orientation of the study. Data from the study were thematically analysed and presented.

The study observed varied ethical issues including ensuring that participants voluntarily agreed to participate in the study. There were no repercussions for refusing to participate in the study. To ensure confidentiality and anonymity, collected data were never disclosed to anyone. Anonymous names were used for the participants in the study.

For the sake of credibility and dependability, the study employed several strategies like multiple data collection methods (triangulation) to allow corroboration of findings. This allowed the study to move away from relying on a single data

collection strategy. To ensure dependability, findings were taken to the participants for confirmation before presentation. Throughout the interview process, the authors employed probing to get clarity on certain areas.

## 10.4 Theoretical Framework

The study uses the sustainable livelihood framework (SLF) to understand the reconstruction of livelihoods by survivors in the Chimanimani district who were affected by cyclone Idai. Furthermore, the study appreciates the importance of the human agency in the reconstruction of livelihoods. The human agency perspective argues that human beings have the capacity to make independent and free choices.

### 10.4.1 Sustainable Livelihoods Framework (SLF)

Besides the use of the human agency approach, the study was guided by the SLF. In explaining the SLF, Scoones (1998: 3) asserts that:

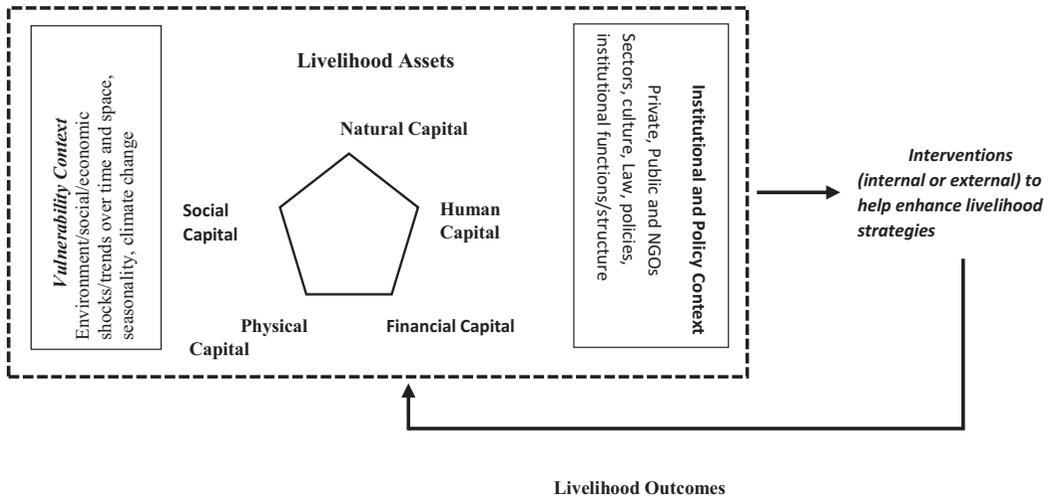
Given a particular *context* (of policy setting, politics, history, agroecology and socio-economic conditions), what combination of *livelihood resources* (different kinds of capital) result in the ability to follow what combination of *livelihood strategies* (agricultural intensification/extensification, livelihood diversification and migration) with what *outcomes*? Of particular interest in this framework are the *institutional processes* (embedded in a matrix of formal and informal institutions and organisations) which mediate the ability to carry out such strategies and achieve (or not) such outcomes

For Solesbury (2003) the framework highlights five interacting elements, which are livelihood assets, vulnerability context, institutions, livelihood strategies and livelihood outcomes as shown in Fig. 10.1. There are five key livelihood assets within the SLF as shown in Fig. 10.1. These are financial capital, natural capital, human capital, social capital and physical capital. Livelihood strategies are a consequence of a combination of capital that households have access to (Scoones, 1998; Chitongo, 2013). The

livelihood strategies being pursued by survivors of cyclone Idai are a function of access to livelihood assets. The study seeks to unpack the livelihood assets that survivors of cyclone Idai are relying on in the reconstruction of livelihood strategies. The vulnerability context is a key element of the SLF. The vulnerability context refers to events that determine the ability of households to pursue livelihood strategies, including shocks and stresses. For Moser (2009), the vulnerability context has implication on access to livelihood assets and livelihood strategies. That is why Solesbury (2003) argues that the vulnerability context can inhibit the livelihoods of households. Chevo (2018) identifies two types of shocks, which are covariate shocks that affect the whole country or entire community, usually in the form of economic depression or natural disasters. Idiosyncratic shocks are more confined to the household and amount to the sickness or death of a family member.

Institutions are an important component of the SLF. Giddens (1979) defines institutions as regularised practice (or patterns of behaviour) structured by the rules and norms of society which have persistent and widespread use. Literature also refers to this as the PIP box—processes, institutions and practices (Scoones, 1998; Chevo, 2018; Dube, 2017). The PIP box also plays an important role in limiting the impact of shocks and stresses on households' livelihoods. Households' access to capital is mediated by institutions like business, civil society and government. Again, policies and culture play an important role in access to capital.

Also, an important element of the SLF are livelihood strategies. Livelihood strategies are a combination of the households' activities fashioned to achieve livelihood outcomes (de Haan, 2012). Dube (2017) on the other hand submits that livelihood strategies are implementable and are designed to achieve certain livelihood outcomes. These livelihood strategies are a function of having access to livelihood assets. Gardening, gambling, buying and selling, chicken rearing and food processing as livelihood strategies by survivors of cyclone Idai are determined by access to a wide range of livelihood assets.



**Fig. 10.1** Showing the sustainable livelihoods framework. (Source: Ellis, 2000)

Livelihood outcomes emanate from livelihood strategies employed by households. Household livelihood strategies must result in the following livelihood outcomes: increased income, improved well-being, reduction in vulnerability, improved situation of food security, sustainable use of the available natural resources, improved social relations and status, as well as improved dignity and respect (Ellis, 1998).

livelihoods. Hitlin and Elder (2007) speak of human potentiality. Survivors of cyclone Idai are knowledgeable and have potential to navigate difficult situations. They also have natural rights, entitlements and privileged mental states (Fuchs, 2001) which allow them to make rational decisions in the reconstruction of their livelihoods (Kapodogo et al., 2013).

### 10.4.2 Human Agency Approach

The study also used the concept of human agency to understand the reconstruction of livelihoods in the aftermath of cyclone Idai. For Barker (2005), agency denotes the capacity of individuals to act independently and to make their own free choices. The basic argument of the human agency approach is that human beings are imbued with potential to fight off the challenges affecting them. Thus, though constrained by structure (in the context of cyclone Idai and its effects), survivors have agency to reconstruct their livelihoods. Put in other words, as agentic individuals, survivors of cyclone Idai have the potential to bounce back after the disruption of their livelihoods. Agency, in this context, denotes the capacity of the survivors of cyclone Idai to choose several livelihood strategies after the disruption of their

## 10.5 Presentation and Discussion of Finding

### 10.5.1 Livelihood Strategies Pursued by Survivors of Cyclone Idai

The study discovered that the survivors of cyclone Idai are pursuing multiple livelihood strategies to survive in a difficult environment. Despite having limited land in camps, survivors are displaying agency in post-disaster recovery. Many of those living in camps are involved in a number of livelihood strategies including gardening, chicken rearing and food processing. Households in Ngangu Camp 1 are growing vegetables, beans and maize around their tents. An interviewed head of household said:

.....before the cyclone, I used to have a good place for growing food for my family but all that is gone now ... I could not just sit and wait for NGOs to

come and assist us. In any case, the food that we are receiving is not enough; therefore, I had to grow something outside my tent. See how my vegetables are growing although the space now is not enough. I intend to sell them and earn extra income (Household head 3).

As agentic individuals, survivors of cyclone Idai are not just waiting for NGOs and the state for food assistance but are showing their ingenuity as they grow crops within their constrained camp environment. In Ngangu Camp 1, survivors managed to terrace the slope and grow their vegetables. Some survivors were engaged in agricultural intensification and intercropping. During transect walks in Ngangu camps, it was common to see vegetables such as rape intercropped with maize and even legumes such as sugar beans. This shows that human capital is important in post-disaster survival. The availability of water (natural capital) in abundance has assisted in the fostering of gardening as a livelihood strategy. As a result of participating in horticulture, the availability of food in the household is guaranteed. This was supported by a respondent who said:

...the most important thing that the people in this camp require is food. Without food there is no life. The few beds of vegetables that I have allow my family to have something to eat. The good thing is that there is water; therefore, I can grow something although the space is limited (Household head 5).

Households producing enough for consumption are selling surplus to fellow camp dwellers as narrated by one respondent: "...you can see this is a small place, but I am producing enough for my family and I am also selling to my neighbours" (Household head 3). The selling of gardening produce enables households to earn extra income. Income ranks as one of the basic needs required by households emerging from a disaster. Before cyclone Idai, Household head 3 was involved in horticulture, producing vegetables for sale. The researchers observed the attempts by Household head 3 to resuscitate his agriculture livelihood strategy under a changed environment.

This respondent is now living in a camp awaiting resettlement.

Besides growing food crops, some households are going further to process and preserve the produce from gardening. Vegetables from gardening are being sun dried and stored for future use as explained by one of the respondents in the study:

...you do not know what the future holds, so it is always good to stay prepared because when the cyclone struck, we were left with completely nothing. I am drying my vegetables so that I can have somewhere to fall on when hardships strike. The donors assisting us will not stay forever and in this recovery period their support has declined (Household head 1).

The drying and processing of vegetables is not only a livelihood strategy but also a way to insure against future shocks and stress. As the survivors of cyclone Idai are not sure about their future, food preservation is an attempt to hedge against future uncertainties. Value addition to vegetables demonstrates the capacity of survivors of cyclone Idai to innovate in a bid to survive in the difficult situations they find themselves in. Even during difficult periods, human beings have the potential to be innovative.

One other noted strategy by survivors of cyclone Idai was engagement in informal vending as they try to reconstruct livelihoods after Idai disaster. While some respondents reported that they were engaged in these income earning activities prior to the disaster, many survivors, including men who never thought of vending, are now actively involved in entrepreneurship. For women, many of these newcomers in vending are widows who lost breadwinners as a result of the disaster. Similarly, women with husbands who migrated to seek employment in towns and even in neighbouring countries, including Mozambique and South Africa, are also pursuing vending. While walking in the streets of Ngangu, the authors could see men and women behind vegetable market stalls. In some instances, the businesses were family managed by both the husband and wife. As one male respondent explained:

...I used to work at a company that was making fruit crates, but it was destroyed by cyclone Idai and all the machines were flooded and this left us with no other source of income. So, I decided to come and assist my wife at her market stall which she established after the disaster (Household head 2).

Indeed, this vignette exemplifies the reasons why most male respondents decided to join vegetable and fruit vending after cyclone Idai. In their explanations, the shift was necessitated by the need to make ends meet and raise money to purchase tools for their trades, which were eroded by the devastating cyclone. Evidence in the above narrative is that disasters like cyclone Idai contributed to the alteration and reordering of gender roles at household level as the family pulls together in the bid to survive.

The uniqueness of the entrepreneurship ventured into by survivors from the Ngangu area is their resourcefulness and tenacity to prop up livelihoods without waiting for external benefactors to reconstruct their livelihoods as is usually the case with most disaster-stricken communities. For instance, Joakim and Wismer (2015: 10) observed, after the Yogyakarta earthquake, the Government of Indonesia and NGOs buttressed livelihoods through “provision of assets to support entrepreneurial activities, including kitchen tools, sewing machines and construction tools; provision and establishment of micro financing institutions to provide support to re-establish damaged business activities; agricultural support through seeds and fertilisers, as well as provision of livestock to support animal breeding programmes; capacity building and training activities to develop new skills, particularly in relation to construction and food production”. In Sri Lanka, following the 2004 Tsunami, development agencies such as Oxfam provided short-term interventions to help particularly coir producers, who were largely women, to restore their incomes through supporting their local mills with raw materials that the agency shipped from less affected areas. At the same time, wages were offered to the women for them to restore their coir pits (Oxfam International, 2008; Mulligan, 2013).

In some instances, survivors of cyclone Idai, especially male household heads, were found engaged in gambling as a livelihood strategy. In venturing into this practice, adults sometimes used proceeds from vending, remittances and cash transfers from NGOs, hoping to win and earn more money:

...the people in the tents are getting some money from NGOs. This has resulted in some male households participating in gambling because most of their workplaces have been affected, so the majority of them are not currently going to work. There are however some who are making a living from this gambling (Key informant 2).

As a result of the disruption of livelihoods by cyclone Idai, socially unacceptable behaviours like gambling and prostitution have increased in the Chimanimani district. It emerged from the study that young girls and middle-aged women are increasingly engaged in prostitution as a survival strategy. The study revealed that prior to the disaster, it was mainly men as husbands who were taking care of their families, but after the cyclone, the majority of them lost their sources of livelihoods, something that prompted women and girls to engage in prostitution. A respondent explained that:

...in general terms, cyclone Idai disrupted the way of life of many people in Chimanimani. It is a difficult situation. In order to survive people are trying different things. Even prostitution has emerged as way to raise income for the impoverished. If you visit the beer halls, the number of women loitering for the purposes of prostitution has drastically increased (Key informant 1).

The sight of young women milling around beer halls was detested by many community members. In many cases, community leaders bemoaned how this prostitution has increased teenage pregnancies and the spread of sexually transmitted diseases in the community. This finding confirms the views of the Rapid Impact and Needs Assessment (RINA, 2019: 71) that survivors’ idleness and limited livelihood options “may lead to risky sexual unions that could further spread sexually transmitted infections (STIs)”. The finding further confirms the study

by Hallegatte et al. (2017) that disasters force people, especially from poor households, to adopt choices with irreversible effects on their well-being (education and healthcare), and that this normally has a tendency of reinforcing the intergenerational transmission of poverty.

It also emerged from this study that some of the survivors are engaged in criminal, illegal or even risky ventures to survive in the precarious post-cyclone Idai era. These activities range from selling drugs such as marijuana, and illicit alcoholic drinks such as spirits or high alcohol content beer often smuggled from Mozambique. They also engage in gold panning as well as robbery and theft. Tent residents at the Ngangu camps complained of increased cases of theft of their food, utensils, clothing and linen when they go out for casual work and vending. Due to limited security in camps and tents, many survivors have fallen victim to theft, thus, undermining their efforts to reconstruct their livelihoods in the aftermath of cyclone Idai. The goods being stolen clearly show how these thieves desire to meet their basic needs in the absence of other survival options. While in many instances the thieves and robbers remain unknown, many survivors point fingers to fellow survivors who stay in the camps, who strike after closely monitoring the survivor's routine movements. This shows that while the tent residents are trying to survive by combining several strategies, their efforts make them vulnerable to fellow residents whose livelihood strategies encompass anti-social behaviours like theft and robbery.

The community confirmed how able-bodied men whose livelihoods were disrupted in areas affected by cyclone Idai are joining alluvial gold panning along the Nyahode, Nyabamba and Risitu rivers. Besides the fact that these options are illegal ventures, they are also perilous endeavours as many participants risk losing their lives. Some of the areas where survivors consider going for gold panning are code named: *musanditeera* (when I am out working do not bother following me), denoting how the area is deemed to be a death trap. Fully aware of the associated risks, able-bodied survivors have limited options as they are desperate to make ends meet. The find-

ings on the increased participation of cyclone Idai survivors in precarious ventures largely confirm the observation by Joakim and Wismer (2015) that limited livelihood options, idleness and unemployment force disaster survivors into illegal ventures. When disasters such as cyclone Idai strike, many survivors' livelihoods are destroyed. While a few survivors, especially those in formal employment and with insured assets, can gradually recover from the losses, the majority become destitute and remain in dire need of any form of employment or activities that enable them to earn some income. This may mean the continuation of involvement in risky alternative activities to earn incomes.

### 10.5.2 Diversification of Livelihood Strategies

In an effort to recover from the effects of cyclone Idai, survivors are largely attempting to diversify their income portfolios into many activities to satisfy their subsistence needs. Livelihood diversification is a process by which 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). In some instances, able-bodied men and women who survived the disaster migrate to towns or neighbouring South Africa and Mozambique in search of employment. In such cases, the remittances from migrants have become a pillar in the reconstruction of livelihoods. As Hussein and Nelson (1999) argue, migration forms a central component of rural people's risk mitigation strategies. The remittances from migrants are being used by those left behind to start small business ventures like vegetable vending and chicken rearing.

Concomitantly, the remaining working-age adults are engaged in piece jobs to boost livelihoods. As shown by previous studies (Dercon & Krishnan, 2005), diversification is dependent on many factors including the availability of capital and skills possessed by survivors. While the availability of capital has seen some survivors engaging in income-generating activities, having

social capital and structural skills was also found to be key in survivors' ability to get casual work with companies and government departments involved in the reconstruction of roads and schools, and gully reclamation. While most people are benefiting from casual work, those with social capital and structural skills comprise the majority of those employed for short-term contracts in reconstruction exercises. The structural skills possessed include carpentry, welding and building, which are needed most by construction companies involved in the rehabilitation of roads and structures in the aftermath of cyclone Idai. These people are employed by construction companies such as Bitumen World, Masimba Construction and JRG Construction Company.

While temporary employment with construction companies remains important to occupy and provide survivors with livelihood alternatives, many workers complained of delays in receiving their wages. For those who worked for the ministry responsible for public works in Chimanimani, it took more than 3 months for them to get their wages. Considering the inflationary environment in Zimbabwe, by the time the survivors received their wages, they had been eroded by inflation. The risks associated with casual labour in post-disaster situations were aptly captured by Buchanan-Smith and Jaspars (2006) and Pantuliano and O'Callaghan (2006), who associate temporary work in post-disaster scenarios with exploitative labour relations as prospective employers know how desperate the displaced persons are for work. Thus, casual labour as a coping livelihood strategy for displaced persons is inextricably linked to unfair labour practices. The findings are however in contrast with what rich nations often experience in the aftermath of disasters. For example, when China experienced a catastrophic earthquake that struck south-western China in 2008, the government promptly initiated hundreds of post-disaster reconstruction projects in which thousands of people were employed to rebuild facilities, infrastructure and residential houses in a more organised manner, having set aside a massive investment to the tune of over USD \$253 billion (Yang et al., 2018).

This study also noted how the structural skills or human capital of survivors in fields such as carpentry, building and welding were used by survivors to get casual jobs in affected areas and surrounding communities. For instance, builders, welders and carpenters were occasionally contracted by relatives and other survivors to repair houses, construct makeshift toilets and houses, fowl runs, wooden cabins, cooking sheds, markets stalls and other structures important to survivors. Relatedly, survivors searched for broken wood, steel and other materials in rubbles, and used their welding and carpentry skills to come up with chairs, benches, flea market stalls and other structures to sell to community members.

From a gender lens, more men benefited from post-cyclone Idai opportunities ahead of women. For many women survivors, their employment is largely in those trades in which structural skills are not needed such as being house maids and shopkeepers or marketers at flea markets in areas not affected by cyclone Idai. During transect walks in Ngangu area, the authors saw some women picking and gathering small-sized stones from huge stones washed away by water from the mountains. Upon inquiry, woman explained that they sell such stones to construction companies who use them for house foundations and pavements. In some instances, women survivors performed casual work such as doing laundry for unaffected households. As one respondent explained:

...to survive after a cyclone is a tall order; however, I am doing a lot of things to make ends meet. You can see I have a small garden where I grow crops, I also do piece jobs like laundry to earn a few dollars. My husband also does piece jobs (Household Head 4).

As de Haan (2012) has shown, a livelihood is not a single activity but at times a consequence of several strategies. The diversification of livelihood strategies increases chances of positive outcomes, particularly more income and increased resilience for survivors. The findings of the study coincide with Shitangsu's findings in 2013 where the scholar highlighted that income diversification by survivors in post-cyclone periods in

Bangladesh included agriculture, fishing and wage labouring to maximise income. In the Chimanimani district, it is important to note that though many households may want to diversify livelihoods, lack of opportunities is a significant impediment, particularly for women. From a SLF, this shows how structures affect construction of people's livelihoods.

### 10.5.3 Vulnerability Contexts in Livelihood Reconstruction

Despite being involved in a myriad of livelihood strategies, there are several challenges militating against the success of livelihood strategies. In addition to those discussed in previous sections, this study noted how limited gender mainstreaming affects livelihood reconstruction efforts for women. Interviewed widows and female headed households complained of being left out when construction companies and the ministry responsible for public works employed casual workers in the reconstruction of roads and other structures destroyed by cyclone Idai.

...I think as women, we were largely affected by the cyclone and this is further worsened by the discrimination we are suffering, especially on the employment front where it is mostly men who are being employed by construction companies rehabilitating our roads... (Household Head 3).

Survivors involved in entrepreneurial activities also find it difficult to secure loans to boost their income generation endeavours. Many survivors with structural skills (human capital) in building, mechanics, carpentry and other trades had their tools of trade washed away by the floods, and do not have money to replace such. Thus, these artisans utilise their social capital to borrow tools or even money from the wider community to purchase tools of trade from colleagues in areas not affected by Idai. This shows the importance of social capital in fashioning livelihood strategies. Sometimes, they are lucky to get them for free while in many instances they are charged some fee to use such tools, something that reduces the financial capital (income) accrued. Indeed, Zimbabwean societies are based on strong kin-

ship systems and networks, which tend to support relatives and congregants in times of crisis. This result corroborates studies by Mozumder et al. (2008), Quisumbing and Maluccio (2003) and Oxfam International (2008) in Bangladesh, where loans and contributions from relatives proved important in supporting survivors to boost businesses and to purchase tools of trade required by survivors to restore trades and livelihoods. In Sri Lanka, women were organised into self-help groups to receive training on how to create value-added products and to run small businesses, all in an attempt to restore and recover their livelihoods destroyed by the 2004 Tsunami, and with the necessary help, the majority of these women managed to double their pre-Tsunami incomes.

For many unaccompanied women, especially widows staying in camps, their entrepreneurial spirit was found to be heavily affected by triple roles of reproductive, productive and sometimes household organisational roles. The short- and long-term effects of cyclone Idai are devastating as many survivors are now sick, maimed and stressed (Government of Zimbabwe, 2019b). It is a widow's burden, therefore, to look after all the sick, elderly, children, injured and persons with disabilities. Some female heads of households have to spend considerable time taking care of the sick, limiting time spend in entrepreneurship and income-generating activities, thus, reducing the potential of many survivors to successfully reconstruct their livelihoods in the aftermath of cyclone Idai.

Survivors pursuing gardening outside their tents bemoaned the unavailability of land for their activities. Viewed through the lens of the SLF, the shortage of natural capital in the form of land affects the ability of survivors of cyclone Idai to conduct gardening effectively. This was echoed by one survivor: "...you can see how healthy my vegetables are; the problem is that I have a small piece of land to grow these vegetables. My area is around the tent, and I cannot encroach onto other people's areas" (Household head 6). Past studies show that the reconstruction of livelihoods in post-cyclone situations is prone to several challenges. For instance, Shitangsu (2013) similarly discovered in Bangladesh that

agriculture after cyclone-induced destruction depends on the availability of cultivable land. It is important to note that the poor often suffer disproportionately from natural hazards because they are in most cases over-exposed to an extent that it will be difficult for them to easily recover as was the case in Ethiopia following the 1984–1985 famine, which took more than a decade for asset-poor households to fully restore their livestock holdings to pre-famine levels (Hallegatte et al., 2017).

## 10.6 Conclusion and Policy Options

The response of the Government of Zimbabwe and non-state actors in the aftermath of cyclone Idai concentrated on rebuilding the community, and the provision of immediate services and needs of survivors. Despite the enormous time and resources devoted to reducing vulnerabilities in the post-cyclone Idai phase, many of the initiatives failed to put survivors on a livelihood recovery path. The efforts have been top down, and lacked holistic linkages to the social, physical and natural capital of survivors. Without adequate and sustainable livelihood alternatives, survivors are boosting humanitarian aid through re-imagining their pre-disaster survival strategies. Evidently, cyclone Idai survivors invoke a combination of alternatives, courtesy of the varied forms of capital they possess. This shows the utility of the SLF in understanding the reconstruction of livelihoods in post-disaster periods. The study shows that human agency is important in the reconstruction of livelihoods. Though devastated and traumatised by cyclone Idai, the survivors are calculative, show tenacity, ingenuity and resourcefulness. External assistance has to build on what the survivors are doing in the reconstruction of their livelihoods buoyed by their human agency.

A range of activities to reconstruct livelihoods by survivors of cyclone Idai include intensive gardening, informal trading, casual labour, migration as well as engaging in risky and illegal ventures, including drugs and alcohol business,

gold panning and prostitution. Regarding farming, survivors have devised ways that include intensification and intercropping in order to maximise the limited spaces around their tents. In order to succeed in their endeavours, survivors take advantage of remittances, cash transfers from NGOs and community networks to diversify and spread sources of income over varied trades and business ventures. Thus, social and human capitals proved vital for successful diversification by survivors. This has assisted survivors to withstand some socio-economic shocks and problems after the disruption of their livelihoods by cyclone Idai.

The various capitals are important in the reconstruction of livelihoods after Idai, but they are not enough to make survivors resilient and address basic needs in a sustainable manner, as they used to do before cyclone Idai wreaked havoc on their livelihoods. The potential of these endeavours is largely limited by the absence of formal credit facilities, lack of tools to fully utilise their structural skills for production, insecurity in tents and limited living and working space for entrepreneurship. Risk reduction strategies and interventions to boost the efforts of survivors should, therefore, target the capitalisation of survivors over and above the inherent forms of capital at the survivors' disposal. The chapter further point out the need for the involvement, consideration and recognition of survivors' capacities, capitals and skills to ensure the sustainability of interventions undertaken as part of post-cyclone Idai livelihood reconstruction.

It is based on this holistic and integrated approach that survivors can be able to recover to livelihood conditions that they were enjoying before cyclone Idai and sustainably command basic needs. Cognizant of local contexts, those who devise intervention strategies must seek to be well-informed of pre-disaster conditions, and largely focus on the strengthening of survivors' capitals and capacities, replacing assets and tools of trade and impartation of lawful income-generating skills, as well as developing and strengthening their networks and markets for increased accumulation of income and lost assets.

## References

- Barker, C. (2005). *Cultural studies: Theory and practice*. Sage.
- Buchanan Smith, M., & Jaspars, S. (2006). Conflict, camps and coercion: The ongoing livelihoods crisis in Darfur. *Disasters*, 31(1), 57–76.
- Chari, F., & Ngcamu, B. S. (2019). The impact of disaster risks on economic sustainability of cotton supply chains: Evidence from Chiredzi district, Zimbabwe. *Cogent Social Sciences*, 5, 1–15.
- Chandrasekhar, D., Rothfeder, R., Xiao, Y., & Donovan, F. (2019). What drives household recovery after disasters? A case study of New York City after 2012 Hurricane Sandy. *Journal of Environmental Planning and Management*, 62(7), 1249–1268. <https://doi.org/10.1080/09640568.2018.1492907>
- Chapagain, T., & Raizada, M. N. (2017). Impact of natural disasters on smallholder farmers: Gaps and recommendations. *Agriculture and Food Security*, 6(39), 1–16.
- Chatiza, K. (2019). *Cyclone Idai in Zimbabwe: An analysis of policy implications for post disaster institutional development to strengthen disaster risk management*. OXFAM Zimbabwe.
- Chevo, T. (2018). *The construction of household livelihood strategies in urban areas: The case of Budiriro*, Harare, Zimbabwe (Unpublished PhD Thesis). Rhodes University, Grahamstown, South Africa.
- Chitongo, L. (2013). The contribution of NGOs to rural development: The case of Catholic Relief Services protecting vulnerable livelihoods programme in Zimbabwe. *Asian Journal of Management Sciences and Education*, 2(3), 124–143.
- de Haan, L. (2012). The livelihood approach: A critical exploration. *Erdkunde*, 66(4), 345–357.
- Dercon, S., & Krishnan, (2005). *Insurance against poverty*. Oxford University.
- Dube, E. (2017). *Towards enhanced disaster risk management interventions for floods hazards and disasters in Tsholotsho District, Zimbabwe* (Unpublished PhD Thesis). Midlands State University, Gweru, Zimbabwe.
- Ellis, F. (1998). Livelihood strategies and rural livelihood diversification. *Journal of Development Studies*, 35(1), 1–35.
- Fuchs, S. (2001). Beyond agency. *Sociological Theory*, 19(1), 24–40.
- Giddens, A. (1979). *Central problems in social theory action, structure and contradiction in social analysis*. Macmillan.
- Government of Zimbabwe. (2019a). *Workshop on validation of the damage assessments, support of early recovery plans and lessons learned from cyclone Idai disaster*, 19–22 June 2019, Mutare. Ministry of Local Government, Public Works and National Housing.
- Government of Zimbabwe. (2019b). *Manicaland Province cyclone Idai disaster report*, 11 May 2019.
- Hallegette, S., Vogt-Schilb, A., Bangalore, M., & Rozenberg, J. (2017). *Unbreakable: Building the resilience of the poor in the face of natural disasters* (Climate change series, overview booklet). World Bank.
- Hitlin, S., & Elder, G. H. (2007). Time, self, and the concept of agency. *Sociological Theory*, 25(2), 170–191.
- Hussein, K., & Nelson, J. (1999). *Sustainable livelihoods and livelihood diversification* (IDS Working Paper 69). Institute of Development Studies.
- Joakim, E. P., & Wismer, S. K. (2015). Livelihood recovery after disaster. *Development in Practice*, 25(3), 401–418.
- Kamal, M. M. (2013). Livelihood coping and recovery from disaster: The case of coastal Bangladesh. *Current Research Journal of Social Sciences*, 5(1), 35–44.
- Kapodogo, M., Chiweshe, M. K., & Muparamoto, N. (2013). Sex based livelihoods in post 2000 in Zimbabwe. *Africa Review*, 11(2), 35–44.
- Lal, P.N., Singh, R., & Holland, P. (2009). *Relationship between natural disasters and poverty: A Fiji case study*. SOPAC Miscellaneous report 678, International Strategy for Disaster Reduction.
- Mashizha, T. M. (2019). Adapting to climate change: Reflections of peasant farmers in Mashonaland West Province of Zimbabwe. *Jambá: Journal of Disaster Risk Studies*, 11(1), 1–8.
- Mhlanga, C., Muzingli, T., & Mpambela, M. (2019). Natural disasters in Zimbabwe: The primer for social work intervention. *African Journal of Social Work*, 9(1), 46–54.
- Moser, C. O. N. (2009). *Ordinary families, extraordinary lives: Assets and poverty reduction in Guayquil, 1978–2004*. Brookings Press.
- Mozumder, P., Bohara, A., Berrens, R., & Halim, N. (2008). Private transfers to cope with a natural disaster: Evidence from Bangladesh. *Environment and Development Economics*, 14(2), 187–210.
- Mulligan, M. (2013). Rebuilding communities after disasters: Lessons from the tsunami disaster in Sri Lanka. *Global Policy*, 4(3), 278–287.
- Oxfam International. (2008). *Humanitarian field studies: Tsunami response-improving livelihoods after disasters*. Oxfam GB.
- Oxfam International. (2013). *How disasters disrupt development: Recommendations for post-2015 development framework*. Oxfam GB.
- Pantuliano, S., & O’Callaghan, S. (2006). *The protection crisis: A review of field-based strategies for humanitarian protection in Darfur* (HPG Discussion Paper). ODI.
- Quisumbing, A. R., & Maluccio, J. A. (2003). Resources at marriage and intra-household allocation: Evidence from Bangladesh, Ethiopia, Indonesia, and South Africa. *Oxford Bulletin of Economics and Statistics*, 65(3), 283–327.
- Zimbabwe Rapid Impact and Needs Assessment (RINA). (2019). World Bank/Global Facility for Disaster Reduction and Recovery.

- Scoones, I. (1998). *A Framework for Analysis* (IDS Working Paper No 72). Institute of Development Studies.
- Shitangsu, K. P. (2013). Post cyclone livelihood status and strategies in coastal Bangladesh. *Rajshahi University of Life, Earth and Agricultural Science*, 41, 1–20.
- Solesbury, W. (2003). *Sustainable livelihoods: A case study of the evolution of DFID policy* (Working Paper 217). Overseas Development Institute.
- Yang, H., Dietz, T., Yang, W., Zhang, J., & Liu, J. (2018). Changes in human well-being and rural livelihoods under natural disasters. *Ecological Economics*, 151, 184–194.