BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SOCIAL SCIENCES AND HUMANITIES

THE EFFECTS OF CLIMATE CHANGE ON PEOPLE WITH DISABILITIES. A CASE STUDY OF DOMBOSHAVA, GOROMONZI DISTRICT

By

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ABSTRACT

The purpose of the study was to show the effects of climate change on people with disabilities in Domboshava, Goromonzi District. A case study was used as a research design in the study as it is the common method in social sciences that involves an in-depth examination of a single case or a group of cases. The case study was done at Ruvarashe Trust in Makumbe village, Domboshava. The study also explores how climate change is affecting the lives of people living with disabilities giving the impacts and the societal response towards the issue. The study also argues that there must be social inclusion of people living with disabilities so that there will be able to participate in policy making so that their perspectives and concerns are capture so that they will not feel discriminated. The study also highlights the need for the inclusion of people with disabilities in policy making and implementation.

DECLARATION FORM

I Sibonginkosi Sibanda, declare that this dissertation is the outcome of my own work, research and study, expect where noted in the acknowledgements and references within the paper. It has not been submitted, either partially or fully for any other degree at any other university.

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DEDICATION

I dedicate this dissertation to the foundational figures in my life, my aunt and my mother, who have greatly influenced who I am today. I am grateful for your unwavering support, guidance as well as for all sacrifices, patience and encouragement. Without your backing this academic year would not have been successful and I feel truly blessed to have you both in my life. To my dad, I hope you are proud of me wherever you are, may your soul continue to rest in peace.

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LIST OF ABBREVIATIONS AND ACRONYMS

GHGs- Greenhouse gases

IPCC- Intergovernmental Panel on Climate Change

NGO- Non Governmental Organisation

PSTD-Post Traumatic Stress Disorder

SADC- Southern African Development Community

SDGs-Sustainable Development Goals

UN- United Nations

UNCPD- United Nations Convention of Persons with Disabilities

UNDRR- United Nations for Disaster Risk Reduction

UNFCCC- United Nations Framework Convention on Climate Change

WHO- World Health Organisation

Table of Contents CHAPTER ONE	12
1.0 INTRODUCTION	12
1.1 Background of the Study	12
1.2 Purpose of the study or 1.2 Aim	14
1.3 Statement of the Problem	14
1.4 Research Objectives	14
1.5 Research Questions	15
1.6 Assumptions	15
1.7 Significance of the Study	15
1.8 To the Ministry of Public Services, Labour and Social Welfare	16
1.9 To people living with disabilities	16
1.10 Delimitations of the Study	16
1.11 Limitations of the Study	17
1.12 Definition of Keywords	17
1.13 Dissertation Outline	18
CHAPTER TWO	19
2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK	19
2.1 Introduction	19
2.2 Theoretical Framework	20
2.3. Concept of Climate change	20
2.3 Causes of climate change	21
2.4 Effects of Climate Change	21
2.5 The Impacts of Climate Change on Persons with Disabilities	22
2.6 Models of Disabilities	24
2.6.1 Charitable Model	24
2.6.2 Medical Model	25
2.6.3 Social Model	25
2.6.4 The identity model	26
2.6.5 The Critical Realist Model	27
2.6.6 Human Rights Based Model	28
2.7 The Concept of Ableism	29
2.9 Chapter Summary	30
CHAPTER THREE	31
3.0 RESEARCH DESIGN AND METHODOLOGY	31

3.1 Introduction	31
3.2 Research philosophy	31
3.3 Research methodology	32
3.4 Research design	33
3.5 Population and sampling	33
3.6 Sampling	35
3.6.1 Simple random sampling	35
3.6.2 Purposive sampling	36
3.7 Data collection methods	36
3.7.1 Focus group discussions (FDGs)	36
3.7.2 Semi-structured interviews	37
3.7.3 Secondary Sources	38
3.8 Validity and reliability	39
3.9 Data presentation and analysis	40
3.10 Pilot testing	41
3.11 Ethical considerations	41
3.12 Chapter Summary	42
CHAPTER FOUR	42
4.0. DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDIN	I GS 42
4.1 Introduction	42
4.1.1 Section A: Biographical data of participants	43
4.2 The impacts of climate change on people with disabilities	43
4.3 Effectiveness of climate change adaptation and mitigation strategies for pe disabilities	
4.4 Challenges faced by people with disabilities in accessing resources and sup climate related events	
4.5 Chapter Summary	53
CHAPTER FIVE	54
5.0 SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND AREAS	
FURTHER RESEARCH	
5.1 Introduction	
4.2 Summary	
5.4 Recommendations Error: Bookmark	
5.5 Areas of further research	
REFERENCES	50

APPENDICES
55

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Climate change is one of the most pressing global challenges of the 21st century, with far-reaching impacts on ecosystems, economies, and human health. The increase in global temperatures, rising sea levels, and the frequency of extreme weather events such as hurricanes, droughts, and floods are evidence of this on-going environmental crisis. According to the Intergovernmental Panel on Climate Change (IPCC), vulnerable populations, including people with disabilities, are disproportionately affected by these changes due to pre-existing socio-economic disadvantages and physical barriers that limit their ability to respond to and recover from climate-related events (IPCC, 2021). People with disabilities, who represent approximately 15% of the global population, are particularly vulnerable because they often have limited access to resources, services, and information that are crucial for coping with climate change. The global community is increasingly recognizing the need for disability-inclusive climate action. However, significant gaps remain in research, policy, and implementation, leaving many disabled individuals at greater risk during climate-related disasters (UNFCCC, 2022).

In the Southern African Development Community (SADC) region, climate change is a critical issue, as the region is highly susceptible to environmental changes that threaten food security, water availability, and livelihoods. The SADC region has experienced significant climatic variability, including prolonged droughts, unpredictable rainfall patterns, and cyclones, which have exacerbated poverty and inequality in member states (SADC, 2020). For people with disabilities in the SADC region, these climate impacts are even more severe due

to the compounded effects of poverty, inadequate healthcare, and limited access to social protection. The SADC region has begun to incorporate climate resilience into its development agenda, but disability-inclusive strategies are still in their infancy. As a result, people with disabilities often face barriers to participation in community-based adaptation efforts and disaster risk reduction programs. There is a growing need for regional frameworks that explicitly address the needs of disabled individuals in the context of climate change to ensure that no one is left behind in the region's adaptation and mitigation efforts.

Zimbabwe, like many other countries in the SADC region, is facing severe impacts from climate change. The country has seen an increase in the frequency and intensity of droughts, floods, and other extreme weather events over the past few decades (Chagutah, 2010). These climatic changes have had a significant impact on agriculture, which is a key sector of Zimbabwe's economy, and on water resources, which are essential for both rural and urban communities. The effects of climate change in Zimbabwe are particularly devastating for vulnerable populations, including people with disabilities. National policies and strategies, such as the National Climate Policy and the National Adaptation Plan, have been developed to address climate change impacts, but they often fail to adequately consider the unique challenges faced by people with disabilities. This lack of inclusivity in policy design and implementation leaves disabled individuals more exposed to climate risks and limits their capacity to adapt.

Domboshava is located in the Goromonzi District of Zimbabwe, is a rural area that is increasingly feeling the effects of climate change. The local community, which relies heavily on subsistence agriculture, is particularly vulnerable to changes in rainfall patterns and the increased occurrence of droughts. These climatic challenges have led to food insecurity, water shortages, and the degradation of natural resources, all of which disproportionately affect people with disabilities. In Domboshava, people with disabilities face additional barriers, such

as limited mobility, restricted access to information, and social exclusion, which make it difficult for them to participate in community-based climate adaptation initiatives. Furthermore, the local infrastructure is often not designed with accessibility in mind, making it harder for disabled individuals to access emergency shelters or participate in disaster response activities. This study aims to explore how these local dynamics intersect with the broader issues of climate change and disability, providing insights that could inform more inclusive climate policies and interventions at both the local and national levels.

1.2 Purpose of the study

The aim of this study is to show the effects of climate change on people with disabilities, mainly focusing on the case of Domboshava in Goromonzi District.

1.3 Statement of the Problem

Despite the growing body of research on climate change, there is a significant gap in understanding how it disproportionately affects people with disabilities, especially in rural areas of developing countries like Zimbabwe. This lack of understanding may lead to ineffective or insufficient policy responses that fail to address the specific needs of this vulnerable group. The problem this study seeks to address is the underrepresentation of people with disabilities in climate change adaptation strategies in Goromonzi District, and how this omission exacerbates their vulnerability.

1.4 Research Objectives

1. To assess the specific impacts of climate change on people with disabilities in Domboshava, Goromonzi District.

- 2. To evaluate the accessibility and effectiveness of current climate adaptation and mitigation strategies for people with disabilities in the study area.
- 3. To identify the challenges faced by people with disabilities in accessing resources and support during climate-related events.

1.5 Research Questions

- 1. What are the specific impacts of climate change on people with disabilities in Goromonzi District?
- 2. How accessible and effective are the current climate adaptation strategies for people with disabilities in this area?
- 3. What challenges do people with disabilities face in accessing resources and support during climate-related events?

1.6 Assumptions

In carrying this study, the researcher assumes that:

- 1) People with disabilities in Goromonzi District are disproportionately affected by climate change compared to the general population.
- 2) It also assumes that existing climate adaptation strategies are not adequately addressing the needs of this group, leading to increased vulnerability.

1.7 Significance of the Study

To the Academics

This study is significant as it addresses a critical gap in the literature on climate change and disability. By focusing on Goromonzi District, the research will provide localized insights

that could inform more inclusive climate policies and interventions in Zimbabwe and similar contexts. The findings could also contribute to global discussions on disability-inclusive climate adaptation strategies, ensuring that people with disabilities are not left behind in efforts to combat climate change.

1.8 To the Ministry of Public Services, Labour and Social Welfare

It is hoped that this study will be useful to the government of Zimbabwe as I will help them to identify the effects of climate change to people living with disabilities. For instance, the inability to access early warning systems, emergency shelters, or relief services during a climate-related disaster is not just due to the physical impairments of individuals but also due to the design of these systems, which do not consider the needs of people with disabilities. Thus, this model supports the argument that climate resilience can only be achieved when societies adopt inclusive practices that address these systemic barriers.

1.9 To people living with disabilities

The study also empowers and educates people living with disabilities on how to adopt to climate change and to be resilient so that their day to day life will not be affected.

1.10 Delimitations of the Study

This study is confined to exploring the effects of climate change on people with disabilities in Goromonzi District, particularly in Domboshava. The research will focus on the socio-economic impacts, health challenges, and adaptation strategies employed by this group, excluding other climate change-affected groups like farmers or businesses. Additionally, the study will only cover individuals with visible physical disabilities, excluding those with mental or cognitive impairments, to keep the scope manageable.

1.11 Limitations of the Study

The study faces several limitations. Firstly, it is geographically restricted to Domboshava, which may limit the generalizability of the findings to other regions. Secondly, the reliance on self-reported data may introduce bias, as participants may not accurately recall their experiences. Lastly, due to resource constraints, the sample size is relatively small, which might limit the statistical power of the study and its ability to fully capture the diversity of experiences among people with disabilities in different parts of the district.

1.12 Definition of Keywords

Climate Change: A change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean or the variability of its properties, and that persists for an extended period, typically decades or longer (IPCC, 2014).

Disabilities: A complex and dynamic interaction between a person's health condition and the contextual factors of their environment (World Health Organisation, 2020).

Vulnerability: The susceptibility of a community to the impacts of the hazards, influenced by social, economic and environmental factors (Schwerdtle et al.,2018)

Adaptation: The process of adjustment to actual or expected climate and its effects in order to moderate harm and exploit beneficial opportunities (IPCC 2022).

Goromonzi District: A rural district in Zimbabwe, located near Harare, known for its agricultural activities.

1.13 Dissertation Outline

The report will consist of five chapters and a brief outline of what the chapter entails is provided below.

Chapter One: The study's introduction and historical context were covered in the chapter. This chapter provides an overview of the research topic, including background information, research objectives, questions, and significance of the study. It also includes the scope and limitations of the research.

Chapter Two: This chapter reviews existing literature on climate change, its impacts on vulnerable populations, and more specifically, how it affects people with disabilities. The chapter will also highlight gaps in the literature that this research aims to address.

Chapter Three: This chapter details the research design, data collection methods, sampling techniques, and analysis procedures used in the study. The ethical considerations and strategies for ensuring the validity and reliability of the research are also discussed.

Chapter Four: In this chapter, the findings from the research will be presented and analysed. The results will be discussed in relation to the research questions and existing literature, highlighting key patterns and themes.

Chapter Five: This chapter provides a summary of the research findings and offers recommendations based on the results. It also outlines areas for future research and implications for policy and practice.

CHAPTER TWO

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

Climate change poses an increasingly critical threat globally, with evidence showing that certain groups are disproportionately affected by its impacts due to socio-economic, geographical, and physical vulnerabilities. Among these vulnerable populations are people living with disabilities, which often face barriers that heighten their exposure to climate-related risks. Research indicates that disabilities exacerbate these challenges, as those with physical, cognitive, or sensory impairments often encounter limitations in mobility, access to information, and health services, particularly during climate-related events like floods, droughts, and heat waves. However, the specific effects of climate change on people with disabilities, especially within rural African settings such as Zimbabwe's Domboshava, Goromonzi District remain insufficiently explored in scholarly literature. Given that rural communities often lack infrastructure and resources to support people with disabilities, there is a clear need for studies that assess how climate change uniquely impacts this population in specific locales. This chapter thus reviews existing literature on climate change and its effects on disabled populations, explores relevant theoretical frameworks, and models that gives a vivid picture of how people with disabilities are affected by climate change. By situating the current research within the broader context of climate vulnerability and models of disability such as charitable model, medical model, social model, the critical realist model, human rights based model and the identity model this chapter establishes the importance of investigating this issue in Domboshava and provides a foundation for understanding the unique challenges faced by disabled individuals in the face of climate change.

2.2 Theoretical Framework

To develop a comprehensive understanding of how climate change affects people with disabilities, this research draws upon three principal theoretical frameworks: The theoretical framework for this study is rooted in the integration of Vulnerability Theory, Environmental Justice, and Disability Studies Theory. Together, these frameworks offer a comprehensive perspective for analysing and interpreting the unique climate-related challenges faced by people with disabilities in Domboshava, a rural region of Goromonzi District in Zimbabwe. This multi-theoretical approach allows for a detailed examination of both immediate and systemic factors that increase vulnerability to climate impacts.

1. Vulnerability Theory

Vulnerability Theory provides a foundational lens by examining how social, economic, and environmental factors intersect to create heightened susceptibility to harm among specific populations (Adger, 2006). This framework is particularly relevant for understanding how people with disabilities in rural Zimbabwe face compounded risks due to their physical impairments and social marginalization. Vulnerability Theory highlights that beyond individual physical conditions, a lack of supportive infrastructure, healthcare access, and information on climate risks further amplifies the dangers disabled individuals face during extreme weather events (Hayward & Ayeb-Karlsson, 2021). This framework is essential for recognizing the factors that make disabled people in Domboshava particularly vulnerable, not solely due to their impairments but also because of socio-economic disadvantages.

2.3. Concept of Climate change

Climate adaptation encompasses the disparities within society and the unequal impacts of climate change and adaptation on individuals (IPCC, 2022). Climate justice and fair

adaptation strategies seek to address these inequalities and injustices, promoting a more inclusive approach to climate adaptation that avoids perpetuating discrimination (Juhola et al. 2022). Climate change is one of the most pressing challenges facing humanity today, marked by significant alterations in the global weather patterns and temperatures. While natural processes have historically contributed to the climate variability, the current changes are predominantly driven by human activities, particularly the release of greenhouse gases (GHGs) into the atmosphere. This rise in GHGs leads to warming the planet, commonly to as global warming. The evolving climate necessitates adjustments to new environmental conditions. Adaptation efforts must consider various societal elements such as infrastructure, building regulations, safety standards for housing, agricultural practices, and irrigation systems. Effective adaptation is crucial for preparing for the complex challenges posed by climate change (Kurebwa).

2.3 Causes of climate change

Human activities are the primary drivers of climate change especially since the Industrial Revolution. These activities significantly increase the concentration of greenhouse gases (GHGs) in the atmosphere, trapping heat and causing global temperatures to rise. The WHO underscores that the primary driver of climate change is the increased concentration of the greenhouse gases in the atmosphere due to human activities. These gases heat and lead to global warming. The health impacts of climate change are driven by greenhouse gas emissions with fossil fuel combustion being the largest contribution (WHO, 2021).

2.4 Effects of Climate Change

Climate change has profound effects on health, livelihoods and ecosystems. The WHO and the UNFCCC have intensively highlighted the effects. The WHO has consistently warned

about the health and societal impacts of climate change framing it as the greatest global health threat of the 21st century. The UNFCCC adopted in 1992, focuses on the understanding, mitigating and adapting to climate change. The UNFCC highlighted several effects of climate change which include environmental impacts, social and economic impact, impacts and sustainable development. It also mentioned that the earth's average surface temperature has risen by approximately 1.1degrees Celsius since the pre-industrial era, primarily due to human activities which lead to melting glaciers, rising sea levels and disrupted ecosystem. "Climate related disasters caused 2.9 trillion economic loses globally between 2010 and 2019, (UNFCCC, 2021). Climate change undermines progress towards the sustainable Development Goals (SDGs) particularly goals related to poverty eradication, health, clean water and sustainable ecosystem for example SDG 2 climate change exacerbates food insecurity and hunger n vulnerable regions.

The effects of climate change are wide ranging and interconnected, impacting health, ecosystems, economies and societies. According to WHO and UNFCCC addressing these challenges requires urgent action to reduce emissions, strengthen healthcare systems and implement equitable adaptation strategies. Failure to act will exacerbate inequalities and threaten the wellbeing of the current and future generations.

2.5 The Impacts of Climate Change on Persons with Disabilities

Climate change is a global crisis that poses significant challenges to all populations however its effects are particularly pronounced for the marginalized groups including individuals with disabilities. Individuals with physical disabilities face heightened risks and challenges in the face of climate change compared to the general population. These vulnerabilities stem from a range of physical limitations, including impairments in hearing, cognition, and symptom exacerbation, as well as difficulties in regulating body temperature

(Stella, Mari, Gabrieli, Barbante, & Bertuzzo, 2020). In the realm of climate change and its consequences, it is widely acknowledged by researchers that individuals with disabilities are among the most susceptible populations (Kett et al. 2021). Persons with disabilities often face heightened health risk due to climate change. Extreme weather events such as heat waves, floods and hurricanes can exacerbate existing health conditions. A study by the World Health Organization (WHO, 2018) highlights that people with disabilities are more susceptible to the heat-related illness due to mobility limitations are reliance on assistive devices that may not function properly in extreme conditions. Moreover, respiratory issues can be exacerbating by increased air pollution and allergens which are intensified by climate change (Lopez et al., 2020).

The psychological impacts of climate change on people with disabilities include anxiety, depression, and post-traumatic stress disorder (PTSD), which can disproportionately affect individuals with disabilities. Research indicates that environmental disasters, coupled with the pre-existing mental health conditions, can lead to heightened vulnerability (Tschakert et al., 2017). The loss of support systems and disruptions to routine following climate-related events can further exacerbate mental health challenges for this population.

Individuals with disabilities already face higher rates of poverty and unemployment, and climate change exacerbates these socio-economic disparities. According to a by the World Bank (2021), climate-related economic disruptions can lead to job losses and reduced income stability for people with disabilities. Limited access to resources and support systems makes it difficult for them to recover from climate-related disasters, further entrenching economic equality. Additionally, the economic strain resulting from the climate impacts can reduce funding for essential services thus fuelling the challenges by thus population.

2.6 Models of Disabilities

The understanding of disability has evolved significantly over time, leading to the development of various models that conceptualize the experiences and challenges faced by individuals with disabilities. These range from interpreting disability as a consequence of divine punishment in the moral/religious model to understanding disability as a product of societal barriers created by exclusive and limited structures in the social model (Retief & Letšosa, 2018). The models will be explored below.

2.6.1 Charitable Model

The charitable model emerged during the time when disability was largely viewed through a lens of moral obligation and philanthropy. While this model views disability as a misfortune (Oliver, 1990), embracing it can result in charitable contributions being directed towards enhancing the circumstances of those with disabilities. However, this perspective on disability diminishes the autonomy of individuals with disabilities, making it unacceptable to many. Individuals with disabilities are often viewed as objectives of sympathy and their needs are framed in terms of charity rather than rights. This obligation of society to provide support and assistance Hughes, (2007). The model promotes the idea that the individuals with disabilities are dependent on charitable organizations and government support, reinforcing the notion that they contribute to society independency, Kurebwa (2025). The criticism surrounding the erosion of personal autonomy has significantly impacted the charitable framework in developed countries, where self-reliance and individual agency are highly valued. Nevertheless, the charitable approach has been disseminated from the developed countries to the developing countries, notably facilitated by missionaries during the colonial period (Grech, 2015). The model often overlooks the social, environmental and institutional barriers that contribute the marginalization of individuals with disabilities. By focusing solely on individual needs it ignores the systematic changes necessary to promote inclusion and accessibility (Shakesphere, 2006)

2.6.2 Medical Model

The medical model is a framework used primarily in a healthcare to understand and treat illness; it focuses on the biological factors and emphasizes diagnosis, treatment and the role of healthcare professionals. The medical model posits that diseases are primarily caused by biological factors, such as pathogens, genetic predispositions and physiological dysfunctions. In this framework, disability is viewed as a condition that requires treatment for the individual to be included in society (Thomas, 2004). The medical model does not only focus on the biological setup. As highlighted by Brisenden (1986), the medical aspect is significant for appropriate care, but it should not limit the autonomy and choices of individuals with disabilities. According to this approach, disability is seen as a physical or mental abnormality that hinders a person's ability to function (Mitchell &Snyder, 2000). By addressing these abnormalities, especially through medical interventions, the disability can be improved, reduced, or managed to enable a higher level of functioning. The medical model has resulted in the creation of specialized services, such as rehabilitation, aimed at improving, reducing, and managing physical or mental abnormalities. The development of specialized services based on a medical model understanding of disability has led to significant progress but has also brought about significant drawbacks (CDC, 2015). In contrast to the charitable model, which does not recognize individuals with disabilities as independent contributors to society, the medical model suggests that the disabilities of people can be treated (Osborne, 2015). The medical model views disability primarily as a deficiency or impairment located within the individual.

2.6.3 Social Model

The social model of disability represents paradigm shift in understanding disability, contrasting sharply with the traditional medical model. The social model offers a crucial framework for understanding the challenges faced by people with disabilities particularly in the context of global issues such as climate change. The World Health Organisation (WHO) has increasingly recognized the intersection of disability and environmental factors emphasizing the societal structures and environmental conditions significantly the lives of people with disabilities. The social model of disability posits that disability is not solely a result of an individual's impairment but rather a consequence of societal barriers that prevent full participation in the society. According to this model, the focus is on eliminating barriers that hinder the participation of individuals with disabilities, such as inaccessible buildings for people in wheelchairs. By removing these barriers, the goal is to promote independence and equality for people with 92 disabilities, allowing them the same opportunities for participation as others (Shakespeare, 2006; United)

Climate change poses a significant threat to the public health and social equity, disproportionately affecting the vulnerable populations including with disability. According to WHO climate change exacerbates existing health inequities and creates new risks for people with disabilities. Extreme weather events such as floods and heat waves can directly endanger lives while environmental changes can lead to increased respiratory issues, mental health problems and access to health care services.

The social model provides a valuable lens through which to understand the implications of f climate change for individuals with disabilities. WHO reports underscore the need for comprehensive approach that recognizes the social barriers faced by this population in the context of environmental challenges.

2.6.4 The identity model

The identity model of disability offers a perspective that emphasizes the social and cultural aspects of disability rather than solely focusing on the medical or functional limitations of individuals according to the United Nations Convention on the Rights of Persons with Disabilities (2006). It asserts that individuals with disabilities should define their own identies without being reduced to their impairments. The identity model represents transformative approach that empowers individuals to embrace their identities fostering advocacy, community and a redefined understanding of disabilities in society. The identity model offers a nuanced framework for understanding how individuals and groups define themselves and interact with the world. According to the Paris agreement disability is not an integral part of an inherent deficit but an integral part of an individual's identity influenced by cultural norms, societal structures and self-perception. The Paris Agreement (2015) emphasizes equity and inclusivity that resonate with the identity model of disability "parties acknowledge that adaptation action should follow a country driven, gender responsive, participatory and fully transparent approach taking into consideration vulnerable groups, communities and ecosystems. Carol Gill (1997) argued that embracing disability as a positive identity can foster resilience, self-worth and community belonging "disability is not a defect to be fixed or tragedy to be endured but an experience that enrich individuals and society when accepted as part of human diversity.

The identity model of disability reframes disability as a meaningful and valuable aspect of human identity. This perspective aligns with Paris Agreement's principles of inclusivity and equity emphasizing the importance of recognized and empowering marginalized groups in the global decision-making processes.

2.6.5 The Critical Realist Model

The critical realist model offers a unique and nuanced framework for understanding disability. While emphasizing the role of societal structures in creating disabling conditions,

the critical realist model also recognizes the significance of nonhuman natural environments in contributing to disability (King & Gregg, 2022). Critical realism recognizes disability as a multi-layered phenomenon shaped by biological, social and cultural factors. The model provides a stratified understanding of disability emphasizing the importance of exploring both the underlying mechanisms that produce disability and the experiences of individuals in specific contexts. Bhaskar (1975), "reality consists of structures and mechanisms that exist independently of our own knowledge but interact with human agency and social systems to produce observable outcomes. This perspective acknowledges the complexity of disability as both physical reality and a socially mediated experience. By integrating the strengths of the social and medical models while addressing their limitations, critical realism offers a holistic perspective that captures the complexity of disability. it emphasizes the importance of uncovering casual mechanisms, recognizing the interplay between the structure and agency and promoting inclusive practices that empower disabled individuals.

2.6.6 Human Rights Based Model

The human rights-based model of disability is a framework that views persons with disabilities as rights holders and active members in the society rather than focusing on their impairments. The human rights-based approach to disability expands upon the social model by incorporating a rights perspective (Disability Advocacy Resource Unit, 2019). This model emphasizes that equality, non-discrimination and removal of barriers that hinder full participant in society. The model aligns with principles such as dignity and anatomy, equality and non-discrimination, participation and inclusion and accountability. The United Nations Conventions on the Rights of Persons with Disabilities (CRPD), 2006 is the cornerstone of the human rights model of disability. It emphasizes the shift from viewing disability as a medical issue to a matter of human rights. Article 1 of the CRPD says the purpose of Convention is to promote and ensure the full and equal enjoyment of all human rights and fundamental freedoms

by all persons with disabilities and to promote respect for their inherent dignity, this article highlight that disability is not an individual issue but also a societal one, requiring systematic changes to include and empower persons with disability. the World Health Organization (WHO) has also embraced the human rights-based approach particularly in its reports on disability and rehabilitation when it said, 'governments have a responsibility to ensure that persons with disabilities have access to the same rights and opportunities as everyone else including education, employment, health care and social participation.

The human rights-based model of disability as outlined by the CPRD and WHO shifts the focus from the individual impairment to the societal and systematic barriers that hinder their participation. The model emphasizes dignity, equality, and inclusion aligning with principles of international human rights law.

2.7 The Concept of Ableism

The concept of ableism as understood by the Intergovernmental Panel on Climate Change involves recognizing how systematic discrimination against persons with disabilities intersects with broader societal, environmental and policy issues. Grue (2014) argues that criticism of ableism often portrays individuals with disabilities as victims, overlooking the need for in-depth analysis and meaningful discussions on specific challenges they face IPCC primarily focuses on climate science and policy, its reports and frameworks increasingly emphasize the need for inclusivity and equity in addressing climate change impacts which includes tackling ableism as part of broader structural inequalities. Ableism refers to discrimination, prejudice or systematic disadvantages against individuals with disabilities. It is perpetuated by societal norms that prioritize able bodied individuals and exclude or marginalize those with disabilities. Ableism is a global issue that intersects with other forms of inequality and discrimination, including poverty, gender inequality, and systemic barriers to education,

healthcare and employment. The IPCC recognize that persons with disabilities face disproportionate risks from climate change due to the interplay of ableism with environmental and social and vulnerabilities. This is highlighted in the context of climate induced disasters, migration and adaptation strategies. Vulnerable groups, including persons with disabilities are disproportionately exposed to and affected by the adverse impacts of climate change, due to existing inequalities and barriers IPCC, AR6, 2022. The IPCC and other UN bodies highlight that ableism intersects with other forms of discrimination such as poverty gender inequality and racism exacerbating the challenges faced by persons with disabilities for example women with disabilities are more likely to experience compounded marginalization during climate crisis. Ableism is perpetuated when persons with disabilities are excluded from being part of decision making.

2.9 Chapter Summary

In summary, this chapter has outlined the critical literature and theoretical frameworks relevant to understanding the effects of climate change on people with disabilities, specifically within the context of Domboshava in the Goromonzi District. The review of literature highlights that while there is a growing body of research on climate vulnerability and marginalized populations, studies focusing on the intersection of disability, rural settings, and climate change are still limited, particularly in African contexts. By addressing these gaps, the current study aims to make a significant contribution to climate adaptation research and policy, advocating for inclusive and equitable strategies that consider the unique needs of disabled individuals.

CHAPTER THREE

3.0. RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter covers the research methods and strategies for data collection. The study will qualitative methods of collecting data thus explanations and justification of the research instruments used will be done in this chapter. It also contains the study population, sample strategy and the ethics and considerations.

3.2 Research philosophy

Research philosophy is the foundation of any research process, involving beliefs, assumptions and principles that guide the researcher in their quest for knowledge and understanding of the world. This concept shapes how researchers approach their work, influencing the design methodology and interpretation of findings. Saunders, Lewis and Thornhill 2019 define research philosophy as a system of beliefs and assumptions about the development of knowledge. Research philosophy addresses fundamental question about the nature of reality (ontology), the nature of knowledge (epistemology) and the role of values in research (axiology). Therefore, research philosophy is not just an abstract concept but a practical and guiding framework that impacts every stage of a study. It forms the philosophical lens through which the researcher views the world ensuring coherence and consistency throughout the research process. Research philosophy plays a crucial role when deciding a research approach to use when carrying out a research. Interpretivism is regarded as one of the research ideologies in social science emphasizing the understanding of human behaviour through the subjective meanings' individuals attach to their experiences. Interpretivism is based on qualitative research techniques that provides deep insights into complex social

phenomena and allows for exploration of diverse perspectives and meanings. This study adopted interpretivism as its research philosophy because qualitative research methodologies have several advantages when applied to it. First, qualitative research provides rich, nuanced data that captures the complexities of human experience, allowing for deeper understanding of participants' perspectives (Braun and Clarke 2013). Secondly, emphasizes flexibility which allows researchers to adapt their approaches based on emerging findings and participant feedback, making research process more responsive (Maxwell 2013). Third, help academics to interpret findings within the specific cultural and situational backgrounds of participants (Yin 2014). Qualitative researchers may bring biases and assumptions to the research, influencing the data collection (Guba and Lincoln 2014) thus the researcher must be careful to minimize researcher bias by employing impartial data gathering techniques.

3.3 Research methodology

Research methodology a systematic approach, principles and techniques used to conduct research in order to acquire knowledge or solve a problem, it is a plan and a process that researchers use to conduct a study to collect and analyze data and it includes the philosophical assumptions underlying the choice of methods and specific techniques employed (Creswell 2010). The research methodology also plays a crucial role in identifying key elements in data collection including what data to collect, how to collect it, tools and techniques most suitable for ensuring accuracy and relevance. The researcher must decide the nature and sources of the data whether they are primary or secondary depending on the research problem (Kothari 2010). Research methodology provides a framework, tools and techniques to guide the process of data collection ensuring that the data gathered is accurate, reliable and appropriate for answering questions or testing hypothesis, it establishes the foundation for systematic and ethical data collection helping researchers make informed decisions about the

procedures (Sunders et al 2010). It helps the researcher to identify whether qualitative, quantitative and mixed methods are suitable for data collection (Creswell 2010). Qualitative research approaches will be used in this research.

3.4 Research design

Research design is a general plan of how the researcher will go about answering the research questions, it will contain clear objectives derived from the research questions, specify the sources from which you intend to collect data and consider the constraints you will inevitably have e. g access to data, time, location and money (Saunders, Lewis and Thornhill 2012). Cresewell, (2019) claims that research design explains the overall plan for connecting the conceptual research problems to the pertinent empirical research. A research design should be considered because it serves as the foundation for conducting a systematic, reliable and valid study, it ensures that the research process is well- structured, coherent and capable of addressing the research problem effectively (Zikmund et al 2010). Correlational research, casual-comparative research, descriptive research, exploratory research, and explanatory research are the main forms of research design (Creswell and Plano Clark 2011).

3.5 Population and sampling

Lack of resources such as time, money and access to the information they want to gather from the population hinders the process and makes it difficult to fulfil study objectives and questions thus it makes it difficult to develop a sample which accurately reflects the population as a subset that can be counted on to gather trustworthy data (Cruz,2019). A sample refers to a subset of population that is selected for a research study, it is a subgroup of the target population that the researcher plans to study for the purpose of making generalizations about a target population (Creswell, 2014). Creswell highlights that a sample is a smaller, manageable

subset of larger population carefully chosen to represent the broader group; the goal is to gather data from the sample and use it to draw conclusions about the entire population. One benefit of sampling is that it allows researchers to study a subset of population reducing the time, cost and effort required to collect data from the entire population while still obtaining results that are representative (Etikan, Musaand Alkssim, 2016), the benefit is especially important where studying the entire population would be impractical or impossible, it ensures that researchers can still achieve meaningful and generalizable findings without the burden of exhaustive data collection. Another benefit of sampling is that it makes it possible for many researchers to do the same study and confirm results; it allows repeatability (Dean 2021).

Exploratory research is a type of a research that to explore and investigate a research problem or phenomenon often without prior knowledge or assumptions (Saunders et al, 2016). Exploratory research is a qualitative method which often employs methods such as interviews, focus groups and observations. The goal of the exploratory research is to gain insights, to develop a deeper understanding of a specific issue, phenomenon or context specifically when existing knowledge is limited. The other goal is to generate hypotheses or research questions that can be tested in subsequent studies guiding future research efforts (Creswel, 2014). The goals of the exploratory research are crucial for laying the foundation for more rigorous studies. Exploratory research is praised for its capacity to identify completely new topics of possible inquiry as well as for laying the foundation for the subsequent studies (Turner, 2019). This study will make use of exploratory research in order to find the effects that are being faced by people living with disabilities due to climate change; it helps to get a vivid picture of their experiences and shows their feelings and emotions. This will work as an aid for the researcher when comprehending the research problem.

A study population refers to the group of individuals, objects or entities that share common characteristics and are the focus of a research investigation. In order to study a

population in research in a particular way it needs to be adequately characterized and its features understood (Dean, 2021). According to Babbie (2015), a study population is the aggregation of elements from which a sample is actually selected, it highlights the study population and represents the broader group from which researchers draw their samples for study aiming to general8ze findings or understand specific phenomena. Babbie emphasizes that it is crucial to clearly define the boundaries of the study population in order to ensure accurate reliable and valid research outcomes. The researcher must ensure that the population is accurately defined when conducting qualitative research since this helps to determine the sample that is used to gather data. In this case a target sample of approximately 25 people living with disabilities will be set for a qualitative research, which will allow for a robust analysis of the effects of climate change on people living with disabilities in Domboshava, Goromonzi District, constitute the population.

3.6 Sampling methods

3.6.1 Simple random sampling

According to Taherdoost (2016), simple random sampling is a method in which each individual is chosen randomly and entirely by chance, such that each individual in the population has the same probability of being selected at any stage during the sampling process, this method is widely used because it is straightforward and ensures unbiased representation of the population. Since every member of the population has an equal chance of selection simple random sampling minimizes selection bias leading to more representative results (Taherdoost, 2016). In this case the types of participants are people living with disabilities for example from Ruvarashe Trust in Makumbe Mission and the participants should be willing and able to provide data. The participants should be above 18 years, the population must be accessible to

ensure the selected participants can be contacted or surveyed. The types of questions that are going to be asked in this case are:

- 1. How climate change has affected their day to day living conditions?
- 2. The effects of climate change on their health?

3.6.2 Purposive sampling

According to Etikan, Musa and Alkassm (2016), purposive sampling is defined a s a deliberate choice of participants due to qualities the participant possesses. The researchers rely on their judgment to select participants who are most likely to provide relevant and valuable data for the study. Purposive sampling allows researchers to target participants who have specific knowledge, experience or characteristics relevant to the research questions (Etikan et al.,2016), this ensures that the data collected is rich and directly applicable to the study. Carter (2021) claims that when purposive sampling is used participants are carefully chosen on the grounds that they are assumed to have knowledge and experience in the field being studied providing important information for the study. In order to create a representative sample the researcher will include two academics, the MP of Goromonzi District, ten members from the district, the two representatives of the ministry of Public Service, Labour and Social Welfare and two representatives from the department of Social Welfare. Thus there are 15 samples in all.

3.7 Data collection methods

3.7.1 Focus group discussions (FDGs)

Focus group discussions are versatile and dynamic qualitative research method that facilitates the collection of rich, socially informed data and they allow researchers to interact with several individuals at once and allow them to study a complex behavior, they are

frequently favored by researchers. Stewart and Shamdasani (2014) explain that FDGs allow participants to clarify their view points or elaborate on their responses after hearing others' perspectives. FDs enables researchers to validate data through group consensus, as participants may affirm or challenge each other's perspectives leading to more reliable insights (Bryman, 2016).

According to Creswell (2014) the advantage of using FDGs is that they provide rich, in depth qualitative data as the group dynamics encourage participants to build on each other's ideas and insights, this collective interaction help uncover a wide range of perspectives in a short period. FDGs allow researchers to explore new and unexpected ideas that emerge from group discussions which may not surface during individual interviews. The researcher can record talks from focus groups in order to conduct a conduct additional post analysis.

Bryaman (2016) highlights the risk of groupthink, where participants may conform to the dominant opinions in the group rather than expressing their true thoughts or dissenting views, dominant participants can overshadow others, limiting the diversity of opinions. Getting all of the respondents the same location at the same time would be a big issue for group talks because of their different obligations (Garner, 2020). Additionally, Gibbs (2014) notes that FDGs may be influenced by social desirability bias where the participants express opinions they believe are acceptable to the group rather than their actual thoughts, participants may also be biased by the presence of other group members or the facilitator. Bryman (2016) argues that FDGs occur in an artificial environment, which may not accurately reflect real world behaviors or interactions, participants may act differently in a research setting.

3.7.2 Semi-structured interviews

Face-to-face allows the researcher to gather quality and in-depth qualitative data, the conversational nature of these interviews encourages participants to express their thoughts,

feelings and experience in detail, leading to richer insights (Creswell, 2014). It is also vital the researcher observe non-verbal cues, such as body language and facial expressions (Carter,2021). These cues can provide additional context to the verbal responses enhancing the understanding of the participant's feelings and attitudes. They also enhance engagement to participants as they may feel more engaged during face-to-face interviews as the personal interaction can create meaningful dialogue (Dean,2021). Face-to-face interviews are a powerful tool in qualitative research providing rich, nuanced data that can significantly enhance the understanding of complex issues.

Open-ended questions are used in semi-structured interviews encourage participant engagement, when individuals are invited to share their thoughts freely, they feel more valued and respected which can enhance the quality of data collected, the engagement is particularly important in qualitative research, where richness of data is paramount (David Silverman,2013). Semi-structured interviews give a room for exploration of sensitive topics (Maxwell, J. A, 2015). In contexts where sensitive issues are discussed, open ended questions can create a safe space for participants to share their experiences without feeling constrained. Semi-structured interviews are frequently used in exploratory research because they enable the researcher to obtain more clarity on the topics being studied. This approach enhances the flexibility of the interview process, encourages participant engagement and allows for the exploration of complex and sensitive topics (Creswell, 2015).

3.7.3 Secondary Sources

Written records are an essential source of information in research and historical documentation; these records include books, reports, letters, archives and other documented materials that preserve information for future reference. Written records, including concept papers, presentations, and academic journals are reliable published sources of information

(Jurisic, 2020). According to Cohen, Manion and Morrison (2018), written records often undergo careful preparation, editing and verification which enhance their accuracy and reliability, they reduce the risk of distortion or forgetting that may occur with oral communication. Yin (2018) points out that written record provides documented accountability for actions, decisions and events which are essential for future use. According to Yin (2018) written records can be misinterpreted due to ambiguous language, outdated terminology or lack of sufficient context, researchers may draw incorrect conclusions if they fail to understand the context in which the records were created. In order to overcome these shortcomings, the researcher has to make sure that are recent and that the information is sufficient.

3.8 Validity and reliability

In research validity and reliability are two crucial concepts that bring out quality and accuracy of collected data. Validity is a crucial concept in research, referring to the degree to which a study accurately what it intends to measure, it ensures the credibility, accuracy and trustworthiness of the research findings. According to Creswell (2014), validity is the extent to which the results of a study reflect the actual phenomenon being studied and are free from the errors and bias thus validity ensures that the research methods, tools and conclusions are appropriate and meaningful. Bryman, (2016) argues that validity is crucial for experimental studies to ensure that observed outcomes are due to the manipulation of the independent variable and not extraneous factors. Validity is a cornerstone of high-quality research ensuring that studies measure what they intended to measure and produce accurate, reliable and credible findings thus it is essential in the attainment of qualitative data. Without validity the results will be bias, unreliable and may lead to inaccurate conclusions.

Creswell (2014) highlights that reliability is crucial for ensuring the consistency of qualitative research findings, researchers must employ reliable instruments to enhance the

credibility of their studies. Reliability is essential for enhancing the credibility, validity and applicability of research findings. Reliability guarantees that the research can be repeated and still find the same results. Reliability refers to the consistency or repeatability of measurement, a reliable measurement yields the same results under a consistent condition. Reliability and validity are interconnected aspects of research measurement. Reliable measurements can contribute to valid conclusions, a measurement must first be reliable before it can be deemed valid, and this shows that the two are interconnected. It is important for researchers to make sure that all the research instruments are reliable and valid before they collect data. It can be done through pilot testing the research instruments.

3.9 Data presentation and analysis

Data presentation and analysis are critical components in research as they help researchers to interpret their findings and communicate them effectively. Data analysis is a process of inspecting, cleaning, transforming and modelling data to discover useful information, inform conclusions and support decision making. According to Silverman (2014), data collection is the process of breaking down data into smaller parts, examining each part and then reassembling the parts into a coherent whole, in order to answer research question or test hypothesis. Data presentation and analysis involves organizing and displaying data in a way that makes it easy to understand and interpret. This can include visualizations, reports and dashboards. Together data presentation and analysis enable the researcher to derive actionable insights from data, facilitating informed decision making and strategic planning. An effective presentation enhances understanding and engages the audience while thorough analysis ensures the information is reliable and relevant.

Research questions will help to provide focus group discussions, while themes will be used to present and analyse data. Interviews will provide data like names and age anonymously.

This will work as a strategy for the researcher to remember who will respond to certain question at any given time.

3.10 Pilot testing

According to Polit and Beck 92014), pilot testing is a small-scale version of a proposed study, conducted to test and refine the study's methodology, instruments and procedures. Pretesting is done earlier to identify potential issues early, allowing adjustments and improvements. In Domboshava the researcher will conduct a pilot survey. Validity, reliability and generalizability of the study findings are enhanced through pilot testing (Creswell 2014). The reasons for conducting a pilot test is to refine research instruments, identify potential issues, test research design and methodology and estimate sample and resources. By conducting a pilot test the researcher can ensure that the study is well designed, effective and efficient ultimately leading to more reliable and valid results.

3.11 Ethical considerations

Ethics is the study of moral values and principles that guide human behavior and decision making; it involves analyzing and evaluating the moral implications of actions, policies and decisions (Resnik 2015). Informed consent is the primary ethical factor which the researcher has to take note of before the research. It ensures that participants are aware of the nature, risks, benefits and purpose of the research before they agree to participate. Researchers have the ethical obligation to ensure that the participants are not coerced or manipulated into participation. By ensuring that participants are properly informed and voluntarily consenting researchers contribute to the ethical conduct of the research and the advancement of knowledge in a responsible manner.

3.12 Chapter Summary

Exploratory research helps the researcher to grasp the nuances and complexities of a problem, especially when the topic is new or poorly understood, it also allows researchers to identify key variables and factors that may be relevant to the study, setting the stage for more detailed investigation. Exploratory research can assist the researcher in identifying the target population and sample for further research, helping to refine participant selection criteria. Structured interviews are two qualitative data collection methods used above which help the researcher to obtain information directly from the participants. Ethical considerations were discussed in the above chapter because they help to measure validity and reliability of the research.

CHAPTER FOUR

4.0. DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

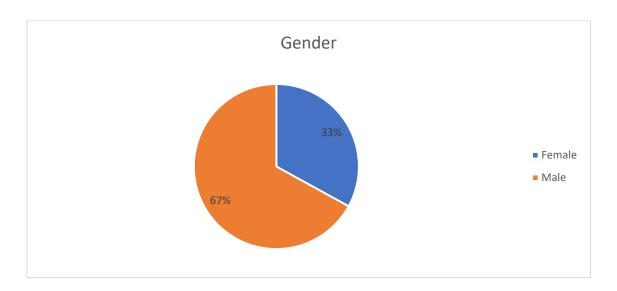
In this chapter the researcher's findings are presented, analysed and discussed. In Goromonzi district the data was acquired through interviews and focus groups discussion. Feedbacks from the research were used to present data in this chapter. This chapter sought to draw the connection between data collected relating it to the objectives of the study that are to investigate the impacts of climate change on people with disabilities, the accessibility and effectiveness of current climate adaptation and mitigation strategies for people with

disabilities and identifying the challenges faced by people with disabilities in accessing resources and support during climate related events.

4.1.1 Section A: Biographical data of participants

1. Gender

Figure 4.1 Gender



From the research findings, the highest number of participants was 15(67%) females, followed by 5(33%) male indicating that this research was dominated by female more than men.

4.2 The impacts of climate change on people with disabilities

The respondents were asked about their understanding regarding the effects climate change on their lives and how it is affecting their security at large. The researcher got different responses which include:

a. Increased vulnerability during extreme weather events

Participants suggested that climate change increase the vulnerability of people living with disabilities during extreme weather events. Individuals with disabilities often face heightened weather events such as hurricanes, floods and heat waves. Research indicates that disabled people experience higher mortality and morbidity rates during these events due to mobility limitations and inadequate access to emergency services, Morrow (1999). Many individuals with disabilities rely on medical devices, medications or continuous care, which be disrupted during power outages or evacuations caused by extreme weather. According to Bethel et al. (2011), these disruptions can lead to worsening health conditions or even fatalities, particularly for those with chronic illnesses or mobility impairments. As highlighted by Mapira (2017), people with disabilities are more likely to experience injury, displacement and even death during disasters. One of the respondents mentioned that,

They make plans for the floods, but no one asks us how we feel and how we will evacuate or where we will go, it's like we do not exist.

This shows that the people living with disabilities feel excluded from disaster preparedness planning. Many report feelings invisible in disaster preparedness planning processes, leading to strategies that fail to address their needs. Individuals with disabilities are often more vulnerable to the impacts of climate change and due to pre-existing health conditions and the physical and social barriers they encounter. This vulnerability heightened in low-income communities where many disabled individuals reside, leading to lack of access to necessary resources during climate –related events. Another respondent said

Climate change makes us vulnerable and the society neglect us and our health is left at risk, we are treated like outcast.

This statement shows that people living with disabilities feel neglected and that they are vulnerable to extreme weather conditions. In line with the above statement, Gwimbi (2017) note that community-based disaster management initiatives in Zimbabwe often fail to include people living with disabilities in decision making processes, leading to the development of strategies that do not address their specific needs. Furthermore, during resource distribution, people living with disabilities may face stigma or be deprioritized in favour of able-bodied individuals, leaving them without essential supplies such as food, water and medical care.

a. Psychological impacts

The respondents show that their mental health is at risk due to the extreme weather condition and the fear of the unknown as they are not updated about the change in weather and that they are not considered in decision making. The stress and uncertainty associated with climate climate-related events can exacerbate existing mental health conditions, making it more difficult for individuals to cope (Fritze et al., 2008). Climate change can exacerbate existing mental health conditions, such as anxiety and depression for people with disabilities, Ncube (2019). Climate related disasters can cause significant trauma and stress for people with disabilities, Moyo (2019). One of the respondents mentioned that,

We experience increased anxiety, depression and trauma due to climate related, the loss of homes, livelihoods and social support networks can have devastating psychological impacts on us.

This statement shows that people living with disabilities leave in fear of how their life will be like after disasters and if they are going to find networks which will help them during the times of needs. The stigma and discrimination associated with disability can make it more difficult for individuals to form and maintain social connections, Mhaka-Mutepfa (2016), the lacks accessible and inclusive climate change adaptation and mitigation initiatives can further

exacerbate social isolation, leaving people with disabilities feeling marginalised and excluded. The psychological impacts of climate change on people with disabilities are significant and far reaching, it is essential to recognise the disproportionate effects of climate change on people with disabilities and to develop strategies that address their unique psychological needs and challenges. This requires inclusive and accessible climate action which priorities the participation, protection and empowerment of people with disabilities.

b. Communication barriers in early warning systems

Participants suggested that early warning systems fail to communicate effectively with them, early warning rely on technology that is not accessible to them. Early warning systems are typically disseminated through radio, television and mobile messages, however people with disabilities may not have access to these communication channels, or may face barriers in understanding the information being conveyed, Mavura (2018). Individuals with visual impairments may not be able to read warning messages, while those with hearing impairments may not be able to hear4 warning sirens, Charema (2019). One of the respondents mentioned,

The warning text messages are useless to me because I cannot read them. There should be a way to inform people like me through voice messages or door-to-door announcements as they know our charity homes.

This statement shows that people living with disabilities feel neglected and that information is not sufficiently delivered to them thus there is need of some traditional ways of communicating with them in times of disasters which are favourable to them. Early warning systems in Zimbabwe often lack sufficient support for people with disabilities, in the event of a disaster people with disabilities may require additional support to evacuate or access shelter, Kett et al. (2017). However early warning systems in Zimbabwe often fail to provide this support, leaving people with disabilities vulnerable to harm, Mavhura (2018).

4.3 Effectiveness of climate change adaptation and mitigation strategies for people with disabilities

The effectiveness of climate adaptation and mitigation strategies for people with disabilities hinges on inclusivity and accessibility. By incorporating the needs of disabled individuals into planning and response efforts, communities can enhance resilience and ensure that everyone is supported during climate related changes. The effectiveness of climate change adaptation and mitigation strategies for people with disabilities is a critical area of research as climate change disproportionately affects this population.

a. Community engagement and empowerment

Engaging people with disabilities in the planning and implementation of climate strategies is essential. Research emphasises their engagement and involvement can lead to more effective and relevant solutions as they can provide insights based on their lived experiences. Empowering disabled individuals to participate in decision making processes fosters a sense of ownership and enhances community resilience. One of the respondents mentions,

As a person with disability, I believe that community engagement and empowerment are essential for creating inclusive environments especially in the context of climate change. When our voices are heard and included in decision making processes, it not only validates our experience but also ensures that the strategies developed truly meet our needs.

This statement gives a clear picture of how people with disabilities are envying for inclusion and engagement. Another responded mentioned,

Being involved in community discussions allows us to share our unique perspectives on the challenges we face during the climate related events. Its empowering to know that our insights can shape policies and initiatives that directly impact our safety wellbeing. Moreover, when we work together with community leaders and organisations, it fosters a sense of belonging and partnership.

Engaging people with disabilities in the planning and implementing of climate change strategies is essential, research emphasizes that their involvement can lead to more effective and relevant solutions, as they can provide insights based on their lived experiences. Empowering disabled individuals to participate in decision-making processes fosters a sense of ownership and enhances community resilience, Harvard Law School Project on Disability (2017).

b. Inclusion in climate policies

Research indicates that people with disabilities are often excluded from climate adaptation and mitigation strategies. A systematic analysis found that only 41 out of 195 parties to the Paris Agreement mention people with disabilities in their nationality determined contributions and even fewer include concrete measure for inclusion. This lack of representation can lead to ineffective strategies that do not address the unique vulnerabilities faced by disabled individuals. One of the responded mentioned,

As a person with disability, am deeply concerned about our exclusion from climate policies. It's disheartening to see that that climate adaptation and mitigation strategies overlook our specific needs. When people with disabilities are not included in these discussions, it creates a significant gap in understanding the unique challenges we face during climate related events.

This statement shows that climate change is not just an environmental issue, it's a also a matter of social justice. People with disabilities often face systemic inequalities that can be worsened by climate impacts. Inclusive policies can help bridge these gaps ensuring that all individuals have equitable access to resources, information and support during climate crisis, Leong, G (2020).

4.4 Challenges faced by people with disabilities in accessing resources and support during climate related events

Climate related events such as floods, drought, cyclone and heat waves are becoming increasingly frequent and severe due to climate change. These events disproportionately affect vulnerable populations, including people living with disabilities. In Zimbabwe people ling with disabilities face significant challenges in accessing resources and support during climate related events. These challenges stem from a combination of systematic barriers, social exclusion policies and infrastructure.

a.Physical and structural barriers

Participants suggested that most significant challenges they face during climate related events is the lack of accessible infrastructure. Emergency shelters, evacuation routes, resource distribution centres are often designed without considering the needs of individuals with mobility, visual or hearing impairments. One of the respondents mentioned,

Evacuation centres are located in buildings that lack ramps or elevators, making them inaccessible to us wheelchair users, temporary shelters do not have facilities such as accessible toilets or proper accommodations for us with physical disabilities.

This statement shows a vivid picture of people living with disabilities are suffering and that their needs are being ignored and mostly focus on the able bodied making it difficult for

them to survive the climate related events. The absence of inclusive infrastructure during disasters excludes people living disabilities from receiving timely support and resources, increasing their vulnerability to harm during times of disasters, Matin et al. (2019). Gwimbi (2017) notes that community-based disaster management initiatives in Zimbabwe often fail to include people living with disabilities in decision making processes, leading to development of strategies and infrastructure that do not address their specific needs. Furthermore, during resources distribution people living with disabilities may face stigma or be deprioritised in favour of able-bodied individuals leaving them without essential supplies such as food, water and medical care. During climate related events individuals with disabilities may struggle to evacuate or access emergency services due to inaccessible transportation and infrastructure Mavhura (2018). People with physical disabilities may face difficulties in navigating flooded areas or accessing shelters with inadequate ramps, Charema (2019). Another respondent mentioned,

We encounter significant physical and structural barriers that hinder our full participation in the society. We encounter physical barriers such as lack of accessible pathways, ramps and public transportation, creating obstacles in daily mobility and access to essential services, the structural barriers encountered are inadequate infrastructure and policies that fail to prioritise inclusivity, further exacerbate these challenges. These challenges do not isolate us only but limit our opportunities for education, employment and social engagement.

This statement shows that people living with disabilities are facing a lot of discrimination thus their life is in danger. Individuals with disabilities often face higher unemployment rates, limiting their ability to invest in adaptive technologies or move to safer locations as climate change impact intensity, Burgdorf (2017) *Social* attitudes towards

disability can create additional barriers, discrimination may limit access to resources, information and support systems necessary for adaptation to climate change, Oliver (1990).

a. Communication barriers

Participants shows that they face communication barriers as critical information about climate risks and emergency producers is often not provided in accessible formats, this includes lack of materials in Braille, large print or easy read formats for individuals with visual or cognitive disabilities. Emergency announcements and information may not be available in sign language, making it difficult for deaf individuals to receive timely updates, climate related communication often use complex language and scientific terminology that may not be easily understood by individuals with cognitive disabilities or limited literacy skills. One of the respondents mentioned,

We face challenges due to inaccessible information formats, such as the lack of materials in Braille or sign language, which hinders our ability to receive critical updates. The use of complex language and technical jargon can alienate us with cognitive disabilities, making it difficult for us to understand essential information. Delays in disseminating accessible communication further exacerbate these issues leaving us vulnerable in emergency situations.

This statement shows that people living with disabilities face challenges in communication thus they end up facing problems and they are easily affected. The National Council on Disabilities (2019) reports that during emergencies, information dissemination often priorities speed over accessibility, delays in providing accessible information can leave disabled individuals unprepared for climate-related events. The use of technical jargon and complex language in climate communications can alienate individual's cognitive disabilities, Tait et al. (2016). A report by the World Health Organisation (2011) indicates that emergency

responders often lack training in effective communication with people with disabilities, this gap can result in misunderstandings and inadequate support during crises. These communication barriers is vital for ensuring that people with disabilities are informed and can effectively participate in climate preparedness and response efforts.

b. Social isolation

Participants mentioned that they face social isolation in their day to day life but it is worsened during climate- related events leading to increased vulnerability and mental health challenges, addressing these issues require targeted interventions that promote accessibility, inclusivity and community engagement to ensure that disable individuals are supported and connected during such crisis. One of the respondents mentioned,

As a person with disability, I often experience social isolation, especially during climate-related events. Limited access to information in formats I can understand leaves me feeling disconnected from community. Physical barriers make it difficult to reach shelters or participate in emergency planning which can be incredibly frustrating. When disasters strike, I find it hard to connect with others for support and societal stigma often makes me hesitant to seek help. This isolation not only affects my ability to respond to emergencies but also takes a toll on my mental health. It is essential that work towards creating inclusive environments where everyone, regardless of ability can participate and feel supported, especially during time of crisis.

This statement shows that people with disabilities face a lot of discrimination and it is affecting their mental health and their day to day living standards. During climate-related emergencies, vital information is often not communicating in accessible individuals uninformed, McCall et al. (2017). People often face physical barriers that prevent them accessing community resources and support networks, Kitchin (2013). During climate

emergencies, these barriers can become more pronounced, isolating individuals from critical support systems. This exclusion can intensify during climate related events, as disabled individuals may feel marginalised and less likely to seek help or participate in recovery efforts.

4.5 Chapter Summary

The first goal included the impacts of climate change on people with disabilities in Domboshava, Goromonzi District. According to the research climate change has negative impacts on people living with disabilities thus there is need for strategies and mitigations to be introduced. The second goal looked at the accessibility and effectiveness of current climate adaptation and mitigation strategies for people with disabilities in study area. The climate change adaptation and mitigation strategies are effective as they help people living with disability to fight against discrimination and it allows inclusion. The third goal is to identify challenges face by people living with disabilities in accessing resources and support during climate related events.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

5.1 Introduction

The main conclusions of the project are presented in this chapter. This chapter seeks to summarize the findings from the research study and draw conclusions based on the research questions and objectives. It also focuses on outlining recommendations from the findings of the research. The study sought to access the impacts of climate change on people with disabilities focusing on Domboshava, Goromonzi District. Insights were gained throughout the research and understanding of the effects of climate change on people with disabilities. Conclusions will be presented based on the causes and impacts of climate change on people living with disabilities in Domboshava. Recommendations are put forth regarding improving the lives of people living with disabilities and what can be done so that there is equality between able bodied and people living with disabilities. It is hoped that these findings will help in policy formulation which will protect the lives of people living with disabilities.

5.2 Summary

Chapter one has the introduction of the study. The objectives of the study were to assess the specific impacts of climate change on people with disabilities in Domboshava, Goromonzi District to evaluate the accessibility and effectiveness of current climate adaptation and mitigation strategies for people with disabilities in the study area and to identify challenges faced by people living with disabilities in accessing resources and support during climate related events. The statement of the problem shows that people with disabilities are disproportionately affected by climate change compared to the general population and it

assumes that the existing climate change adaptation strategies are inadequately addressing the needs of this group and leading to vulnerability.

Chapter Two: focuses on literature review and theoretical frameworks for the study. The vulnerability theory focuses on understanding how people with disabilities in rural Zimbabwe face compounded risks due to their physical impairments and social marginalisation. In the chapter the concept of climate change, causes of climate change, effects of climate change, the impacts of climate change on persons with disabilities, models of disabilities such as the charitable, medical, social, the identity, the critical realist and human based model are discussed and give relevant information about people leaving with disabilities. The concept of ableism focuses on the systematic discrimination against persons with disabilities intersects with broader societal, environmental and policy issues.

Chapter Three: gave an overview of the methodology that was used in the study.

Chapter Four: In this chapter data was presented, analysed and discussed. There are various themes and insights that emerged in the findings and they shall be further discussed in the conclusion of the study.

Chapter Five: summary, conclusions, recommendations and areas of further study sought to summarize the whole study and provide conclusions highlighting whether the study was able to provide the answers for the problem.

5.3 Conclusions

5.3.1 Assess the effects of climate change on people with disabilities in, Domboshava Goromonzi District.

The findings show that the impacts of climate change on people with disabilities are

1. To assess the specific impacts of climate change on people living with disabilities

The findings show that the impacts of climate change on people with disabilities are increase vulnerability during extreme weather conditions, psychological impacts and communication barriers in early warning systems. The impacts of climate change cause discrimination, social isolation and vulnerability of people living with disabilities. People with disabilities often experience intersecting challenges such as poverty, inadequate access to healthcare and social exclusion which exacerbate their susceptibility to climate change impacts, Kelman et al. (2016).

2. Evaluate the accessibility and effectiveness of current climate change adaptation and mitigation strategies for people with disabilities.

The findings show that the climate change adaptation and mitigation strategies from people with disabilities shows social and economic inequalities further restrict people with disabilities access to adaptation strategies. WHO (2011) reports that people with disabilities are disproportionately affected by poverty, which limits their ability to prepare for or recover from climate-related events.

3. The challenges faced by people with disabilities in accessing resources and support during climate related events.

The findings show that the challenges that are faced by people with disabilities in accessing resources and support during climate change related events are physical and structural barriers, communication barriers and social isolation. The United Nations Office for Disaster Risk Reduction, (2015) highlights that only a small fraction of national disaster risk reduction plans explicitly address the needs of people with disabilities.

5.4 Recommendations

Ministry of Public Service Labour and social Welfare

They should involve people with disabilities in the creation of policies to ensure their needs and perspectives are included; ensure that all climate-related policies and initiatives meet accessibility standards.

Ministry of Environment, Climate, Tourism and Hospitality Industry:

They should develop emergency response plans that specifically address the needs of individuals with disabilities, including accessible evacuation routes and communication methods, training for emergency personnel on how to assist individuals with disabilities during climate related disasters.

Ministry of Health and Child Care:

They should ensure that people with albinism must have access to affordable and effective sunscreen, protective clothing and hats. They must also consider subsidies or distribution programs in vulnerable areas.

People with disabilities:

they should develop a personal emergency plans that address specific needs during climate related disasters and also ensure that they have essential supplies and know evacuation routes that are accessible.

Non-Governmental Organisations:

They advocate for inclusive climate policies that specifically address the needs and rights of people with disabilities at local, national and international levels.

5.5 Areas of further research

This research is based on the effects of climate change on people with disabilities. Some scholars can look at the effects of climate change on human security and the effects of climate change on albinism.

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Appendix

INTERVIEW GUIDE

- I B211270B, a final year student at Bindura University of Science Education (BUSE). I am carrying out a research on the effects of climate change on people with disabilities in Domboshava as a fulfilment of the Bachelor of Science HonSors Degree in Peace and Governance. I kindly ask you to participate in the following interview questions that are relevant to my study as part of the fieldwork. Please note that the findings will be strictly for academic and research purposes. Confidentiality and anonymity are guaranteed. Your participation ad cooperation will be greatly appreciated.
 - 1.2.1.1 What are the impacts of climate change on your day today activities?
 - 1.2.1.2 What are the effects of climate change and how is it affecting your lives and participation in the community?
 - 1.2.1.3 What is the effectiveness of climate change adaptation and mitigation strategies?
 - 1.2.1.4 How effective are the adaptation and mitigations strategies and their drawbacks.
 - 1.2.1.5 What are strategies that could be used which can help to enhance resilience for people with disabilities to climate change?
 - 1.2.1.6 What are the challenges that you are facing in accessing resources during climate related events?

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