Five decades of Disasters in Bukoba: An Abridgment of Earthquake Survivors' Agentic Lived experiences¹¹

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Abstract

This paper explores lived experiences of earthquake survivors in Bukoba District. It adopts a qualitative study methodology to capture the narratives of survivors of multiple disasters. The objective was to uncover the emerging forms of agency as expressed through survivors' living experiences. Key informant interviews, focus group discussion, observation and documentary review were the methods used in highlighting the five-decade long (1970-2019) lived experiences of disaster survivors of Bukoba, Tanzania. Informed by Emirbaver and Mische's (1998) Chordal Triad of Agency conceptualization, the results show that individual agency, which is usually unheard of in conventional disaster management studies and practice, plays an important role in disaster survival. The paper shows that vulnerability or resilience dominant in disaster management studies are part of the life continuum and not ends in themselves. The paper has shown that human agency plays an important role in facing, experiencing, and recovering from disasters. It is concluded that, people who face disasters are agentic survivors whose life is a continuum of multiple complex experiences. It urges policymakers to reflect on these experiences in the national disaster management policies and regulations, which should also translate into practical interventions in a community faced by disasters

Keywords: human agency, disasters, survivors, lived experiences

Introduction and Background

Natural disasters, such as earthquakes, have an adverse effect on how life is socially organized. They affect, and may change sociality, social structures,

¹¹ Part of a chapter in a PhD thesis, titled "Exploring the Forms of Agency among Disaster Survivors:

A Case of Earthquake Survivors in Bukoba District, Tanzania", currently at the final stage.

and social relations, and thereby leading to new forms of relations, new ways of organizing social life and the imaginations of the future - all of which are connected to the way people deal with the trauma caused by sudden events. This paper presents findings from a study that explored people's ways of life and their associated actions amidst occurrence of life disturbing events – disasters. Literature and lived experiences suggest that disasters have a long history in human life. They are as old as human beings themselves (Quarantelli, 1998; Lori, 2015), and they invoke different memories and experiences to different people who face them.

Definitions of a disaster are determined by experiences of the people and their community, and differ variously with context. Disaster responses and recovery mechanisms are therefore influenced by different survivors¹² forms of actions- in this study referred to as agency. Understanding disasters and how people respond to, recover from or live with them is a complex venture that attracts the interest of sociologists to study them (Quarantelli, 1998; Oliver-Smith, 1999; Fritz, 1961; Lori, 2015).

The understanding of disasters has been important at the global, regional and country levels. The discipline has attracted interest of scholars in multiple fields, including but not limited to geography, sociology, psychology, archaeology, geology, economics, political science, and others (Letukas and Barnshaw, 2008; Drabek and McEntire, 2003). Countries such as the USA, Indonesia, the Philippines, Japan, Haiti and others have lived experiences in disaster occurrences. Disasters recorded globally include, those related to meteorological and hydrological hazards, climate extremes, and others that are man-made. Hence, disasters include earthquakes, wars, floods, landslides, tsunamis, heavy winds, radiation or overheating, hurricanes, tornados, wildfires, accidents involving transport vessels carrying many people like aeroplanes, ships and trains, and in many cases disease outbreaks that claim many peoples' lives (Bhavnani *et al.*, 2008). These disasters are unevenly distributed worldwide, at regional and national or local levels.

Bhavnani et al. (2008) show that there have been efforts put in place to respond to the vulnerabilities caused by these disasters in the African context. First, at the regional level, the African Union (AU), together with the New Partnership for Africa's Development (NEPAD) Secretariat

¹² Survivor is used in this paper to refer to people (actors) who were affected by different disasters that happened in Bukoba, including the - the earthquake. They are called survivors as opposed to 'victims' in order to reflect the potential power they have, that is, acting upon and living their life through difficult times.

established the African Regional Strategy for Disaster Risk Reduction (DRR) and a Programme of Action for the Implementation of the Africa Strategy in 2005. This strategy is being implemented at the sub-regional and national levels, and the assessment of its performance is conducted in five-year periods, the first one being in 2010. Also, the first Africa's Ministerial Conference on Disaster Risk Reduction (DRR) implemented the Programme of Action in 2005 and in 2006; the African Ministerial Conference on Environment (AMCEN) mainstreamed the Africa DRR strategy into its five-year programme. Such strategies have been in place to support the continent monitor, but at the same time respond to regional disaster management needs.

Furthermore, at the sub-regional level, there have also been efforts to respond to disaster risk reduction and management. For instance, the Inter-Governmental Authority on Development (IGAD) by 2008 had developed a sub-regional strategy for disaster reduction. Similarly, the Economic Community of West African States (ECOWAS) approved a sub-regional Common Policy and mechanisms for DRR in the early 2007. Additionally, the Southern Africa Development Community (SADC) did also revise its sub-regional strategy which addresses the need by including the DRR in its functioning. Lastly, the Economic Community of Central Africa States (ECCAS) also responded by establishing a sub-regional centre for DRR in the Republic of Congo and has also developed a sub-regional strategy. In addition to such efforts, many African countries have tried to be proactive in developing mechanisms to help them prepare to face future disasters. For instance, In Cameroon, Ethiopia, and Lesotho, policies, legislation, plans, and agencies for disaster management have been advanced considerably (Bhavnani et al., 2008). Countries such as Gabon, Madagascar, Malawi, Mozambique, and Niger have also incorporated aspects of natural disaster risk management in their Poverty Reduction Strategy Papers (PRSPs). In addition to the efforts mentioned, the United Nations International Strategy for Disaster Reduction (UNISDR) and the World Bank have supported the process of integrating risk reduction strategies into development strategies for good governance, sustainable economic growth, and poverty reduction (Bhavnani et al., 2008).

Literature suggests that Tanzania has, over history, suffered from disasters such as drought, floods, epidemics, accidents, and earthquakes (World Bank, 2008 and 2009a). In addition, Tanzania was involved in a war known famously as the Uganda-Tanzania war fought in Kagera and parts of Uganda in the late 1970s (Matata, 2016). Similarly, there have been occurrence and recurrence of immense accidents in Tanzania that claimed so

many people's lives. One example of such accidents was the 1996 Mv Bukoba tragic sinking accident and the passenger-cargo train collision accident that occurred in Dodoma in 2002 (Barry, 2002). Suffice it to say also that the HIV epidemic is marked among the disasters that hit many parts of Tanzania with more fatal everlasting impacts on some regions -like Kagera than others (Over *et al.*, 1996). Recently, other disasters such as Mv Nyerere ferry capsizing in Mwanza; an earthquake in Mbeya, and fatal fuel tanker explosion claiming 100+ people's lives in Morogoro that occurred between 2018 and 2019.

Nevertheless, there have been efforts in the country to address the situation and help the survivors. These efforts have been carried out by both the governmental and non-governmental organizations such as the Disaster Management Unit (DMU) at the Tanzania Prime Minister's office, Tanzania Social Security Fund (TASAF), the International Federation of Red Cross (IFRC), The International Monetary Fund (IMF), World Bank through Accelerated Food Security Program (AFSP), and the United Nations (UN) agencies like The United Nations Children's Fund (UNICEF), World Health Organizations (WHO), International Labour Organization (ILO), and The United Nations High Commissioner for Refugees (UNHR) (IFRC, 2016).

While there are multiple efforts addressing survivors' sufferings from disasters, the literature mentioned above points out the fact that little attention is paid to people's experiences on how they face such disasters in their local settings. This is because these disasters significantly affect and alter survivors' lives in different ways. Understanding how survivors manage and survive disasters needs a sociological inquiry. As active human beings, survivors engage in multiple agentic practices as they struggle out of vulnerability and in attaining resilience. However, disaster management practice tends to pay inadequate attention to what individual survivors do as part of the struggle to survive.

The institutional approach is dominant in disaster management practice for that matter. The challenge is that, such an approach doesn't take in the experiences of the survivors of these disasters, particularly the earthquake. Similarly, the available disaster management policy¹³, act¹⁴ and regulations¹⁵ in Tanzania, correspond to the same dominant institutional approaches which inadequately address survivors' agentic experiences

¹³ National Disaster Management Policy, 2004

¹⁴ The Disaster Management Act, 2015

¹⁵ The Disaster Management Regulations, 2017

against vulnerability and its contribution to resilience. In the same vein, the available literature and scholarly work (Ahangama and Prasanna, 2015; Fischer, 2003; Gotham and Greenberg 2008; Quarantelli, 1988; Spilerman and Guy, 2009; Williams, 2008; Djillali, 2005; FEWSN, 2016; IFRC, 2016; World Bank, 2008) generally do not reflect human actors' voices and particularly in the context of Bukoba. To this point, I argue that, lived experiences of disaster survivors can produce important insight towards an appreciation and understanding of how they survive through such traumatic experiences. This paper, therefore, responds to this gap by presenting disaster survivors' lived experiences accumulated over the past five decades in Bukoba district. The paper focuses further on how these experiences shape the survivors' present and future life. The data generation and interpretation of findings of this paper were guided by the Chordal Triad of Agency by Emirbayer and Mische (1998) which through its three elements¹⁶, iterational, practical evaluation and projectivity, trusts in the power of human actors and their lived experiences. This theory indicates how actors live in a way that reflects their past in their present actions and both influence their decisions for the future. The authors posit an important element in survivors' ways of life amidst disasters; that is, the ability to circumnavigate difficult conditions and use them to their advantage unlike it is usually argued in mainstream literature. Emirbayer and Mische (1998) offer a significant interpretation of human action expressed in a triad of agency. This paper, therefore, presents the experiences of survivors of the 2016 earthquake in Bukoba who also have a lived experience of multiple other disasters. It shows how people have constantly perceived these disasters and the way they have adapted to multiple ways of life and various forms of agency leading to their survival.

Methodology

This paper draws on findings collected through an exploratory research design which applied a qualitative research methodology in an extensive PhD study conducted during the 2017-2020 period that aimed at exploring

¹⁶ The Iterational Element: "the selective reactivation by actors of past patterns of thought and action, as routinely incorporated in practical activity, thereby giving stability and order to social universes and helping to sustain identities, interactions, and institutions over time" (Emirbayer and Mische, 1998:971).

The Practical-Evaluative Element: "the capacity of actors to make practical and normative judgments among alternative possible trajectories of action, in response to the emerging demands, dilemmas, and ambiguities of presently evolving situations" (Emirbayer and Mische, 1998:971).

The Projective Element: "the imaginative generation by actors of possible future trajectories of action, in which received structures of thought and action may be creatively reconfigured in relation to actors' hopes, fears, and desires for the future" (Emirbayer and Mische, 1998:971).

and understanding the forms of agency and other social dynamics, occurring among people after the earthquake catastrophe in Bukoba. To answer the questions impinging this study, Key-Informant Interviews (KIIs), Focus Group Discussions (FGDs), Observation and Documentary Review were used. The choice of these methods was purposive in an attempt to get a broader picture of survivors' experiences. The use of these different methods was meant for triangulation; for instance, in the case where a study participant did not feel like expressing their experiences in a group discussion, KII method could cover the gap. Similarly, information from KIIs could be verified through FGDs for its potential in allowing discussion, argument and consensus. Overall, documentary review and observation methods also helped to further supplement information generated through FGDs and KIIs.

The study was carried out in Bukoba, including both urban and rural districts, in Hamugembe and Bugabo Wards, and further down in Omukishenye *mtaa*¹⁷ and Ibosa village respectively (Figure 1). Bukoba was selected because of its intensive experience in multiple disasters, compared to other regions in Tanzania. The wards and villages were purposively selected because they had a record of more destructive effects by earthquake disaster compared to other areas. A purposive sampling procedure was adopted to get participants who had knowledge, interest and were ready to participate in the study. A total of 50 key informants were interviewed; 24 out of 50 were from Bukoba urban, 21 from Bukoba rural and five from the regional level. An average of 80 participants was also selected for 8 focus group discussions (four from each study site).

¹⁷ Swahili word for street





Figure 1. Map showing the study areas Source: Cartographic Unit, University of Dar es Salaam, 2019.

The data generation activity began with preliminary informal consultations with local leaders, specifically, the District Disaster Management Coordinators with whom we identified the relevant study sites. Then I went on to meet the WEOs/VEOs in both areas, urban and rural, for setting up logistics and identifying study participants. After that, I began interviews in Haumgembe Mtaa and later in Ibosa village. The process was not linear; interviews and focus group discussions were conducted in an alternating approach. The study population for this study included: i) Community members particularly those who had experience in a number of the mentioned disasters, ii) victims of the earthquake (those who were directly affected by the earthquake, including those who lost family members; those whose property like a house was stricken, those who suffered injuries or someone from the family suffered injuries), iii) leaders from both private and public institutions that were affected by the earthquake and other past disasters such as schools, religious buildings, roads, and hospitals; iv) local government officials/authorities such as village/street chairpersons,

Village/Mtaa and Ward Executive Officers (VEOs, MEOs and WEOs), Councilors; v) The Regional and District Disaster Management office representatives; vi) NGOs whose functions in disaster/risk management were pivotal during and after the earthquake strike particularly World Vision, and Red Cross. A mixture of such participants with various stories in their experience of disasters enriches this paper in terms of lived experiences and agentic processes endured by survivors.

At the end of the data generation process with 58 audio records (50 KIIs and 8 FGDs), I had begun transcription during fieldwork which I completed a few days after, and began translation of the text from Kiswahili to English. I adopted a phenomenological¹⁸ approach in data analysis.

Findings and discussion

Survivors' Lived experiences from disasters in Bukoba District

Findings from the study indicate that, people in Bukoba have lived experiences in traumatic catastrophes. Apparently, in five decades (1970-2019s), Kagera has experienced the following; first, a war fought between Tanzania and Uganda which is historically termed as the 'Uganda-Kagera War'. Second, the HIV/AIDS pandemic that started in the area in the early 1980s claiming many lives of people; third, the Mv Bukoba ship accident in Lake Victoria which killed almost 1000 people, most of whom business people; fourth, the downfall in crop production, especially bananas and coffee whose impact is in many ways social, economic and psychological due to their potential as primary survival enhancements for the local communities in the area. Fifth, the earthquake that hit the area in 2016 claimed the lives of people, and left many others with social and economic scars. Extreme climatic disasters were also mentioned by participants and some of their impacts observed. This paper shows that regardless of when these disasters happened, their impact is still felt by many survivors to date. Therefore, in the next section I present survivors' experiences. It should be noted that presenting these different disasters separately is only for a matter of clarity; the experiences of survivors are not necessarily isolated in reality.

¹⁸ That is, data in form of text was supported and complemented by observational information either in form of simple notes, memories or pictures from the field involving survivors everyday practices. Generally, data analysis began during the data generation process and went on through writing of findings.

Experiences from the Tanzania-Uganda War

Participants of the study were of the view that, the Tanzania-Uganda war should be remembered as one of the biggest disasters to ever happen in Tanzania, and generally in Kagera Region, Bukoba District in particular. There was a repeated mention that the war occurred in the 1970s. However, double arguments on this emerged stating that, the war had its roots as early as 1971/2 when the Ugandan Dictator, Idd Amin triggered a war between Tanzania and Uganda while others just focused on the actual 1978/9 war which involved physical confrontation between the two countries. Further, submergence into a discussion with participants and a deeper documentary review reveal the attempts to prompt a war were engineered by Idd Amin's greed to become an East African superpower through territorial expansion in the early 1970s. Tired of Idd Amin's bullying and contemptuous actions towards Tanzania, the ultimate war fought in 1978 was a reciprocal response by the then Tanzania's–president, Mwalimu Nyerere¹⁹.

It was noted that, on the Tanzania's side, the war was fought in Kagera Region, specifically in Misenyi District, which borders Uganda and Tanzania. However, other districts including Bukoba, which is only 50 kilometres away, felt the impact as much, as expressed by one participant:

The trauma and damage from the Idd Amin war (Tanzania-Uganda War) was very huge, and the experience was bitter...those of us who lived closer to the border were forced out to move away in rescue of our lives...I am by origin from Kyaka (a township closer to Mutukula-Ugandan border) but during the war, my family and I ran away and took refuge in Rwamishenve (one of Bukoba Town streets), but later bought a piece of land here at Hamugembe...the war was unforgiving. People died, houses were destroyed, children and women were abducted, husbands were killed, their wives were raped and children killed or displaced. It presented one of the hardest time one could wish experience to (KII/Male/Elderly/Hamugembe/Bukoba).

¹⁹ The first President of Tanzania also affirmed the war against Idd Amin.

The above comment was shared by other participants. Notably was this woman with the following narrative:

I remember I was in a labour ward at the Kagera Regional Hospital (now the Kagera Regional Referral Hospital) when the war was being fought ... we were all afraid. While the nurses and the hospital administration assured us of safety, and at different times we could see the Tanzanian soldiers holding guns surveying the hospital, all patients and expecting mothers were terribly horrified with what was next...one day we heard on the radio that Idd Amin's soldiers had planned to strike the Kagera River bridge, and would also target public institutions such as schools and hospitals...I can tell you, we were all in an unspeakable fear...some of us wished we left the hospital, but the fear was even more enormous going back home. We were short of options...to cut the story short, Idd Amin's soldiers threw a bomb that stroke the hospital, targeting the labour ward and I could witness a nurse carrying a tray with medical equipment stuck on the crushed door. She was burning and crying aloud for help, and no one was able to save her...some expectant mothers died, others suffered miscarriage and some of us suffered life time wounds like this one (showing me the wound on the thigh and forehead) (Source: KII with earthquake survivor in Bukoba, 2019).

Different participants expressed very sad stories of their experiences with the war. All the stories sounded as if they had just happened a day before as the participants who suffered losses told their experiences. It was clear that new disasters reminded them of the suffering of the past. These stories connected well with my observation of the wrecks left behind in some areas. Deaths, physical destructions, immorality and many other bad happenings were part of the narratives on the impact of war. Survivors expressed their traumatic experiences and psychological torture suffered during the war that has taken time to heal. These experiences are not isolated, but rather connected with all other new disasters that happen in Bukoba.

Experiences from the HIV/AIDS epidemic

HIV/AIDS²⁰ is another disaster experienced in Bukoba. Survivors' experiences show that the disease was first discovered in Kagera Region in the early 1980s (other survivors specifically mentioned 1983). Its routes are said to be traced in Uganda and at its first appearance people in Bukoba associated it with some type of clothing known as '*Juliana*' for the reason that the first victims were sellers of those clothes who traded between Kagera. The lived experiences reveal that, *s*ome of these businesspersons engaged in sex with some infected guys in Uganda ending up contracting the disease as described below:

The first people to present the symptoms which we came to know later were signaling HIV/AIDS were businessmen and women who used to do inter-country trade between Tanzania (Kagera) and Uganda...these sold to us 'Juliana-shirts';and most of these got terribly sick and died between 1986 to 1992 ()(Source: KII with earthquake survivor in Bukoba district, 2019).

Furthermore, findings reveal that the first victims of HIV/AIDS had vicious symptoms, manifesting themselves through very black skin, suffering whole body sores, itching skin, herpes zoster (commonly called - umeme or *mkanda wa jeshi*), peeling off lips turning unpleasantly reddish and bleeding sometimes, terrible loss of weight, intermittent fevers, vomiting, diarrhoea, continuous and excessive coughing, self-hate, anger, anxiety, stress and ultimate death. The expressions from participants' experiences with the disease were very disturbing. I noted that HIV/AIDS infection was accompanied with excessive stigma and discrimination not only for the sick individuals but their families too. Accordingly, the disease was another tragic experience among the Bukoba people. The problem was even bigger because the medical personnel had neither solutions nor explanation on what the disease was by that time. From the findings, life during that time was pragmatically uncertain as people had multiple assumptions on the cause of disease amidst the absence of cure. People connected it to bad luck, misfortune, curse and reminder of God's power. Some people had a myth that it was another tragedy from Uganda as a payback for the lost war

²⁰ The advent of the AIDS epidemic in Kagera Region in 1983, prompted a variety of responses by communities, the government and non-governmental organizations within and outside the region to try and cope with its social, economic and health effects (Kwesigabo, 2001), Trends of HIV infection in the Kagera Region of Tanzania 1987-2000)

(though Idd Amin was no longer in power). The anecdotes on the disease were adding to the ambiguity, uncertainty, stress, fear and anxiety among community members.

In addition, the disease was understood as an unforgiving epidemic because whoever got infected would die. According to interview and FGD participants as aforementioned the disease traumatised everybody, insecurity was high and nobody felt safe. Some people responded to the pandemic by keeping far from people infected with HIV and their families; families also did neglect some of their members in fear of being infected or if not neglected, the casualties were stigmatised. Akin to the narratives above, and due to lack of awareness plus the dominant culture of sharing tools (such as piercing needles, pins and blades) intrinsic in the culture of the Haya (the majority ethnic group in Bukoba), families with an HIV patient ended up being infected almost the whole family. The disease turned into a disaster with risks far-reaching claiming lives of so many people or causing high morbidity.

Apart from claiming many people's lives, HIV/AIDS left behind vulnerable people, including orphans, helpless old parents, and other problems like destructing the economy because it killed the group of working men and women, elites and the youth who also comprised the labour force. The experience from this epidemic has informed how people survived through other disasters in Bukoba as seen in the prospective sub-sections hereunder.

Experiences from Mv Bukoba ship accident

Lived experiences from study participants indicate that this was a national calamity; however, Kagera region in general and Bukoba, in particular, suffered more from it. It was noted that the accident led to the deaths of many people in the area. Similar to the HIV/AIDS epidemic, the accident, as well, killed many people with economic potential including, students, business people involved in trade between Kagera and Mwanza and/or Kampala and Mwanza through Kagera; experts, many children and youths.

I realised that the disaster also affected many families that already had suffered from HIV/AIDS during the time. Besides, the accident led to trauma among community members especially those whose beloved ones were involved in the accident. It was apparent that people had a lot of fear to travel through the lake after the accident in fear of sinking. By the time, Mwanza was the only easy route to Dar es Salaam and other areas of the country. Therefore, the accident meant that people were blocked from easy transport to elsewhere. People could sail to Mwanza then catch a train to other regions of the country. Findings attest to the fact that the disaster left the area somewhat isolated in terms of transport but also limiting easy access to goods from Mwanza and other areas.

The experience of this accident was also connected to other disasters in the area as survivors expressed their historical trajectory. The connection came in, first, by remembering the trauma and other losses, but more importantly human fatalities suffered. These people altogether thought the new disaster (e.g. earthquake) would have been easily recovered from and/or coped with just if their deceased relative(s) was/were alive. Some participants maintained that nothing could ever cover up for the loss endured. With such a perception, I noticed that survivors tend to actively engage in forms of agency that support their perception of life and survival as propounded by Emirbayer and Mische (1998) in the chordal triad of agency²¹. The statement below verifies this claim:

Once you have suffered a loss as huge as losing your relative you depend on, the gap will be felt for so long, even if there comes support from any other person...every time I face a problem. *I remember that I have to struggle and solve it,* because no one is going to help me...so my brother's death in the ship accident has been a lesson...as a family we all depended on him since all of us were not working in any form of business that would give us money. We only did farming for subsistence...we all banked on him, his passing meant really a huge loss but since then we learned that we need to have people in our family going to school and have business so that the family doesn't depend only on one person (FGD/Female/Adult/ Ibosa/Bukoba).

The experiences of the deceased's relatives, who are also survivors of other disasters, indicate there is a close connection that human beings feel every time they encounter a new disturbing condition. This feeling informs the way they engage in and interact to face and recover from a new disaster.

²¹ According to Emirbayer and Mische (1998), human agency is sub-grouped into a triad, involving iterational/habitual, projective and practical- evaluative elements which are representative of the past, present and future actions.

Experience from Climatic Disasters: Floods, Droughts and Winds

Results on the historical account of floods among disaster survivors in Bukoba show that many floods have happened but the El Nino²² floods are remembered by survivors in Bukoba as among the most threatening disasters in the area. According to them, the flood started with prolonged rainfall between 1997 and 1998. Participants pointed out that the aftermath of it all was in 1998 when river banks broke (e.g. River Kanoni), Lake Victoria extended into the villages around. In Bukoba Town and rural areas, water began to erupt haphazardly everywhere, including under the beds, sitting rooms, kitchens, livestock sheds and in farms. Streams of water flowed from different parts of the land and washed away utensils and other belongings.

Findings show that the El Nino experience caused many people to run away from their homes, and became internally displaced. Farms were destroyed, leading to food insecurity, scarcity and hunger to many; there was an outbreak of diseases including malaria, bilharzia and other water-borne diseases. Participants claimed that the deaths of people were also part of the effects of the floods. The disaster destructed social relations and systems as well. Infrastructure was also affected.

Likewise, the study established that floods have been occurring from time to time before and since then. It was noted that the 1997/8 flood gained more popularity because it affected almost the whole country and beyond, but also was magnificently bigger in comparison to others (Kevin, 2002.). I noted that the floods also gave them a traumatic experience– as stated above– facing deaths, diseases, increasing crimes and disturbance in their social relations plus economic losses of their means of production and capital. All these disasters were confirmed in the interviews with government leaders and other representatives of organizations interviewed in this study. Their experiences are kept in the society through many means of remembrance but the most unique one is the naming of some children (currently 20+ years old) El Nino.

Furthermore, droughts have been among problematic climatic conditions in Bukoba that have turned into disasters. Study participants shared their experience that droughts and floods have been alternating at different periods in the area. In most cases, after floods follows a period of prolonged

²² The 1997–98 El Niño was regarded as one of the most powerful El Niño–Southern Oscillation events in recorded history, resulting in widespread droughts, flooding and other natural disasters across the globe. *"Evolution of El Niño–Southern Oscillation and global atmospheric surface temperatures". Journal of Geophysical Research.* 107 (D8): 4065.

dryness, leading to drought. Findings of this study indicates that droughts have been causing food shortages due to bad harvests.

According to participants of this study in Bukoba town the impact is normally felt in lack of enough supply of food and cash crops from rural areas and consequently leading to escalating food prices. On the other hand, in areas of Bukoba rural, the impact of droughts is normally direct. It is also apparent that a number of people living in Bukoba town have farms in the villages near and far from town thus the impact is normally mutual as well. At this moment, some participants expressed how suffering from one disaster would cause a continuous effect in recovering from the next disaster. A quote below verifies this claim:

>when droughts happened in the past, our own rescue was my son who died of AIDS...now when a drought happens, I know that it is going to be a problem since unlike my neighbours whose children can send them money or foodstuffs, I have nobody (KII/Female/Elderly/Ibosa/Bukoba).

The above testimonial was corroborated by another participant who said the following:

In times of droughts or any other problem or even without it, I have to always take care of my family in the village; they depend on me, yes they do cultivation and farming there and sometimes they may send me some farm products, but I know it is my responsibility to do so...therefore when I am faced by problems like now that I am a victim of the earthquake, my family in the village is also suffering

(KII/Male/Adult/Hamugembe/Bukoba).

Hence, the life of disaster survivors is always on an evolving agency. People live by calculating happenings of the past, present and future.

Furthermore, winds are yet another disaster revealed in this paper. Findings indicate that strong winds have been facing Kagera in general and Bukoba in particular from time to time. Participants maintained that winds have been destructive and have led to a number of losses. Like other climatic conditions, it was noted that winds have led to the destruction of farms, houses/dwellings, infrastructure like electric poles falling, big trees falling blocking roads and destruction of social service centres namely schools, medical facilities and worship centres.

Bukoba because of its agricultural nature which involves banana cultivation as the main staple food planted on a permanent basis, winds have ended up destroying farms something that makes people food dependent and face difficulties in leading their lives. It was evident as well through interviews that these strong winds are normally accompanied with heavy rains, and at times hailstones (*mvua ya mawe*) which largely destroy farm crops. Accordingly, the farms run out of shape, and their recovery may take a year or so to get a better harvest once again before the next storm.

It is apparent from these findings that people have been leading a life of uncertainty due to such disasters. Heavy rains and hailstones always happen unnoticed and cause destruction. Living in such a situation makes them learn how to survive. Their survival determines different forms of agency which they have to adopt for them to proceed with their life. According to them, there is no time to accept vulnerability; they have to survive no matter what happens because such disasters will not stop happening.

Experience from the banana wilt-disease tragedy (*mnyauko*)

Banana is both a staple food and a cash crop in Bukoba District- as aforementioned. It is known to be the most prominent food crop in the area beside other types of crops. Evidence indicates that most crops have generally been affected including, cassava, sweet potatoes, maize, coffee and bananas. However, the banana wilt (commonly known by its Kiswahili term '*mnayuko*') was ranked top of all other crop diseases. It is clear that banana diseases have affected people both in terms of food availability and economically. To them, it is a huge disaster since the banana has both economic and social value as proposed in the statement that:

Banana diseases have been detrimental to our survival...most families are no longer able to afford three meals and few can claim to have surplus bananas for sale as it used to be in the past...to us banana is not only a crop, but something we value very much in our culture *(Source: KII with earthquake survivor in Bukoba, 2019).*)

Reflecting on this was significant in establishing the reasons why many people in Bukoba have had respect for the banana crop and kept it out of danger. As I learned from the participants' experiences, bananas and their plants have diverse uses - food bananas and bananas used for alcohol brewing. The most cultivated are the former whereas the latter are precariously mixed up within big farms and few farmers cultivate them separately. This paper finds that banana has a hidden potential as an economically highly valued plant. Further, exploration into both literature and interviews showed that a banana tree would be a source of a handful of products worth trading as a business. For example, a banana plant can produce the following items/stuff or be used as follows: Food (banana fruit); Juice (banana juice); liquor (banana wine, local brew, commonly known as-olubisi;, gongo/konvagi-Spirit distilled from fermented olubisi; manure (both banana fruits and their peels can be turned into manure); water/fluids for livestock (banana stem offers a lot of fluids); vegetables - banana flowers are used as vegetables in some cultures in Europe and Asia (Scott et al., 1971); fibre - from a banana trunk; clothing both raw and processed from banana fibre; plate/container- traditionally using banana leaves; umbrella - banana leaves; decoration - banana as a whole or some of its products like leaves; medicine- some banana leaves are potential as a cure in Bukoba: treatment of metal contamination and purification of water (Scott et al., 1971); paper- banana fibre and leaves can produce paper; glue- banana peels can be processed to produce glue. Thus, due to the multiple uses of banana plants as indicated above, it is evident that there has been hidden potential of this fruit. Some other participants have not yet made sense of such uses, but with time such uses will be apparent.

The banana wilt disease was therefore, said to have caused a lot of social and economic problems. Many farms are no longer able to produce enough for people to eat leave aside getting surplus for selling. Findings from this study shows that apart from leading to food insecurity, the disease has made it difficult for many parents to take their children to school because they can no longer produce enough for sale.

Connected to the banana crop downfall was the coffee crop deterioration caused by depreciating market prices and unfavourable business conditions in the country. With the absence of both of these crops, participants claimed to be going through a hard time. This situation has made them rethink how they should survive and hence have been adapting to different forms of survival which express an evolving agency as pinpointed above.

Experience from the 2016 earthquake

This disaster was the core of the study I conducted, and thus it demonstrates more details on people's lived experiences in connection to other disasters already discussed in this paper. Accordingly, study participants denoted that the earthquake occurred in the afternoon at around 3.00 p.m. on 10th September 2016. The District Disaster Coordinator (DDC) informed me that the earthquake took a very short time just less than two minutes to strike, and it was of 5.7 magnitude under the Richter scale. Data shows that during the time of earthquake people were 'caught off-guard'²³ because there was no prior indication of the disaster. It was found that some people were working, others on shopping, others having a siesta after lunch, others were on their way to local football show kiosks as on that day was a derby match between Manchester City vs. Manchester United; youths especially boys were moving to a school playground for an inter-street football match; other families were in jolly moments throwing parties after their children had received the Confirmation Sacrament in the Catholic church which had happened earlier in the afternoon; some government officials who had unfinished work from Friday were almost leaving their offices. In short, survivors were in different locations when suddenly the earthquake struck.

Institutions such as schools and the religious ones were also in trouble. For example, for day schools most students were at home as it was a weekend; for boarding schools, most of the students were doing their extra-curricular activities, including washing, watching football, or playing games. Teachers were at their residences except a few who were on duty at that time. For hospitals, routine activities were proceeding, including attending patients and other medical procedures. As for religious institutions, the Seventh Day Adventist (SDA) believers were in church praying, others were done with worship ceremonies for many churches except a few who were involved in preparing for Sunday ceremonies and choir members on practices. For the Muslims, few were in mosques already, but many were preparing to move to the mosque for the evening prayer/worship.

I was also interested in capturing what first and fast came to mind of most of the survivors at the time they first heard the earthquake striking. From the findings, numerous things came to the mind of survivors when the earthquake occurred. It was evident that people defined what they heard in accordance with their past experiences or stories about different calamities. Apparently survivors' imagination of what was going on was much influenced by their level of understanding of possibilities of natural

²³ The earthquake just occurred unexpectedly in such a way that no one was prepared to face it.

disasters. Below were some replies on what came to the mind of survivors after observing and/or hearing the earthquake strike: bomb or airstrike; car accident (head to head crush); rockfall; lightening; demolition of houses/structures; rock crushing using dynamite; storm; end of the world (*Kiama*); return of Jesus; Israel (Angel who takes lives); witchcraft (*uchawi*); meteor (*Kimondo*); gas pitcher burst (*mtungi wa gesi*); electric explosion of a transformer; earthquake.

From the responses above, it is noted that survivors had mixed feelings towards what had happened. These answers imply a sense of confusion among the people. The statement below shows the nature of panic and shock people underwent during the earthquake:

> I don't even know where to begin in answering this question (laughing so hard and loudly)... remembering the experience makes me think I was maybe stupid! Anyway, let me tell you - when the earthquake first struck, I was inside my house almost taking a nap after an afternoon meal...what I heard, it's difficult to explain (one needs to experience by themselves)... in short I heard a very deadly strong sound of combustion or burst that I quickly thought Idd Amin had come back. I thought it was a bomb or an airstrike like those happening in Iraq...I quickly grabbed my sleeping baby and ran outside because house mv was falling (KII/Male/Adult/Hamugembe/Bukoba).

Another experience was shared as follows:

I knew the end had I arrived...I thought it is either the return of Jesus or, maybe, Israel the killer angel had come to finish us all for wrong doings currently going on in the world (KII/Female/Elderly/Ibosa/Bukoba).

Experiences of what came to mind to most people, as already said, were defined by their past experiences of what they have seen or watched on television, or just imagined, read or heard in their places of worship. The level of education, experience, social responsibilities (parenting, teaching, administering etc.), geographic location, religiosity, age and gender, all influenced what the community and survivors perceived of the earthquake.

These forms of thinking became much important in triggering the spontaneous actions and reactions taken by different survivors.

Findings show that survivors and the community acted and reacted in multiple ways towards the earthquake strike. All people, realizing a threat to their life, rushed in different ways to save themselves and their fellows. Therefore, mentioned below were some of the general actions and reactions of survivors and community members:

Running back home for those who happened to be far from home; grabbing children and the incapable out of the houses for those who were inside the houses or closer; running out of the houses for those inside; staying under chairs and/or tables who were for those inside houses; instructing others not to stay closer to any house structures or trees; calling on phone family members and relatives to know their condition; praying to God for help; just crying; preventing children and those ignorant of the disaster to run back inside the houses when unnecessary; digging out the casualties who were hit by falling walls; rushing casualties to hospital through private cars, bicycles, motorbikes or later in ambulances or carrying them (children) o their back; supporting the rescue team from the Regional Referral Hospital (RRH) and Red Cross; stealing of people's property by some pick-pockets and thieves in the area; and afterwards carrying some domestic materials outside houses for staying overnight.

As reflected in the list above, actions were focused on life-saving, specifically as we can see in the list above. However, some people also took advantage of the event, for example, those who decided to steal from the confused majority. Survivors claimed afterwards to have lost their property, including money, cell phones, radio sets, TV sets etc. some of which were stolen in the earthquake frenzy-like situation. So many people were emotional and shocked. Children were traumatized, and so were many women and elderly people. Casualties were many and deaths occurred. The reactions already indicate human agency. The actions and responses by survivors were part of the subjective evaluation of the situation during the earthquake strike.

Conclusions

People have multiple lived experiences from various disasters they have faced. It should be noted that behind the life during a disaster there is a complex social process of survival, among the people who have been hit by the same. Findings show that earthquake survivors had multiple experiences from disasters including, a war, ship accident, extreme climatic conditions

such as floods, drought and strong winds, crop diseases and the earthquake. To survive, experiences show that survivors engaged active and subjective processes of responding to, recovering from, and at times, living their life through the disaster. In so doing, survivors make an interactive agentic course that gives them livelihood continuity. Some survivors become resilient, and some may be vulnerable. However, there is no permanency in these two aspects since human life is not static. Life goes on for survivors passing through different life episodes of vulnerability and resilience, informed by the experiences of the past, present and future presented above. To understand how this life continuum functions, the focus should be to appreciate human life as an ongoing, evolving, cyclic process that has never stopped at any moment since the creation of the world. Hardships, anxiety, suffering, fear, starvation, migration, and death, as shown in the findings section, are part of human life. The study of disaster management should align itself with the core function of agency that survivors have. Lived experiences are complex, and have multiple interpretations. As such, they should not be reduced to resilience and vulnerability dominant in disaster studies and practice. Vulnerability and/or resilience are part of the ongoing surviving process within the experience of disasters, and this is clear from survivors' lived experiences. Thus, disaster survivors' lived experiences should be taken into account in every action, project, policy and regulation for disaster management in the country.

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