



Public Service Delivery in the Context of Disaster Risk Reduction for Sustainable Human Security with Special Reference to the City of Mutare, Zimbabwe

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Abstract

The goal of the study was to evaluate the city of Mutare's level of support in the face of emergencies endangering people's security. The study's objectives were to examine how gender dynamics affect peaceful coexistence in Mutare, analyse the contribution of governance to disaster risk reduction in Mutare, and assess the effectiveness of the disaster risk reduction measures in place to protect the community from Infrastructural damage. To achieve the objectives of the study, a survey research strategy and quantitative approach informed the study. Data was collected from 110 respondents through questionnaires. Stakeholders involved in public services delivery in the context of disaster risk reduction for sustainable human security includes government agencies, emergency services, community organisations, academic and research institutions, private sector and media. The analysis settled on the demographic analysis of the respondents, the frequency analysis of each item, from public service delivery (PSD) to complexity in disasters, and some hypothesis testing on key constructs. Statistical Package for the Social Sciences (SPSS) and STATA software were used to analyse the research data. Ques-

tionnaires were pre-coded and post-coded for input into the statistical applications. Local governments lack interest in and capacities for disaster risk reduction. This has invariably placed the majority of citizens at risk from hazards. Instead of employing short-term measures, local governments can capitalize on the momentum created by disasters to involve other stakeholders and communities in long-term disaster risk reduction initiatives.

Subject Areas

Sociology

Keywords

Zimbabwe, Public Service Delivery, Disaster Risk Reduction, Human Security, Community

1. Introduction

The field of human security has often been misconstrued to entail only physical harm yet human security can be negated by structural violence. According to [1], structural violence is a pointer to “negative peace”, which is a state in which society is characterized by a number of threats that are existent across the globe and which make lives very insecure. [2] supposes that the security threats range from a lack of sustainable development, unstable political environments, economic collapses, natural and manmade disasters, poverty, disease outbreaks, and violent conflict, among a host of other security challenges. The existence of a multiplicity of such challenges is at the core of human insecurity, and their overlap and exponential growth often result in the destruction of livelihoods across the globe.

[3] states that the existence of structural violence is not only a function of poor governance but can be a disaster which destroys the very efforts at public service delivery aimed at improving human security through addressing structural violence. The United Nations General Assembly (UNGA) resolution/290, in [4], provides that, “human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the livelihood, livelihood and dignity of their people.” There is therefore a human-centred approach that is all-inclusive, specific to a context and aimed at the creation of prevention-oriented reactions that are aimed at reinforcing the protection and empowerment of humanity.

1.1. Background to the Research Problem

The Universal Declaration of Human Rights (UDHR), which is administered by the United Nations, provides for an array of fundamental human rights [5]. Article 20 of the UDHR provides that, “1) Everyone has the right to freedom of peaceful assembly and association. 2) No one may be compelled to belong to an

association.” Article 21 of the UDHR states that, “1) Everyone has the right to take part in the government of his country, directly or through freely chosen representatives. 2) Everyone has the right to equal access to public service in their country. 3) The will of the people shall be the foundation of government authority; this shall be expressed in periodic and genuine elections, held by universal and equal suffrage and by secret ballot or equivalent free voting procedures”.

Article 22 states that, “Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.” Article 23 avers that, “1) Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment. 2) Everyone, without any discrimination, has the right to equal pay for equal work. 3) Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection. 4) Everyone has the right to form and to join trade unions for the protection of his interests”.

Article 24 states that, “Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.” Article 25 provides that, “1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, medical care, and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age, or other lack of livelihood in circumstances beyond his control. 2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection”.

Article 26 articulates that, “1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available, and higher education shall be equally accessible to all on the basis of merit. 2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance, and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace. 3) Parents have a prior right to choose the kind of education that shall be given to their children”.

Article 27 states, “1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts, and to share in scientific advancement and its benefits. 2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of

which he is the author.” Article 28 states, “Everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.” Article 29 states, “1) Everyone has duties to the community in which alone the free and full development of his personality is possible. 2) In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order, and the general welfare in a democratic society. 3) These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations”.

The claim for human security progresses in tandem with wide-ranging positions that address the multifaceted origins and concerns of intricate challenges. [6] proposes that there be a call for a multi-sectorial approach from the stakeholders in coming up with responses that are relevant to the attainment of sustainable human security through public service delivery. As such, it calls for integrated actions among a network of stakeholders to ensure lasting responses to the most difficult deficits in peace and development. According to [7], this necessitates the coordination of resources and expertise available to central and local governments as well as local communities, civil society, and the private sector.

Knowing that the major foundations and indicators of challenges are diverse across disaster-prone countries and communities, human security stimulates reactions that are aimed at addressing localized realities. [8] avers that this results in the localization of global, nationwide, and community agendas so that none of the stakeholders are left behind when reacting to disaster-induced structural violence. [9] contend that public service delivery aimed at disaster risk reduction should be at the centre of human security since there is a need to address the significant vulnerabilities that are inherent to disasters, with greater emphasis being placed on early warning systems and paying attention to emergent risks. [10] believes that such a scenario empowers communities to be resilient by encouraging the development of solutions that promote social cohesion by emphasizing the importance of human rights and dignity.

[11] states that in Zimbabwe, hydro-ecological disasters have been witnessed. The country was faced with a drought that resulted in over 6 million people, especially children, the elderly, and people living with HIV/AIDS, being affected. Cyclone Eline struck Zimbabwe around 2000, which resulted in areas in the northern and southern low-lying areas being affected by floods. Over 90 people were killed, and over 250,000 people were affected, with economic losses totaling more than US\$7.5 million.

[12] submits that biological hazards in the form of gastro-intestinal infections, typhoid, cholera, diarrhoea, HIV, and AIDS have been witnessed. Zimbabwe has had cholera epidemics since 1975 on a 5- to 10-year cycle. According to the WHO (7-13 June 2009), the unprecedented cholera outbreak of 2008-2009,

which was deemed to be the worst of these outbreaks and affected the majority of urban centers, Mutare included, stretched the country's disaster response capacity with over 100,000 cases and over 4000 deaths being recorded. The hazard of typhoid remains high. Between 10 October 2011, when a typhoid case was reported in Harare, and 6 January 2013, a total of 5833 suspected cases and 6 deaths were reported, compared with the period 1996-2006, where 114 cases and 9 deaths were reported. In relation to technological hazards, the probability of traffic accidents being on the increase is very high owing to the increase in traffic volumes across Zimbabwe, especially in urban centers. The risk is also increased by an increase in vehicles in transit to other countries along the Beira corridor and Beitbridge-Chirundu Road, fading road infrastructure, and a host of other challenges that are subject to research [13].

In the face of such monumental disasters that are affecting the country, government efforts at disaster risk reduction aimed at attaining human security have to be assessed. This can be attained through establishing the nexus between disasters and structural violence, investigating the gender elements that are inherent to disasters and their impact on positive peace, assessing the role of governance in disaster risk reduction as a precaution against structural violence, evaluating the disaster risk reduction mechanisms that are in place as a safeguard against structural violence, and identifying the improvements that are required to increase the sufficiency of the disaster recovery mechanisms as a safeguard against structural violence in Greater Mutare.

1.2. Problem Statement

Annually, across the globe, governments avail billions of dollars for disaster risk reduction so that the impact of these disasters on human security is minimized since the disasters have become pervasive. It is common knowledge that natural disasters, by their nature, cannot be prevented; however, the devastating effects of these disasters can be mitigated through early warning systems and effective emergency preparedness, disaster mitigation, disaster response, and early recovery systems. Human security is the responsibility of central and local governments to ensure that citizens have sustainable livelihoods. Human Security is attained when there is peace due to the absence of actual physical violence and or structural violence hence there will be a state of positive peace. Disasters, by definition, cause structural violence, resulting in negative peace through the destruction of social services, and in some cases, where structural violence already existed, the disaster may cause actual physical violence, rendering human security unsustainable. The nexus between disasters and human security needs to be investigated. In addition, women and children are the most vulnerable in the face of disasters; hence, the gender elements inherent in disasters need to be explored. There is also a need to assess the role of government, disaster recovery, and mitigation strategies that are in place in Greater Mutare for the sustenance of human security.

1.3. Objectives

- 1) To establish the nexus between disasters and structural violence in Greater Mutare.
- 2) To assess the role of governance in disaster risk reduction in Greater Mutare.
- 3) To evaluate the disaster risk reduction mechanisms in place as safeguards against structural violence, greater Mutare.
- 4) To identify required improvements to increase the sufficiency of the disaster recovery mechanisms as safeguards against structural violence in Greater Mutare.

2. Literature Review

As part of the study, the literature was reviewed under three headings, namely, theoretical framework, conceptual framework, and empirical review. Literature review serves the purpose of avoiding duplication by identifying gaps that are not addressed by the existing body of knowledge in order that the current problem may be solved. It indicates the insufficiency of the pre-existing body of knowledge to address the current problem, hence the need to conduct the current study through the creation of a hypothesis, which stands to be proven.

2.1. Theoretical Framework

2.1.1. Public Governance Theory

[6] asserts that proponents of the public governance theory have argued that, in the face of a disaster, public-private partnerships (PPP) can be attained through public governance. The notion of collective systems in disaster management is derived from the supposition that participants in the disaster management process have varied cultures that are diverse by their nature, hence conflict is inevitable. In support of the assertion, [14] argues that parties involved in disaster management have diverse cultural backgrounds and are bound to experience conflicts, hence the need to be culturally sensitive and create mutually harmonious relationships. Networking in the contemporary world is a necessity due to the complexity of emerging hazards, where individual entities cannot be adequately prepared and sufficiently resourced for all the disasters that may emerge, and there might not be a central agency with the mandate to coordinate and control all the disaster response agencies in their disaster response activities.

[10] notes that the Public Governance theory offers the value of fortifying the sharing of responsibility by giving an opportunity to groups with diverse social origins to have a hand in the decision-making process. Through such collaborative disaster response actions, social consensus is built and will be aimed at tackling doubt based on community-based intellect. According to [15], with this theory, there is emphasis on teamwork, civic involvement, troubleshooting of challenges, and candidness as the major anchors to the disaster management process. The theory strives to create a collective hazard governance structure

comprised of varied participants, inclusive of central and local governments, the corporate world, and non-governmental organizations, with the government having a coordination role in creating linkages between the disaster response agencies.

According to [9], critics of the theory opine that the theory is difficult to apply for emergency disaster responses, where there is no time for widespread consultation but rather a demand for action in response to an emergent disaster. Such a reasoning is deemed noble, though empirical evidence from some disasters, point to the fact that collaborative disaster response is the new norm in contemporary disaster management in that it brings about, “interagency cooperation” and “coherent response”, in that no one is left out when responding to disasters.

2.1.2. Public Service Delivery

[16] argues that the notion of “public service” can be spelt out as a series of activities in which states interact with citizens who would be clients of the state. Public service delivery therefore becomes an institutional arrangement in which the state undertakes to provide goods and services to the masses. The quality of public service delivery to citizens is heavily influenced by the institutional arrangements adopted by the government. [17] opines that the institutional arrangements that can be adopted by governments for the purpose of service delivery fall into four categories, namely decentralization of service delivery [18], alternative service delivery, privatization of service delivery, and direct service delivery.

With a decentralized public service delivery arrangement, the role of government is decentralized to states, provinces, and districts, taking into consideration capacity to deliver and the attached economies of scale. As an [18] alternative to traditional public service delivery, there is the involvement of private players in the provision of public goods and services through public-private partnerships. This may be achieved through platforms offering contracts to private players: build, operate, and transfer; or build, own, operate, and transfer. With a privatized public service delivery platform, the provision of public goods and services becomes the mandate of private companies, where the government assumes no responsibility but rather assumes a regulatory role, especially with regards to compliance with standards and industry-specific laws [17]. Setting vibrant, outcome-oriented objectives and defining proper performance measures to monitor achievement in attaining those objectives is required for government agencies that contract out tasks for service delivery. [19] argues that this can be achieved through the use of performance measurement instruments like the Balanced Score Card or Integrated Results Based Management (IRBM). In direct service delivery, the central government creates policy, legislates on that policy, enforces it, hires staff, invests money, and produces and distributes goods and services from the centre of government or through devolved agencies. The government retains responsibility and accountability for the provision and delivery of the

services.

[5] emphasizes that public service delivery permits an administration to be in touch with masses, especially the needy citizens, hence there is need for a qualitative assessment of the public services. Providing public services to the poor is a barometer for assessing the government's justifiable delivery of proficiency and efficacy. The world has been turned into a village through the use of information technologies, and this has led to the localization of international best practices in governance, hence the demand for more accountability from government by their subjects. When governments provide services, they should do so according to a predetermined criterion, within the set standards and covering all the various socio-economic aspects of their citizens across all levels of government. The delivery of public services should be done in accordance with the preferences of the citizens and should be of high quality at a minimum cost [20].

2.1.3. Social Contract

According to [21], the Social Contract is premised on the notion that the relationship between men is not natural and general but rather a collective idea of the mind where no realistic union exists between individuals. Such a relationship is viewed in the context of the existence of ambitious efforts at displaying universal truth and right in public service delivery by being accountable. [22] attests that accountability in the public sector is attained through adopting service models from the private sector, since there is a need for the public sector to be more responsive to their clients in the provision of public goods and services. In a number of countries, citizens have become aware of the optimum standards in service delivery; hence, local and central government should at all times strive to improve performance standards and be accountable and transparent in their dealings.

[23] indicates that the standards that should be adopted by the providers of public services and goods are contained in service charters in which the body concerned offers accountability against set service commitments. The existence of such a charter point to the existence of a contract between the government agents and the public; hence, these agents should be more accountable in the same manner as the private sector. [16] emphasizes that the charters in question act as guiding principles as they confer general rights on the citizens, with the government having a positive duty to uphold these rights.

Based on service delivery principles, each and every citizen has a legitimate claim for public services, and public service providers must answer for the claim. In contrast to a real contact, the social contract ensues from a unilateral declaration of intent based on a presumed relationship corresponding to the relationship between humanitarian organizations and their beneficiaries. [24] states that when linked to the Sphere Project, which defines the minimum standards in humanitarian assistance, a model of accountability is created through the advancement of the humanitarian ombudsman concept, which was later transformed into the Humanitarian Accountability Project. Just like in the private

sector, in the public sector there is also the use of key performance indicators in the provision of public goods and services.

The standards for service in the public sector can be drawn without making reference to human rights but rather to human needs. [21] speaks to Sphere's determination to go beyond simply setting standards and instead link the standards to a set of predetermined rights so that disaster victims become claimants of the rights in the event that humanitarian assistance in the form of protection becomes necessary. [25] suggests that the standards are not basically symbolic or ambitious or an uninformed foundation for accountability but resemble well-known rights. The humanitarian dictate demands that under circumstances of life-threatening human suffering, action to release that suffering is obligatory. The Sphere charter makes reference to the humanitarian dictate and international humanitarian law and construes them as well-matched from a victim-centred perspective where these victims have a right to humanitarian assistance and protection. As such, humanitarian agents will come in and be advocates for the rights of the victims, hence the necessity to differentiate between needs and rights [26].

2.1.4. Disaster Risk Reduction

The term "disaster" has been apportioned a number of meanings with regard to eras of catastrophic events and depending upon the intentions of the user. There is no conclusive definition of the term "disaster", though recurrent definitions have been proffered by historians, organizations, and legislatures in the domain of public policies and in the description of calamitous events. In this light, there have been calls to broaden the definition of disaster to include new and emerging calamities of greater magnitude. [27] proposes that forest fires like those in Australia and California in the United States of America (USA), Fukushima in Japan, Severe Acute Respiratory Syndrome (SARS-CoV-2), severe droughts in Somalia, the La Nina and El Nino weather patterns, and the Boeing 767 Max accidents are emerging trends in disaster.

According to [13], the word "disaster" is a derivative of the Latin word "disastrum" for "ill-omened star." Such a meaning points to the fact that disasters are by their nature uncontrollable events, sudden, and an act brought upon humanity by God. With the passage of time, there has been due consideration for the evolution of technologies and social trends. [28] notes that the South Korean Disasters and Safety Act defines disaster as "what causes or is likely to cause any harm to the lives, bodies, and property of citizens and the State." The intention of the South Korean Legislature in proffering such a definition was to enact laws that were aimed at countering the impact of typhoons, hurricanes, and floods, thus legislating for disaster risk reduction. As a result of the realization of the need to broaden the scope of disaster risk reduction, the above-mentioned act was repealed by the Countermeasures Against Natural Disasters Act (Act No. 4993), which defined "disaster" as "damage caused by a typhoon, flood, downpour, storm, tidal wave, heavy snowfall, drought, or earthquake (including tsu-

nami) and other natural phenomena equivalent thereto.”

Besides natural disasters, there have been human-induced disasters, which encompass infernos, the collapse of buildings and mines, air and traffic accidents, radioactivity, chemical and biological weapons, and ecological pollution. According to [29], in addition, there have been what are known as “social disasters,” which manifest through the crippling of social services that are at the core of a state’s provision of services like health, education, water, energy, transport systems, and communication networks.

To attain human security, there is a need to factor in disaster risk reduction strategies that are adopted by states as they attempt to cushion their citizens from the effects of a disaster. According to [30], these disaster risk reduction strategies are vital for building a more equitable and sustainable future for the citizens. [24] opines that this therefore gives rise to the need to conceptualize the term “risk”, which is a derivative from a Spanish nautical term denoting “penetrating into the reefs and the accompanying adversity to obtain wealth.” [5] defined risk as “the prospect of injurious consequences, or anticipated harm to people, property, occupations, commercial activity disturbed, or ecological damage as a result of a number of contacts between natural or human-induced threats and susceptible environments.”

2.1.5. Human Security

Security has evolved, giving way to a multiplicity of dimensions of security that encompass international security, cooperative security, and human security, among a host of other dimensions. [31] argues that the UN and non-governmental organizations are the chief promoters of the concept of human security, whereby countries like Norway and Canada, through the formation of the Human Security Network, have been vocal in supporting the concept. In relation to human security, a number of definitions and perspectives have been proffered, though the underlining factor in all these definitions is the orientation toward the welfare of the common man and that everyone is for it. Rudimentary definitions have been all-encompassing, covering aspects ranging from the psychological well-being to the physical security of men [32].

Human security in its simplest form brings together states, developmental agencies, and non-governmental organizations; hence, it has a unifying effect across all spectrums. According to [18], political coalitions are frequently formed around human security, which has resulted in significant achievements such as the establishment of the International Court of Criminal Justice (ICCJ), which has had an impact on the conduct of international politics [33] postulates that the concept of security has for too long been interpreted narrowly: as security of territory from external aggression, as protection of national interests in foreign policy, or as global security from the threat of nuclear holocaust. Forgotten were the legitimate concerns of ordinary people who sought security in their daily lives.

Arguments such as the one above has, according to [32], led to the broadening

of the concept of security to include the new dimension of human security, which is deemed to be two-dimensional. The first dimension of human security focuses on safety from enduring pressures from hunger, disease, and repression. The second dimension of human security focuses on protection against abrupt and harmful disturbances in the normal day to day patterns within communities and working environments. The scope of such a definition is broader as it encompasses all issues that may threaten normal human life. An expansion of the definition has led to the identification of seven core elements that have been deemed to be at the core of human security and these are economic security (freedom from poverty), food security (access to food), health security (access to health care and protection from diseases), environmental security (protection from such dangers as environmental pollution and depletion), personal security (physical safety from such things as torture, war, criminal attacks, domestic violence, drug use, suicide, and even traffic accidents), community security (survival of traditional cultures and ethnic groups as well as the physical security of these groups) and political security (enjoyment of civil and political rights, and freedom from political oppression).

The Japanese government in (Japanese Ministry of Foreign Affairs, 1999) offers a more comprehensive and practical conceptualization of the human security concept by providing that human security “comprehensively covers all the measures that threaten human survival, daily life, and dignity—for example, environmental degradation, violations of human rights, transnational organized crime, illicit drugs, refugees, poverty, anti-personnel landmines, and infectious diseases such as AIDS—and strengthens efforts to confront these threats.” To buttress this, [18] supposes that a fivefold conceptualization of the human security concept has been offered by Jorge Nef, where the first dimension encompasses, the second dimension covers economic security, the third-dimension features social security, including freedom from discrimination based on age, gender, ethnicity, or social status, the fourth-dimension political security, and the fifth dimension is cultural security.

[31] opines that peace building is a continuous process of averting internal threats to human security from causing protracted, violent conflict. As such, there has been the identification of parameters that are aimed at the prevention of the decline in human security and these components. [32] argues that those tasked with disaster management should focus on the root causes of the disaster, taking into consideration variations in local settings, seek sustainable and durable results, and mobilize local actors and resources in support of human security and peace. There has been an argument that human security is attained when poverty, political freedom, health, education, and democracy are dealt with to the fullest.

In some instances, there have been arguments on the dimensions of human security where people within certain communities enjoy high levels of human security in the form of reduced poverty, sensible access to health facilities, access

to quality education, democracy and political freedoms while they are at high risk of being affected by disaster of deadly violence. There is there need to broaden the values that are ingrained in the concept of human security so that political and financial resources are dedicated to the provision of human security through state machinery.

3. Methodology

The study applied the survey research design. The design was relevant to the study since it was well suited for obtaining information from the various respondents who were involved in disaster risk reduction within Mutare. We then designed the questionnaire based on literature, hypothesis, research questions, and statement of the problem and study variables.

A combination of open and closed-ended questionnaires is used to collect data from a sample of 110 respondents. [34] opines that a sample in the framework of technical study and statistics is an illustrative subcategory of a population. There are various stakeholders involved in public service delivery in the context of disaster risk reduction for sustainable human security. The sample was drawn from 11 respondents from government agencies, 11 respondents from emergency services, 11 respondents from community organisations, 11 respondents from international organisations, 11 respondents from academic and research institutions, 11 respondents from private sector, 11 respondents from media, 11 respondents from civil societies, 11 respondents from educational institutions and 11 respondents from infrastructure providers. For government agencies, national, regional and local government bodies play a central role in disaster risk reduction. They are responsible for policy development, coordination and implementing measures to enhance human security. For emergency services, fire departments, police, medical services and other emergency responders are crucial stakeholders in disaster risk reduction. They focus on immediate response and recovery efforts to protect human lives and property. Community organizations such as Non-Governmental Organizations and volunteer organizations often play a key role in disaster risk reduction. They contribute to community resilience, awareness and preparedness. International organizations such as the United Nations and World Health Organisations and other international bodies often collaborate with government departments to provide support, resources and expertise in disaster risk reduction. Academic and research institutions such as Universities and research institutions contribute by conducting studies, providing data and developing innovative approaches to enhance disaster risk reduction strategies. Private Sector such as businesses and industries are essential stakeholders as they may be involved in providing resources, expertise or participating in public-private partnerships to support disaster risk reduction efforts.

The media plays a crucial role in disseminating information, raising awareness and facilitating communication during disasters. They contribute to public edu-

cation and emergency communication. The Civil society such as Non-profit organizations, advocacy groups and grassroots movements contribute to disaster risk reduction by raising awareness, mobilizing resources and promoting community engagement. The Educational institutions such as schools are vital for incorporating disaster risk reduction into curricula ensuring that future generations are aware and prepared. The infrastructure providers such as companies involved in infrastructure development (e.g. construction and utilities are important stakeholders). They contribute to building resilient infrastructure that can withstand disasters. Effective collaboration and communication among these stakeholders are essential for a comprehensive and sustainable approach to disaster risk reduction for human security. [34] opines that a sample, in the framework of technical study and statistics, is an illustrative subcategory of a population. The study population comprised technocrats from both the central (those sitting on the District Civil Protection Unit) and local governments (Mutare Municipality) operating within Mutare. In addition, councilors for all the urban wards within Mutare; staff from selected non-governmental organizations; religious leaders from selected Christian denominations; committee members from the Mutare Residents Associations; and staff from the Traffic Safety Council of Zimbabwe (TSCZ). Recruitment method employed in gathering the sample was purposive in nature. This choice was driven by the need to obtain responses from individuals who are well versed and knowledgeable with civil protection and disaster management dynamics. The collected data from questionnaires was coded manually, tallied, and then analysed using the Statistical Package for Social Sciences (SPSS) and STATA software.

4. Data Analysis

4.1. Introduction and Preliminary Findings

The analysis settled on the demographic analysis of the respondents, frequency analysis on each item from Public Service Delivery (PSD) to Complexity in Disasters and some hypotheses testing on key constructs. The study used quantitative data collected from 110 randomly selected questionnaire respondents from the City of Mutare. Research data was analysed using the Statistical Package for the Social Sciences (SPSS) and STATA software. Questionnaires were pre-coded and post coded for input into the statistical applications.

The study performed an evaluation of the overall measurement model. Reflective measurements are assessed based on indicator reliability, internal consistency reliability, convergent validity and discriminant validity. Validity is checked using correlational analysis (Pearson) for the variables in the main public service delivery (PSD) tool. A correlational analysis revealed significant (less than 0.05) p-values for most of the indicators in the tool indicating that the tool is valid. Reliability check is done by computation of the Cronbach's alpha. A value of at least 0.8 is reliable [35]. However, researches in social science are flexible such values of at least 0.60 are accommodated. The value of the reliability check using

Cronbach's alpha was 0.63, which is reasonable.

4.2. Demographic Analysis of the Respondents

4.2.1. An Analysis by Gender, Age, Marital Status, Qualifications and Employment Status

Table 1 shows a demographic analysis of respondents' gender, age, qualifications, employment status and marital status. Out of 110 respondents surveyed, 68 (61.8%) were males whilst 42 (38.2%) were females. A frequency distribution by age group revealed that the majority of respondents came from the age groups 21 - 30 years (74.5). A demographic analysis by marital status revealed that the majority of respondents were married (81.8%) A frequency distribution by qualifications revealed that the majority of respondents had diplomas (57.3%) followed by degree holders at 32.7%. An analysis by nature of work

Table 1. Demographic analysis of respondents.

No	Participants characteristics	Frequency	Percentage
Gender of respondents			
1	Male	68	61.8%
	Female	42	38.2%
Supervisor Gender respondent			
2	Male	79	71.8%
	Female	31	28.2%
Age of respondents			
3	21 - 30 years	82	74.5%
	31 - 40 years	16	14.5%
	Over 41 years	12	10.9%
Qualifications			
4	Diploma	63	57.3%
	Bachelor's degree	36	32.7%
	Master's degree	8	7.3%
	Doctorate	3	2.7%
Employment status			
5	Part-time Job	0	0
	Full-time Job	110	100%
Marital Status			
6	Single	10	9.1%
	Married	90	81.8%
	Widowed	6	5.5%
	Divorced	2	1.8%

Source: Primary data (2023).

experience revealed that the majority of respondents were employed full time (100%).

4.2.2. Perceptions towards Public Service Delivery (PSD)

Table 2 shows a frequency analysis on the perceptions of respondents towards Public Service Delivery (PSD) which generally revealed that the majority are generally agreeing that human rights should be at the core of PSD (100%), standards should exist in PSD (84.5%), PSD should have gender equality and equity (81.8%) and the UDHR should be ratified into national constitutions (90%). Only a minority of respondents were neutral on PSD encompassing gender equality and equity (15.5%) and UDHR being ratified into national constitutions (8.2%).

The frequency responses on Public Service Delivery (PSD) revealed that the local governments have a big role to play including the following: Firstly, to effectively engage local communities and citizens with disaster risk reduction activities and link their concerns with government priorities. As the most immediate public service provider and interface with citizens, local governments are naturally situated in the best position to raise citizens' awareness of disaster risks and to listen to their concerns. Even the most sophisticated national disaster risk reduction measures (such as early warning systems) may fail, if communities are not properly informed and engaged. Likewise, community preparedness measures are sometimes as effective as costly public investments in reducing casualties from disasters, and local governments should play a central role in community education and training. Secondly, to strengthen their own institutional capacities and implement practical disaster risk reduction actions by themselves. As the governmental body responsible for the long-term development and viability of its area, a local government is required to consider and institutionalize disaster risk reduction in its day-to-day operations, including development planning, land use control and the provision of public facilities and services.

Table 2. Frequency of responses to perceptions on Public Service Delivery (PSD).

Observed Variable	Frequency responses: Agree to Strongly agree	
	Number	Percentage
Human rights should be at core of Public Service Delivery	100	100%
There should be standards in Public Service Delivery (PSD)	93	84.5%
PSD should encompass gender equality and equity	90	81.8%
The UDHR should be ratified into national constitutions	99	90%

Source: Primary data (2023).

4.2.3. Frequency of Responses to Perceptions towards Disaster Risk Reduction

A frequency analysis on the perceptions of respondents towards Public Service Delivery (PSD) generally revealed that the majority are generally disagreeing that biological hazards are common in their locality (84.5%), technological hazards were a common experience (76.4%), geological hazards are rarely experienced (81.8%) and also of the view that there are mechanisms in place to guard against hazards (91.8%). On the other side a majority of respondents are in agreement with the questions: hydro-meteorological hazards are usually experienced (70.9%) and mechanisms in place were not sufficient (71.0%) (**Table 3**).

4.2.4. Frequency of Responses on Perceptions on Human Security

Table 4 shows a frequency analysis on the perceptions of respondents towards Human Security (HS), generally revealed that the majority are generally agreeing that human beings are vulnerable to hazards (84.5%), proactive measures should be in place to minimize exposure to hazards (76.4%), human security is diverse and all encompassing (86.4%), Citizens are responsible for their own security (66.3%), human insecurity results in sure but slow death (71.9%) and central government should save citizens from slow but sure death (72.7%). On the other hand, more than ten-point percentage responses were observed on some responses being neutral on nearly all questions falling under human security with the following percentages (HS1, 11.8%, HS2 12.7%, HS3, 9.1%, HS4, 18.2%, HS5, 13.6% and HS6, 17.3%). Also, some respondents were disagreeing on some questions with the following percentages: HS2, 10.9%, HS4, 15.5%, HS5 14.5% and

Table 3. Perceptions towards disaster risk reduction.

Observed Variable	Frequency responses: Disagree to Strongly Disagree	
	Number	Percentage
Biological hazards common in my locality	93	84.5%
Technological hazards a common experience	84	76.4%
Hydro-meteorological hazards a common experience	18	16.4%
Geological hazards rarely experienced	90	81.8%
Mechanisms are in place to guard against these hazards	101	91.8%
Mechanisms in place are not sufficient	9	8.2%
	Frequency responses: agree to Strongly agree	
Hydro-meteorological hazards a common experience	78	70.9%
Mechanisms in place are not sufficient	82	71.0%

Source: Primary data (2023).

Table 4. Frequencies of responses on perceptions on human security.

Observed Variable	Frequency responses: Agree to Strongly agree	
	Number	Percentage
Human beings are vulnerable to hazards	93	84.5%
Proactive measures should be put in place to minimize exposure to hazards	84	76.4%
Human security is diverse and all encompassing	95	86.4%
Citizens are responsible for their own security	73	66.3%
Human insecurity results in sure but slow death	79	71.95%
Central and local governance should save citizens from sure but slow death	80	72.7%
	Frequency responses: disagree to Strongly disagree	
Proactive measures should be put in place to minimize exposure to hazards	12	10.9%
Citizens are responsible for their own security	17	15.5%
Human insecurity results in sure but slow death	16	14.5%
Central and local governance should save citizens from sure but slow death	11	10.0%

Source: Primary data (2023).

HS6 at 10.0%.

It can be concluded that the majority of respondents are at risk of hazards, humans value their security and the government (both the ministry and central government) is not doing enough in saving people from risk of slow but sure death. On the other hand, the fact that some respondents were neutral on some questions and disagreeing with cumulative percentage points of over fifteen percentage reveals some are also of the view that it is a responsibility of both individuals and the government to ensure measures are put in place for safety of all (Table 4).

4.2.5. Frequency of Responses on Perceptions on Normal Accidents

A frequency analysis on the perceptions of respondents towards Normal Accidents (NA) generally revealed that the majority are generally agreeing that accidents are routine (75.4%), accidents do occur irrespective of safety measures in place (72.8%), and that safety should be practiced at all times (90.0%). On the other side a majority of respondents are in disagreement with the question that technology breeds hazards (77.3%). Also, in the same analysis some respondents were neutral on the first three questions with the following percentages: NA1 (18.2%), NA2 (17.3%), NA3 (10.0% and NA4 (9.0%). Whilst the majority are in agreement that accidents do occur and have normalized situations, they do agree that safety should be practiced at all times (Table 5).

Table 5. Frequencies of responses on perceptions on Normal Accidents (NA).

Observed Variable	Frequency responses: Agree to Strongly Agree	
	Number	Percentage
Accidents are routine	83	75.4%
Even with safety measures in place accidents do occur	80	72.8%
Safety should be practiced at all times	99	90.0%
Technology breeds hazards	11	13.7%
Frequency responses: disagree to Strongly disagree		
Even with safety measures in place accidents do occur	11	10%
Technology breeds hazards	85	77.3%
Human insecurity results in sure but slow death	16	14.5%
Central and local governance should save citizens from sure but slow death	11	10.0%

Source: Primary data (2023).

4.2.6. Frequency of Responses on Perceptions on Natural Accidents

Table 6 shows a frequency analysis on the perceptions of respondents towards Natural Accidents (NA) which generally revealed that the majority are generally agreeing that human beings must adapt to nature (62.7%), there is need to balance human activities and nature (67.3%), land use should factor in safe practices (88.1%), there is need for people to prepare for natural hazards (82.7%), committees on capacity building should be set up (75.5%) and disaster response agencies should have their activities coordinated (83.6%). Also, in the same analysis a majority of respondents disagreed on two questions: nature creates hazards (41.8%). The analysis on natural accidents concluded that human beings must adapt to nature by balancing their activities and nature and practicing land use in a safe manner. Also, another major conclusion is that there is need for committees on capacity building as well as having disaster response agencies having coordinated activities. There is any element of deficit of level of preparedness on agencies and lack of proper systems set up tailored towards the natural accidents.

4.2.7. Frequency of Responses on Perceptions on Complexity in Disasters

A frequency analysis on the perceptions of respondents generally revealed that the majority are generally disagreeing that natural disasters can lead to man-made disasters (59.1%), disasters occur where nature meets technology (52.7%) and man-made structures need to be safe-guarded against nature

Table 6. Frequencies of responses on perceptions on Natural Accidents (NAA).

Observed Variable	Frequency responses: Agree to Strongly Agree	
	Number	Percentage
Nature creates hazards	39	35.4%
Human beings must adapt to nature	69	62.7%
There is need to balance human activities and nature	74	67.3%
Land use should factor in safe practices	97	88.1%
There is need for people to prepare for natural hazards	91	82.7%
Committees on capacity building should be set up	83	75.5%
Disaster response agencies ought to have their activities coordinated	92	83.6%
	Frequency responses: disagree to Strongly disagree	
Nature creates hazards	46	41.8%
Human beings must adapt to nature	26	23.6%

Source: Primary data (2023).

(66.4%). On the other side a majority of respondents are in agreement with the question they have experienced both natural and man-made disasters (72.7%). The last question points to tricky situation in which respondents and generally residents of Mutare (and Manicaland Province in general) encounter. This reveals that they often experience natural and man-made disasters at any given time (Table 7).

4.3. Discussion of Results

The responses in each section highlighted the nature of problems, level of preparedness of both the central government and the local government in disaster reduction. It is important to note that there are challenges and opportunities to be considered for future planning in terms of disaster reduction preparedness. Challenges include the following: Firstly, local governments lack of interest and capacities. An initial challenge is often the lack of interest and capacities for disaster risk reduction by local governments. This is oftentimes a reflection of weak local governance capacities. Support from partners, such as national government, NGOs and UN agencies, can play catalytic roles to fill the initial gaps. The challenge is to build up a planning process where people participate, decide and plan their city together with the local government authorities, based on their capacities and resources. In Viet Nam, an international NGO worked with local governments to promote cyclone-resistant buildings and related awareness-raising

Table 7. Frequencies of responses on perceptions towards complexity in disasters.

Observed Variable	Frequency responses: Disagree to Strongly Disagree	
	Number	Percentage
Natural disasters can lead to man-made disasters	65	59.1%
Disasters occur where nature meets technology	58	52.7%
Man-made structures need to be safeguarded against nature	73	66.4%
I have experienced both natural and man-made disasters	13	11.8%
	Frequency responses: agree to Strongly agree	
I have experienced both natural and man-made disasters	80	72.7%

Source: Primary data (2023).

for local communities. Initially supported by the NGO, as the project progressed the local governments took over many roles that the NGO originally fulfilled. They also formed a network of local governments to share experiences with other governments facing similar conditions and risks. In Bangladesh, a national government Ministry has been conducting community risk assessments and disaster risk reduction action planning with municipal governments across the country, as a part of the country's Comprehensive Disaster Management Programme. Local governments were encouraged to participate and assume the responsibility through a "learn through doing" approach. However, the contribution from local governments varied from one to the other, with the partner NGOs filling gaps in capacity. Moreover, the availability of a funding mechanism (the Local DRR Fund) to implement identified priority projects ensured local governments and communities could see a clear path from risk assessment to funded action.

Secondly, local governments lack knowledge in understanding local risks and vulnerabilities. Local governments often lack sufficient knowledge about disaster risks and vulnerabilities of their communities as well as appropriate disaster risk reduction measures. Partners can help local governments understand them, in order to better plan and manage local disaster risks. The provincial government of Ontario, Canada implemented a province-wide hazard identification and risk assessment programme. It was a comprehensive process involving all the provincial ministries and more than 400 municipalities, who identified high-risk hazards and helped developing effective disaster risk reduction measures. A standardized methodology for risk assessment provided a clear baseline for the ministries and municipalities to assess their risks.

In Bangladesh, as the result of the community risk assessment, local authorities got practical experience in assessing their risk environment, determining the vulnerabilities of their local communities, and taking the appropriate actions to mitigate them. Thirdly, local governments face challenge of managing long-term processes. Being a long-term process, a disaster risk reduction initiative often suffers from staff changes and uneven interest among. Long-term political commitment is crucial for successfully implementing disaster risk reduction programmes over time. The provincial government of Albay in the Philippines established and managed an independent and institutionalized disaster risk reduction office with permanent staff. Through the office, the government decentralized and mainstreamed disaster risk reduction into local governments' plans and programmes. The fact that the project gained consistent support for its policies and funding from the provincial governors since its inception contributed to the success of the office. In South Africa, the Overstrand municipal government has been managing the process of water resource management and development since 2001. Due to the long processes involved and staff turnover, it was a challenge to retain project momentum and continuity. Fortunately, a stable situation in recent years has contributed to the project's progress.

Lastly local governments should learn from past disasters. After the onset of a disaster, people are tempted to focus on short-term, visible recovery works. However, building on the momentum created by a disaster is often a very effective way to engage local governments and communities with long-term disaster risk reduction efforts. In Pakistan, the programme was implemented in the area affected by the massive earthquake in 2005. It was the most devastating disaster to have ever affected the nation. The destruction caused by the earthquake elicited strong commitment to disaster risk reduction programmes by various stakeholders. It was identified as a challenge to combine short-term activities during the recovery phase with strategic longer-term initiatives to reduce risk, using political interests as an opportunity for gaining real commitments to risk sensitive development. The city of Saijo in Japan was hit by record typhoons in 2004 that led to flooding and landslides in the various parts of the city. In conducting "mountain-watching" and "town-watching", the group of schoolchildren and the citizens visited the area affected and damaged by 2004 typhoons, and heard stories from eye-witnesses. This way, the experience of the 2004 catastrophe was used as a new starting point for disaster education and preparation.

Irrespective of the challenges and laid down procedures in disaster reduction it is imperative to promote a culture of participatory planning and implementation of disaster risk reduction initiatives. When successful, this builds on local and national government and civil society partnerships and cooperation in support of local initiatives to dramatically reduce the costs of risk reduction, ensure local acceptance and build social capital. There are limitations to what household and community action can do to reduce disaster risk without government support, or without a broader infrastructure and service framework into which community provision can integrate, as some of the examples demonstrate from a

positive point of view. Innovative approaches and tools exist and are being applied creatively in urban and local governance and in community-based approaches. However, they need scaling up with support from national governments. Many cities have applied innovative methods to provide access to secure land tenure, infrastructure and services for the poor. Improved urban and local governance is usually built on partnership between competent and accountable local government and an active civil society that can articulate needs and priorities; plus, decentralization of authority and resources from central levels, as demonstrated in the examples from Bangladesh, Vietnam, Philippines, El Salvador and Canada. Capacity of urban and local government to plan and regulate urban development, enable access to safe housing and well-sited land, and provide hazard mitigating infrastructure are necessary conditions for urban risk reduction.

Conflicts of Interest

The authors declare no conflicts of interest.

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