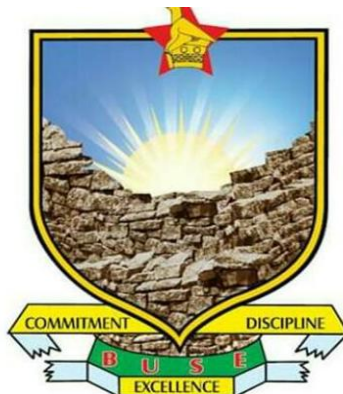


BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF SOCIAL SCIENCES AND HUMANITIES
DEPARTMENT OF PEACE AND GOVERNANCE



**THE IMPACTS OF CLIMATE CHANGE ON FOOD SECURITY OF CHILD
HEADED HOUSEHOLDS IN RUSHING A DISTRICT.**

By

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B211050B

**A Dissertation Submitted To The Department Of Peace And Governance In Partial
Fulfilment For The Requirements For The Bachelor of Science Honours Degree In Peace And
Governance.**

DR J KUREBWA

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MARCH, 2025

ABSTRACT

The purpose of this study was to investigate the impact of climate change on food security among child-headed households in Rushinga District, Zimbabwe. Utilizing a case study research design, the study employed qualitative methods, primarily in-depth interviews, to gather data from respondents, including child-headed households, community leaders, and NGO representatives. A sample of 25 respondents was selected through simple random sampling. Data was collected using in-depth interviews. Key findings reveal that climate change significantly exacerbates vulnerabilities faced by child-headed households, particularly through increased water scarcity and the frequency of droughts, which lead to crop failures and heightened food insecurity. Respondents report that these challenges force children to take on adult responsibilities, negatively impacting their education and mental health. The study highlights the urgent need for targeted interventions to support child-headed households in coping with the adverse effects of climate change. Recommendations include establishing community support programs that provide food aid and agricultural training, enhancing access to education through scholarship initiatives, and strengthening social safety nets to alleviate economic pressures. Additionally, promoting community gardens and implementing climate adaptation strategies can significantly improve food security and resilience among these vulnerable populations.

DECLARATION FORM

I, Tatenda Chiwara (B211050B), hereby declare that this dissertation is the result of my own research and study, except to the extent indicated in the acknowledgments and references included in the body of the paper, and that it has not been submitted in part or in full for any other degree to any other university.

APPROVAL FORM

The undersigned certify that they have supervised, have read and recommend to the University for acceptance and examination a research project titled The Impact of climate change of food security in child headed households in Rushinga district submitted by (B211050B) in partial fulfilment of the requirements for the award of the degree of Bachelor of Science Honors Degree in Peace and Governance.

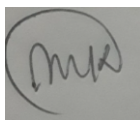
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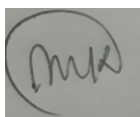
Supervisor's Signature:



Date:

#Chairperson's Name: Dr J Kurebwa

Chairperson's Signature:



Date:

DEDICATION

I dedicate this work to my son.

ACKNOWLEDGEMENTS

First, I would like to extend my gratitude to my family for being my pillar of support during my studies. I would like to thank my friends for their encouragement during my studies.

I would also like to extend my heartfelt gratitude to my Supervisor for his mentorship during my studies. I would also like to thank the stakeholders in Rushinga District for their timely assistance during my studies.

ABBREVIATIONS AND ACRONYMS

CBO - Community-Based Organization

FAO - Food and Agriculture Organization

HIV/AIDS - Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

IPCC - Intergovernmental Panel on Climate Change

NGO - Non-Governmental Organization

UNICEF - United Nations Children's Fund

WHO - World Health Organization

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Child headed households have been determined to be a global phenomenon. Across the world, the ratio of child headed households has been increasing. According to Newlin et al. (2016) child-headed households in Asia face a myriad of challenges, particularly in countries like India, where social and economic disparities are prevalent. One of the primary challenges these households encounter is the lack of access to basic necessities such as food, shelter, education, and healthcare (Newlin et al., 2016). Without parental guidance and support, children in these households are often forced to fend for themselves, leading to issues like malnutrition, inadequate living conditions, and limited educational opportunities (Newlin et al., 2016). In India, child-headed households often struggle to access government welfare programs and social services due to bureaucratic hurdles and lack of proper documentation (Lone, 2021). This results in these vulnerable children being further marginalized and deprived of essential support systems. Additionally, societal stigma and discrimination can exacerbate the isolation and hardship faced by children heading households, making it even more challenging for them to integrate into their communities and access the assistance they need (Lone, 2021). In Colombia, for instance, internal conflicts and displacement have contributed to the increase in child-headed households. These children often lack access to education, healthcare, and social services, as they may not have the necessary support networks or documentation to access these resources (Lone, 2021). The ongoing violence and instability in the region further compound their vulnerabilities, exposing them to risks of exploitation, abuse, and neglect. In Brazil, economic inequality and urban poverty contribute to the prevalence of child-headed households, especially in marginalized communities and urban slums (Lone, 2021). These children may be forced into labour to support themselves and their siblings, which

can perpetuate cycles of poverty and limit their opportunities for education and personal growth.

Across Africa, child-headed households face significant challenges accessing basic necessities as highlighted by Lone (2021). These vulnerabilities are exacerbated by climate change impacts in many regions. In Zimbabwe, Tirivangasi and Nyahunda (2019) note that persistent droughts induced by climate change have posed major difficulties. Prolonged dry conditions have led to water scarcity issues negatively impacting irrigation for agriculture. The lack of sufficient rainfall has also resulted in widespread crop failures and food insecurity as farmers depend on rain-fed production. As the agricultural sector forms an important livelihood source, many Zimbabweans now struggle to meet needs due to decreased crop yields impacting the economy as discussed by Tirivangasi and Nyahunda (2019). Additionally, prolonged droughts have contributed to environmental degradation through increased deforestation, soil erosion and loss of biodiversity weakening community resilience. Similar issues are seen in Kenya and South Africa where factors such as high orphanhood rates, poverty, displacement due to conflicts and climate disasters increase vulnerabilities of child-headed households as explained by Hall and Sambu (2019) and Kibachio and Mutie (2020). Child-headed households face even greater risks accessing food and water during climate stresses without adult support. There is need to examine impacts of recurrent droughts on the food security of these marginalized groups

As stated by Tirivangasi and Nyahunda (2019) in Zimbabwe, climate change-induced droughts have had significant impacts on the country's agriculture, economy, and environment. The persistent dry conditions have led to water scarcity, crop failures and food insecurity for many communities (Tirivangasi & Nyahunda, 2019). Without sufficient rainfall for irrigation and farming, Zimbabweans are facing challenges in meeting their basic needs and sustaining

their livelihoods. The lack of access to water for drinking, sanitation, and agriculture has resulted in health concerns, malnutrition, and economic instability (Tirivangasi & Nyahunda, 2019). The agricultural sector, which is a vital source of income for many Zimbabweans, has been severely affected by the droughts, leading to decreased crop yields and livelihoods at risk (Tirivangasi & Nyahunda, 2019). Additionally, the prolonged droughts have exacerbated environmental degradation, soil erosion, and deforestation in Zimbabwe. The loss of vegetation and biodiversity not only impacts local ecosystems but also contributes to the vulnerability of communities to climate-related disasters such as floods and landslides (Tirivangasi & Nyahunda, 2019). In that regard, there is a need to investigate how child headed households have been affected by these trends.

1.2 Purpose of the Study

To investigate the impact of climate change on food security of child headed households in Rushinga District.

1.3 Statement of the Problem

Climate change has become a major cause for concern in Zimbabwe in recent years. The persistent droughts that the country has been facing as a result of climate change have led to dire consequences for its population and environment (Ringson, 2022). For instance, the lack of rainfall has resulted in water scarcity, leading to issues with irrigation for agriculture and access to clean drinking water for communities (Hall & Sambu, 2019). Additionally, the dry conditions have contributed to food insecurity and negatively impacted the economy, as agriculture is a vital sector in Zimbabwe. Child-headed households in Zimbabwe face even greater challenges when it comes to dealing with the impacts of climate change (Ringson, 2022). These households, where children are responsible for caring for themselves and possibly younger siblings, have additional vulnerabilities that make them even more susceptible to the

effects of persistent droughts and changing weather patterns (Hall & Sambu, 2019). For example, without adult supervision or support, these children may struggle to access necessary resources like food, water, and healthcare during times of environmental stress (Hall & Sambu, 2019). The lack of guidance and resources can further exacerbate their already challenging circumstances.

1.4 Objectives of the Study

1. To investigate the impact of climate change on food security of child headed households in Rushinga District.
2. To explore the food security challenges faced by child headed households in Rushinga District.
3. To identify remedies or solutions to address food security challenges faced by child headed households in Rushinga District.

1.5 Research Questions

1. What is the impact of climate change on child headed households in Rushinga District?
2. What food security challenges are faced as a result of climate change in child headed households in Rushinga District?
3. What solutions or remedies can be implemented to address food security challenges in child headed households?

1.6 Assumptions of the Study

The study assumes that child-headed households are more vulnerable to food insecurity compared to households headed by adults.

The study also assumes that climate change impacts like recurrent droughts are exacerbating pre-existing food security challenges in the study area.

1.7 Significance of the Study

The findings highlight the specific challenges faced by child-headed households in Rushinga District. They could aid policymakers to develop targeted responses and allocate appropriate resources. By identifying existing gaps, the study can help policymakers strengthen government programs that aim to boost food production, diversify livelihoods, and improve access to food for at-risk communities.

For the academic community, the study would add to the body of knowledge on the disproportionate impacts of climate change on marginalized populations like child-headed households in Africa. It could also provide empirical data and qualitative insights on how droughts affect the food security and livelihoods of vulnerable groups in Zimbabwe.

For the local community, the study could help raise awareness about how climate change is exacerbating food insecurity, and the specific struggles faced by child-headed households. Recommendations from the study could aid in establishing community-led initiatives to strengthen social safety nets for at-risk families.

Findings could aid NGOs working with children by identifying gaps in food security and livelihoods during climate stresses. This allows them to develop more targeted interventions to boost access to food, income sources and social services for these households. Raising awareness about disproportionate impacts on vulnerable groups can encourage more collaborative efforts between government, NGOs and communities to build resilience of at-risk populations.

The findings could help traditional leaders advocate more strongly with local government officials to direct resources and programs towards vulnerable groups. Traditional leaders may use this increased awareness of disproportionate impacts on marginalized households to encourage community-led support systems.

1.8 Delimitations of the Study

The study focused on child-headed households in Rushinga District, Zimbabwe and will not include other areas. This helps narrow the scope. Only households where the primary caregiver was aged 18 years or younger were considered as "child-headed". Households with older caregivers will not be included. The study was focused on understanding food security challenges rather than broader issues like access to education, healthcare that child-headed households face.

1.9 Limitations of the Study

Accessing child-headed households in remote rural areas was a challenge due to poor infrastructure and transport limitations. To address the challenge, the researcher worked with local NGOs/CBOs who are familiar with the communities. They assisted with transportation and introductions. Some younger children heading households felt uncomfortable sharing experiences and may give socially desirable responses instead of open disclosure. To make younger children feel more comfortable sharing experiences, the interviews could be conducted in a familiar community space like a school, in the presence of a trusted community member.

1.10 Definition of Key Words

Child-headed household: A household where the primary caregiver and head of the household is aged 18 years or below (Hall & Sambu, 2019). They are responsible for the care of younger siblings or other relatives.

Food security: Access by all people at all times to enough nutritious, safe and culturally acceptable food to meet dietary needs for an active and healthy life (King et al., 2017).

Climate change: Long-term shifts in temperatures and weather patterns due primarily to human activities including emissions and land use. It poses risks to societies and ecosystems (King et al., 2017).

Drought: Prolonged periods of abnormally low rainfall, leading to water scarcity that impacts agriculture, ecosystems and communities (Roorda, 2020).

Vulnerability: The degree to which communities or individuals are susceptible to and unable to cope with adverse impacts of climate change like droughts, due to socioeconomic and environmental factors (Lone, 2021).

Livelihood: The capabilities, assets, and activities required to make a living, including food, income, and resources like land and social support (Roorda, 2020).

1.13 Dissertation Outline

Chapter 1 introduced the study. The chapter also provided background information to introduce the research topic and context of the study. It stated the problem being investigated and outline the research objectives and questions. The significance of the study and scope and limitations were explained. Key terms relevant to the research were also defined in this chapter.

Chapter 2 provided a review of existing literature related to the research topic. It discussed the theoretical frameworks of human security theory and sustainable livelihoods that guided the study. Literature around impacts of climate change on food security, challenges of child-headed households and the role of agriculture in Zimbabwe's economy will also be examined. Government policies and programs supporting vulnerable groups will be explored alongside identifying gaps in existing research.

Chapter 3 provided an overview of the research methodology. The research design and methodology adopted for the study detailed in this chapter. It described the study area and population of interest. Sampling techniques and sample size were explained. The specific data collection methods of in-depth interviews and observation were outlined. Data analysis

techniques were presented along with how validity and reliability was ensured. Ethical considerations and limitations of the methodology were addressed.

Chapter 4 shall presented the findings of the study. This chapter presented the key findings from the research organized into themes. It provided a demographic profile of respondents and analyze findings around impacts of climate change on agriculture and food security. Food security challenges faced by child-headed households and coping strategies adopted were also examined.

Chapter 5 provided conclusions. This final chapter summarized the overall study and present the main conclusions drawn from analysis of findings. It provided recommendations for policy, practice and areas for further research.

CHAPTER TWO

2.0 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

The impact of climate change on the food security of child-headed households is a pressing issue that requires in-depth examination and understanding. This chapter delves into the literature review and theoretical framework surrounding the vulnerabilities faced by these marginalized households in the face of environmental challenges. By exploring the conceptual and theoretical frameworks of Vulnerability Theory and Human Security Framework, this chapter aims to shed light on the complex interplay of social, economic, and environmental factors that heighten the vulnerability of child-headed households to climate change impacts. Through an analysis of existing research and theoretical perspectives, this chapter seeks to inform targeted interventions and strategies that can empower these vulnerable communities and enhance their resilience in the wake of adversity.

2.2 Conceptual and Theoretical Framework

The human security framework as the vulnerability theory will be used as the theoretical and conceptual frameworks in the study.

2.2.1 Vulnerability Theory

Vulnerability Theory offers a critical lens through which to examine the multifaceted factors that heighten the vulnerability of certain groups, such as child-headed households, to the impacts of climate change. By exploring the intersection of social, economic, and environmental dynamics, this theory underscores the importance of understanding the complex contexts that shape vulnerability and inform targeted interventions to address the specific needs of marginalized communities (Fineman, 2024). Social factors play a significant role in determining the vulnerability of child-headed households to climate change impacts (Fineman,

2024). Hall and Sambu (2019) assert that a lack of parental guidance and support, limited access to educational opportunities, and inadequate social networks can exacerbate the challenges faced by children managing households on their own. Hall and Sambu (2019) further assert that social isolation, stigma, and discrimination may further compound the vulnerabilities of these children, hindering their ability to access resources, make decisions, and advocate for their rights in the face of environmental threats. As stated Ntuli et al. (2020) economic factors also contribute to the vulnerability of child-headed households, with poverty, limited income opportunities, and lack of asset ownership constraining their ability to cope with climate-related shocks and stresses. Inadequate access to financial services, markets, and employment opportunities can further marginalize these households, increasing their susceptibility to food insecurity, economic instability, and other risks amplified by climate change (Mabhaudhi et al., 2019). Environmental factors, such as exposure to natural hazards, loss of biodiversity, and degradation of natural resources, pose additional challenges to the resilience of child-headed households. Climate change-induced events, including droughts, floods, and erratic weather patterns, can disrupt agricultural livelihoods, compromise food security, and exacerbate environmental degradation, heightening the vulnerability of children managing households in resource-constrained settings (Mabhaudhi et al., 2019). By examining the complex interplay of social, economic, and environmental factors that shape the vulnerability of child-headed households, policymakers, practitioners, and researchers can develop targeted interventions that address the root causes of vulnerability and build resilience within these marginalized communities. Strategies that empower children with knowledge, skills, and resources, foster social cohesion and support networks, and promote sustainable livelihood options can help mitigate the impacts of climate change and enhance the well-being of child-headed households in the face of adversity.

2.2.2 Human Security Framework

The Human Security Framework provides a holistic approach to addressing the security and well-being of individuals, communities, and societies by focusing on their protection from various threats and vulnerabilities. As stated by Presaud (2022) this framework goes beyond traditional security concerns to encompass a range of interconnected issues, such as economic, environmental, health, and political dimensions of security. It emphasizes the importance of ensuring the safety, dignity, and rights of individuals by addressing root causes of insecurity and promoting sustainable development and human rights protections (Presaud, 2022). Food security is a critical component of human security, as it directly impacts the well-being, dignity, and resilience of individuals and communities. Ensuring access to sufficient, nutritious, and culturally appropriate food for all is essential for safeguarding human rights, promoting health, and addressing vulnerabilities that can lead to insecurity and instability (Presaud, 2022). Orhero (2020) asserts that food security, within the context of human security, encompasses not only the availability of food but also its accessibility, affordability, quality, and safety. Incorporating food security into the broader framework of human security acknowledges the interconnectedness of food-related challenges with other security threats, such as poverty, conflict, climate change, and inequality. By addressing the root causes of food insecurity through integrated approaches that promote sustainable agriculture, equitable food distribution, social protection, and nutrition education, policymakers can enhance the resilience and well-being of individuals and communities, thereby contributing to peace, stability, and development (Orhero, 2020). Addressing the food security of child-headed households is crucial within the framework of human security. These vulnerable households, where children are responsible for providing food and care for themselves and their siblings, face unique challenges that can compromise their well-being and dignity (Novella, 2018). Ensuring access to adequate and nutritious food for these children is essential not only for their physical health

but also for their overall security and resilience. Child-headed households are particularly susceptible to food insecurity due to factors such as limited resources, lack of parental support, and economic constraints (Novella, 2018). The absence of adult caregivers can disrupt traditional food procurement and preparation practices, leaving children to fend for themselves and often resort to inadequate diets that may impact their growth and development.

2.3 Child Headed Households in Zimbabwe

It is essential to address the specific challenges faced by child-headed households or orphan households in Zimbabwe, where a significant number of children are living without adult caregivers due to factors like HIV/AIDS (Mabhaudhi et al., 2019). The high prevalence of HIV/AIDS in Zimbabwe has had a devastating impact on families, leading to an increase in the number of child-headed households where children are left to fend for themselves after losing their parents to the disease. In Zimbabwe, the ratio of child-headed households or orphan households is particularly high, with a substantial number of children assuming caregiving responsibilities at a young age (Mabhaudhi et al., 2019). The prevalence of HIV/AIDS has been identified as one of the primary causes of this phenomenon, as the disease has left many children orphaned and vulnerable to food insecurity, poverty, and limited access to essential services like education and healthcare. Children in child-headed households or orphan households in Zimbabwe face heightened risks of food insecurity due to the loss of parental support, limited resources, and economic instability exacerbated by the HIV/AIDS epidemic (Dzvimbo et al., 2022). The absence of adult caregivers can disrupt traditional food production and procurement mechanisms, leaving children with inadequate access to nutritious food and increasing their susceptibility to malnutrition and related health issues.

2.4 Challenges Faced by Child Headed Households

The following challenges are commonly faced by child headed households.

2.4.1 Limited Resources

One of the significant vulnerabilities faced by child-headed households in the context of food security is their limited resources. These households often lack the financial and material means necessary to adapt agricultural practices or invest in sustainable food sources, exacerbating the challenges they face due to climate change. The scarcity of resources in child-headed households directly impacts their ability to access nutritious food. Without adequate funds to purchase diverse and healthy food items, children in these households may experience malnutrition and food insecurity (Novella, 2018). Limited resources also hinder their capacity to engage in alternative food production methods that could enhance their resilience to the impacts of climate change. Moreover, the lack of financial resources in child-headed households can restrict their access to necessary agricultural inputs and technologies (Novella, 2018). In regions where climate change leads to shifts in growing seasons or increased pest infestations, these households may struggle to afford adaptive measures to protect their crops and ensure a stable food supply. As a result, they become more vulnerable to food shortages and hunger (Ntuli et al., 2020). Addressing the vulnerability of child-headed households due to limited resources requires targeted interventions that prioritize sustainable food production and access. Initiatives focusing on improving financial literacy, providing microfinance opportunities, and promoting community-based support systems can empower these households to enhance their food security (Ntuli et al., 2020). Additionally, collaborations with local governments and NGOs can facilitate the implementation of programs that offer training on climate-resilient agriculture practices and support the establishment of community gardens or food cooperatives.

2.4.2 Lack of Adult Guidance

Another critical vulnerability faced by child-headed households is the lack of adult guidance, depriving children of the necessary knowledge and skills for effective food

production and management. Without adult caregivers to impart agricultural expertise and practical know-how, children in these households may struggle to navigate the complexities of food security in the context of climate change (Lee & Boyle, 2021). The absence of adult guidance has significant implications for the capacity of children in child-headed households to sustainably produce and manage food. Without proper training and mentorship, children may lack the fundamental agricultural knowledge required to optimize crop yields, mitigate risks associated with climate variability, and utilize resources efficiently (Lee & Boyle, 2021). As a result, they may face challenges in ensuring a stable and nutritious food supply for themselves and their siblings. Furthermore, the lack of adult caregivers can hinder the development of essential life skills related to food management, such as meal planning, food preservation, and budgeting. These skills are crucial for maintaining a balanced diet, minimizing food waste, and making informed decisions about food consumption (Lee & Boyle, 2021). The absence of adult guidance leaves children in child-headed households vulnerable to food insecurity and nutritional deficiencies, impacting their overall health and well-being. Addressing the issue of lack of adult guidance in child-headed households requires a holistic approach that combines education, mentorship, and community support. Programs that provide training in sustainable agricultural practices, nutrition, and food safety can equip children with the knowledge and skills needed to effectively produce and manage food in a changing climate (Lee & Boyle, 2021). Moreover, initiatives that connect child-headed households with experienced mentors or agricultural extension services can provide valuable guidance and support to enhance their resilience and food security.

2.4.3 Effects of Climate Change

One of the significant effects of climate change on child-headed households is the increased frequency of extreme weather events, such as droughts, floods, and storms. As stated by Himulayi (2020) these phenomena can have devastating consequences for crop production,

leading to food shortages and posing significant challenges for children managing households on their own. Himulayi (2020) further states that extreme weather events, exacerbated by climate change, can wreak havoc on agricultural activities, decimating crops and disrupting food production in child-headed households. Bilali (2020) notes that droughts can result in parched fields and failed harvests, leaving children without an essential source of food and income. Similarly, floods and storms can destroy crops and infrastructure, further exacerbating food insecurity for these vulnerable households. Child-headed households are particularly vulnerable to the impact of extreme weather events due to their limited resources and adaptive capacities (Bilali, 2020). Unlike adult-headed households that may have access to support networks or financial reserves to bounce back from climate-related shocks, children managing households on their own may struggle to recover and rebuild in the aftermath of disasters (Bilali, 2020). The lack of adult guidance and knowledge in navigating such challenges can further hinder their resilience and ability to secure food for themselves and their siblings. To address the effects of extreme weather events on child-headed households, tailored interventions focusing on disaster preparedness and climate resilience are essential. Himulayi (2020) highlights that these interventions may include early warning systems, emergency response plans, and post-disaster recovery programs specifically designed to support children managing households in the wake of climate-related disasters. By equipping these households with the tools and resources needed to withstand and recover from extreme weather events, we can help safeguard their food security and well-being in a changing climate.

2.4.4 Shift in Agricultural Patterns

Another significant consequence of climate change on child-headed households is the shifts in agricultural patterns caused by alterations in climate conditions. These changes have disrupted growing seasons, reduced crop yields, and ultimately impacted access to food for children managing households on their own (Mabhaudhi et al., 2019). Climate-induced

alterations in growing seasons can have profound effects on the agricultural practices of child-headed households. For example, prolonged droughts or erratic rainfall patterns may lead to delays in planting or harvesting crops, affecting both the quantity and quality of food produced (Mabhaudhi et al., 2019). In regions where staple crops rely heavily on specific temperature and moisture conditions, such disruptions can result in decreased yields and limited availability of essential food sources. The implications of shifts in agricultural patterns extend beyond crop production to food security and nutrition for child-headed households. Reduced crop yields and irregular harvests can lead to food shortages, making it challenging for children to maintain a well-balanced diet and meet their nutritional needs (Lee & Boyle, 2021). These disruptions in food availability can have long-term consequences for the health and well-being of children managing households without adult caregivers to provide guidance and support. Addressing the impacts of shifts in agricultural patterns on child-headed households requires a comprehensive approach that integrates climate-smart agricultural practices and adaptation strategies (Lee & Boyle, 2021). Initiatives focusing on crop diversification, water conservation, and soil management can help buffer these households against the effects of changing climate conditions and ensure a more resilient food production system. Additionally, partnerships with local agricultural experts and community-based organizations can provide children with the knowledge and skills needed to adapt to shifting agricultural patterns and enhance their food security.

2.4.5 Malnutrition Risks

One of the most pressing concerns related to food security in child-headed households is the heightened risk of malnutrition, with significant implications for children's physical and cognitive development. In these households, where access to a balanced diet is already limited, food insecurity can exacerbate the prevalence of malnutrition and its negative effects on overall well-being. Food insecurity resulting from limited resources and challenges in food production

and management can predispose children in child-headed households to malnutrition (Gomba, 2018). The lack of adequate and diverse food sources often leads to deficiencies in essential nutrients crucial for growth and development. Without access to a balanced diet that meets their nutritional needs, children in these households are at increased risk of stunted growth, micronutrient deficiencies, and other health issues associated with malnutrition (Gomba, 2018). The consequences of malnutrition extend beyond physical health to impact children's cognitive development and educational outcomes. Inadequate nutrition can impair cognitive function, memory retention, and concentration, hindering children's ability to learn and excel in school (Gomba, 2018). Over time, chronic malnutrition can lead to long-term developmental delays and diminished academic performance, perpetuating cycles of poverty and vulnerability in child-headed households. Addressing the risks of malnutrition in child-headed households requires multifaceted interventions that prioritize access to nutritious food, nutrition education, and health services (Hall & Sambu, 2019). Programs focusing on nutrition-sensitive agriculture, school feeding initiatives, and micronutrient supplementation can help mitigate the effects of food insecurity and malnutrition on children's health and well-being (Hall & Sambu, 2019). Additionally, collaborations with healthcare providers, community organizations, and local authorities can facilitate early detection and treatment of malnutrition, ensuring that children in these vulnerable households receive the support they need to thrive.

2.4.6 Dependence on Unstable Markets

Another critical issue faced by child-headed households due to the effects of climate change on local agriculture is the potential dependence on expensive and unstable food markets. As climate variability disrupts traditional farming practices and diminishes local food production, these households may be forced to turn to external markets for their food supply, increasing their vulnerability and jeopardizing their food security (Gomba, 2018). The reliance on unstable food markets can have detrimental effects on the ability of child-headed households

to access affordable and nutritious food (Gomba, 2018). Fluctuations in market prices, supply chain disruptions, and inadequate infrastructure can drive up the cost of essential food items, making it challenging for children managing households on their own to afford a balanced diet. Moreover, the unpredictability of market conditions can introduce additional stress and insecurity into the lives of these vulnerable households, exacerbating their already precarious situation. The consequences of dependence on unstable markets extend beyond economic challenges to impact the overall well-being of children in child-headed households. High food prices and limited access to diverse food options can lead to dietary imbalances, micronutrient deficiencies, and compromised nutrition, increasing the risk of malnutrition and associated health issues. Moreover, the uncertainty surrounding market availability and affordability can further hinder the ability of children to plan and secure their food supply, perpetuating cycles of food insecurity and vulnerability. To address the risks associated with dependence on unstable food markets, targeted interventions are needed to enhance the resilience and food security of child-headed households (Ntuli et al., 2020). Initiatives that promote local food production, strengthen market linkages, and provide financial support to vulnerable households can help mitigate the impact of external market forces on their food access (Ntuli et al., 2020). Additionally, educational programs that equip children with skills in budgeting, meal planning, and advocacy can empower them to navigate the complexities of market dynamics and make informed decisions about their food choices.

2.5 Measures to Assist Child Headed Households

The following measures have been discussed in order to assist child headed households.

2.5.1 Community Support

A crucial coping strategy for child-headed households facing the impacts of climate change is the establishment of robust community support networks. By fostering connections and collaboration within their local communities, children managing households on their own

can access essential resources, knowledge sharing, and emotional support to navigate the challenges of changing conditions and build resilience in the face of adversity (Kibachio & Mutie, 2020). Community support plays a vital role in empowering child-headed households to adapt to the complex challenges brought about by climate change. Through community networks, children can gain access to practical assistance, such as food aid, agricultural training, and livelihood opportunities (Kibachio & Mutie, 2020). Moreover, the emotional support and solidarity offered by community members can provide comfort and reassurance during times of hardship, bolstering the resilience and mental health of children facing daunting circumstances (Kibachio & Mutie, 2020). In addition to tangible resources and emotional support, community networks facilitate knowledge sharing and skill development that equip children with the tools needed to thrive in changing conditions. By engaging in community-led initiatives, workshops, and educational programs, children can acquire valuable insights into sustainable agricultural practices, climate-resilient technologies, and disaster preparedness strategies that enhance their adaptive capacity and empower them to address the impacts of climate change on their households (Gomba, 2018). Furthermore, community support networks serve as a platform for collective action and advocacy, enabling children to amplify their voices, raise awareness about their needs, and engage with policymakers and stakeholders to drive positive change (Gomba, 2018). By mobilizing community resources, expertise, and solidarity, child-headed households can strengthen their position, advocate for their rights, and contribute to the development of inclusive and sustainable solutions that benefit their well-being and the resilience of their communities as a whole (Kibachio & Mutie, 2020).

2.5.2 Education and Training

One of the key strategies to empower children in child-headed households to cope with the challenges of climate change and food insecurity is through specialized education and training programs. By equipping these vulnerable children with knowledge about sustainable

practices, nutrition, and food production, they can make informed decisions that enhance their resilience, well-being, and ability to adapt to changing conditions in their households (Mariano & Faas, 2020). Educational programs focused on sustainable practices and nutrition play a vital role in empowering children to become agents of change in their households and communities. By participating in training initiatives, workshops, and skill-building activities, children can acquire practical knowledge about climate-resilient agriculture, water conservation methods, and diversified food production strategies that enable them to mitigate the impacts of climate change on their food security (Mariano & Faas, 2020). Moreover, education about nutrition can help children make healthy food choices, prevent malnutrition, and promote overall well-being. Empowering children with education and training not only enhances their individual capacity but also fosters a culture of learning and innovation within child-headed households (Mariano & Faas, 2020). By providing opportunities for children to engage in hands-on activities, peer-to-peer knowledge sharing, and mentorship programs, educational initiatives can cultivate leadership skills, creativity, and problem-solving abilities that enable children to address complex challenges and seize opportunities for positive change. Furthermore, education and training programs can serve as a platform for children to raise awareness, advocate for their rights, and mobilize support for sustainable food practices and nutrition initiatives (Mariano & Faas, 2020). By leveraging their newfound knowledge and skills, children can become champions for resilience, sustainability, and social justice, influencing policies, behaviors, and attitudes within their communities and beyond (Kibachio & Mutie, 2020).

2.5.3 Targeted Support

To address the complex needs of child-headed households impacted by food insecurity and climate change, it is imperative for governments and non-governmental organizations (NGOs) to develop targeted assistance programs that provide comprehensive support and

resources to empower these vulnerable children to thrive in challenging circumstances. One crucial policy recommendation is the establishment of financial assistance programs that provide child-headed households with the means to meet their basic needs and invest in their future (Bilali, 2020). Financial aid packages, including cash transfers, grants, and subsidies, can help alleviate the economic burden faced by children managing households on their own, enabling them to access food, healthcare, education, and other essential services critical for their well-being (Bilali, 2020). In addition to financial support, educational initiatives tailored to the specific needs of child-headed households are essential for building their capacity and skills. Governments and NGOs can develop programs that offer training in sustainable agriculture, nutrition education, vocational skills, and financial literacy to empower children to make informed decisions about food production, consumption, and livelihood opportunities (Ashebir, 2020). By investing in education, these initiatives can equip children with the knowledge and tools needed to navigate the complexities of climate change and food insecurity, fostering resilience and self-reliance. Furthermore, psychosocial support services play a critical role in addressing the emotional and mental health needs of children in child-headed households. Policies should prioritize access to counseling, mentorship programs, peer support groups, and community-based mental health services to help children cope with trauma, stress, and isolation resulting from their caregiving responsibilities and challenging living conditions (Ashebir, 2020). By addressing the psychosocial well-being of these children, assistance programs can promote holistic healing and resilience-building within child-headed households. Collaboration and coordination among government agencies, NGOs, community organizations, and other stakeholders are essential to ensure the effectiveness and sustainability of targeted assistance programs for child-headed households (Ashebir, 2020). By working together to align resources, expertise, and strategies, policymakers can create a supportive

ecosystem that empowers children to overcome adversity, realize their potential, and contribute meaningfully to their communities.

2.5.4 Climate Resilience Initiatives

One of the key strategies to bolster climate resilience and enhance food security is through the implementation of initiatives that promote sustainable agriculture practices. By adopting sustainable farming techniques, child-headed households and communities can mitigate the adverse effects of climate change on food production, improve environmental sustainability, and build adaptive capacity to withstand changing conditions (Bilali, 2020). Crop diversification is a fundamental approach to sustainable agriculture that can help child-headed households reduce dependence on a single crop and enhance their resilience to climate variability (Bilali, 2020). By growing a variety of crops with different growth patterns and ecological requirements, children can diversify their food sources, increase their income potential, and mitigate risks associated with pests, diseases, and extreme weather events that may impact crop yields (Bilali, 2020). Furthermore, water conservation methods, such as rainwater harvesting, drip irrigation, and soil moisture retention practices, are essential for sustainable agriculture in the face of climate change-induced water scarcity. By capturing and efficiently utilizing water resources, child-headed households can maintain stable crop yields, reduce irrigation costs, and minimize the environmental impact of water use, contributing to long-term sustainability and resilience in agriculture (Ashebir, 2020). Agroforestry techniques, including tree planting, intercropping, and pastoral systems, offer promising opportunities to integrate trees and shrubs into agricultural landscapes, enhancing biodiversity, soil fertility, and climate resilience (Ashebir, 2020). By incorporating trees into farming systems, children can improve soil structure, capture carbon, regulate microclimates, and diversify their income sources through the production of fruits, timber, and non-timber forest products. While initiatives promoting sustainable agriculture have the potential to enhance climate resilience

and food security, challenges such as access to resources, knowledge gaps, and market conditions may hinder their successful implementation. Governments, NGOs, and local stakeholders must provide support in the form of training, extension services, market linkages, and policy incentives to overcome these barriers and promote the widespread adoption of sustainable farming practices among child-headed households (Ashebir, 2020).

2.6 Summary

In summarizing the key topics explored in this chapter, the literature review provided a comprehensive analysis of the vulnerabilities child-headed households experience regarding food security within the contexts of climate change. The conceptual frameworks of vulnerability theory and human security highlighted the importance of understanding the multifaceted social, economic and environmental factors that shape the risks these households face. Examining the Zimbabwe context in particular shed light on the prevalence and challenges of child-headed households in the region. A range of issues that compromise the food security of these vulnerable groups were also examined, from limited resources to malnutrition risks. Crucially, the chapter discussed various strategies and supportive measures that could help build resilience if implemented through targeted policies and programs. These included fostering community cohesion, providing skills training, offering financial assistance and promoting climate-smart agriculture. Overall, the extensive review of literature presents vital insights and considerations to inform the development of effective interventions aimed at enhancing the livelihood security and well-being of child-headed households in a changing climate.

CHAPTER THREE

3.0 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology employed in this study to investigate the impact of climate change on food security among child-headed households in Rushinga District. The research shall be conducted using the case study research design. The constructivist paradigm was used as the main philosophical outlook of the study. In addition, the qualitative research methods were used in the study. This allowed for rich and detailed data collection through in-depth interviews.

3.2 Research Philosophy

A research philosophy refers to the set of beliefs, assumptions, and values that guide a researcher in conducting their research (Johnson & Lee, 2019). The constructivist paradigm was used in the study. As stated by Brown (2020) the constructivist paradigm is a philosophical outlook that involves the belief that knowledge is created and negotiated through an individual's own experiences and interactions with the world. This approach to research was used because it values multiple perspectives and acknowledges that knowledge is not fixed but rather evolves over time. Researchers working within this paradigm often utilize methods such as qualitative interviews, participant observation, and document analysis to explore the multiple perspectives and interpretations of reality. As stated by Pilarska (2021) one key advantage is that it allows for a more in-depth exploration of individuals' subjective experiences and interpretations of reality. By prioritizing context and social interactions, researchers using the constructivist approach can uncover rich and detailed insights that may be overlooked by other research paradigms. Additionally, the flexibility of the constructivist paradigm allows researchers to adapt their methods and theories based on new data and emerging perspectives, enabling a more dynamic and responsive research process (Pilarska, 2021).

3.3 Research Methodology

As stated by Miller (2022) research methodology refers to the systematic process of planning, conducting, and analyzing research studies. Qualitative research methods were used in the study. Qualitative research methods are non-numerical data collection tools that are used for gathering in-depth insights into individuals' experiences and behaviors (Miller, 2022). Thompson (2021) asserts that the advantage of using qualitative research methods is that they excel in capturing non-numerical data, such as feelings, thoughts, perceptions, and behaviors. This provides valuable insights into the intricacies of human experiences. As an example, interviews are a powerful qualitative research method for extracting non-numerical data, as researchers can engage in open-ended conversations with participants to uncover their feelings, thoughts, and perceptions on a given topic (Thompson, 2021). The aim is to understand the experiences of child-headed households as a result of climate change.

3.4 Research Design

Williams et al. (2022) describes research design as the framework that outlines the overall structure and organization of a research study. In the context of the study, the case study research design was used. According to Davis (2021) a case study research design is a qualitative research method that entails an in-depth investigation of a specific case to uncover detailed insights and understanding. The advantage of using the case study research design is that it allows researchers to delve deeply into a single case, examining it from multiple angles and perspectives (Davis, 2021). It allowed the researcher to collect detailed data through interviews, observations, and document analysis. Furthermore, researchers can uncover nuances and complexities that may not be captured through other research methods. Williams et al. (2022) assert that case studies are conducted within a specific context, which helps researchers understand how external factors and circumstances influence the case. This is why a case study research design was used.

3.5 Population and Sample

It is imperative to elaborate on the population of the study. Roberts (2021) describes a population as the entire group of subjects, items, or elements that possess the characteristics being studied. In the context of the study, the population comprised of child-headed households, traditional leaders and NGOs in Rushinga District. It also comprised of community leaders such as councillors or the District Development Coordinator in Rushinga District. Lastly, it involves the academic community. A sample is a subset of individuals or objects that is selected from a larger population to study (Creswell, 2018). A sample of 15 participants was selected for the research. 7 individuals from child headed households in Rushinga District were included in the study. It also included 3 traditional leaders, 5 community leaders, 3 NGO representatives in Rushinga District.

3.6 Sampling Methods

As stated earlier, sampling is the selection of a subset of individuals or objects from the population of the study.

3.6.1 Simple Random Sampling

Simple random sampling was used in the study. Simple random sampling is a technique used in research to select a sample from a larger population where each individual in the population has an equal probability of being chosen (Johnson & Christensen, 2018). One of the main advantages of simple random sampling is its simplicity and ease of implementation (Johnson & Christensen, 2018). It is a straightforward method that does not require advanced statistical knowledge or complex procedures, making it accessible to researchers across various disciplines. Additionally, simple random sampling ensures each member of the population has an equal chance of being selected, which helps in reducing sampling bias and increasing the generalizability of the findings to the larger population. Using this sampling method,

representatives from child headed households were selected. NGO representatives and community leaders were also interviewed. They responded to interview questions. The focus of the questions was on how child headed households have been affected by climate change. The focus was also on identifying potential solutions to the challenges.

3.7 Data Collection Methods

3.7.1 In-depth Interviews

In-depth interviews were used in the study. In-depth interviews are qualitative research methods that involve conducting one-on-one conversations between a researcher and a participant (Kvale, 2015). In-depth interviews are a powerful tool for understanding the meanings individuals attach to their experiences (Kvale, 2015). Creswell (2018) notes that in-depth interviews can provide a deep understanding of the social contexts and personal narratives that shape individuals' lives. They underscore the importance of building rapport during the interview process to facilitate open and honest communication (Creswell, 2018). The advantage of using them is that they generate comprehensive and elaborate accounts of participants' thoughts and feelings (Kvale, 2015). This depth of information can uncover insights that structured surveys might miss. Interviewers can also adapt their questions based on participants' responses, allowing for exploration of emerging topics that may be significant to the participant but not initially considered by the researcher (Kvale, 2015).

3.7.2 Documentary Search

According to Harris (2021) secondary data, also known as documentary data, are sources of information that have been collected and documented by other researchers for purposes other than the current research project. Various authors have highlighted the benefits and considerations associated with secondary data. Key documents such as United Nations Framework Convention on Climate Change (UNFCCC) were used. The human security

framework from UNDP (1994) was also used. Thompson (2021) underscores the cost-effectiveness and efficiency of using existing data sources to address research inquiries. Documentary data sources encompass a wide array of materials that researchers can tap into for insightful and in-depth analyses. As an example, academic journals, books, and research articles serve as valuable sources of documentary data, providing researchers with a wealth of information on various subjects and research findings (Thompson, 2021). Additionally, organizational records, such as annual reports or financial statements, can provide valuable data for researchers studying business performance and management practices (Haris, 2021).

3.8 Validity and Reliability

Clark (2022) defines validity in research as the extent to which a study measures what it claims to measure. Validity was ensured in the study by collecting detailed data. . Roberts (2020) also argues that detailed descriptions and interpretations help establish the validity of qualitative findings by capturing the complexity and depth of the participants' experiences. The researcher therefore ensured validity by collecting rich detailed data. Reliability in research refers to the accuracy of data collection methods that are used in a study (Clark, 2022). Reliability was ensured by making sure that systematic data collection and analysis procedures are used. Roberts (2020) suggests that researchers should maintain detailed records of their research process, including data collection methods, coding procedures, and analytical techniques, to enhance the reliability of their findings. Reliability was ensured by ensuring the right data collection instruments are used.

3.9 Data Presentation and Analysis

The qualitative findings collected through in-depth interviews were presented as key themes related to the impact of climate change on child-headed households. Qualitative data analysis was then used to analyse the data. Qualitative data analysis is a method used to

interpret and analyze non-numerical data such as text, images, videos, and other types of qualitative information (Elis, 2021). The data was collected in the form of audio interviews. After that, it was transcribed into documents. The analysis was done through the exploration of patterns, themes, and meanings within the data to generate insights and understanding. Qualitative data analysis allows researchers to uncover complex relationships and capture the richness of human experiences (Elis, 2021). Garcia and Turner (2022) also introduce the approach of thematic analysis, which involves identifying, analyzing, and reporting patterns (themes) within the qualitative data. They highlight the interpretive nature of qualitative analysis and the importance of reflexivity in the research process.

3.10 Ethical considerations

According to Elis (2021) ethical considerations are moral principles and standards that guide the research. The research will follow university procedures for collection data. The researcher obtained permission letter from the university. The researcher also sought for permission from gatekeepers and authorities in the field. In addition, the researcher sought for informed consent before conducting the research. The anonymity and confidentiality of information was ensured. The researcher also ensured that all participants are fully informed about the purpose of the study and what their participation involves

3.11 Summary

In summary, qualitative research methods were employed to explore the impact of climate change on food security among child-headed households in Rushinga District. By utilizing a qualitative approach, the study highlighted the importance of in-depth interviews and observations in capturing the nuanced experiences and challenges faced by these vulnerable groups. A case study research design was used in the study. In addition, the constructivist paradigm was used the philosophical outlook of the study. Qualitative data

analysis was also used to interpret themes and patterns that may emerge from the findings. The research was conducted following university ethical guidelines.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter examines the profound impact of climate change on child-headed households in Rushinga District, focusing on the multifaceted challenges these vulnerable groups face. It highlights how climate-related issues such as water scarcity, drought, and unpredictable weather patterns exacerbate existing vulnerabilities, leading to increased food insecurity, reduced educational opportunities, and emotional distress. By analyzing data from respondents, the chapter aims to provide a comprehensive understanding of these challenges and underscore the urgent need for targeted interventions to support the well-being of child-headed households in the face of climate change.

Section A: Demographic Data

4.2 Respondent Information

1 Interview Response Rate

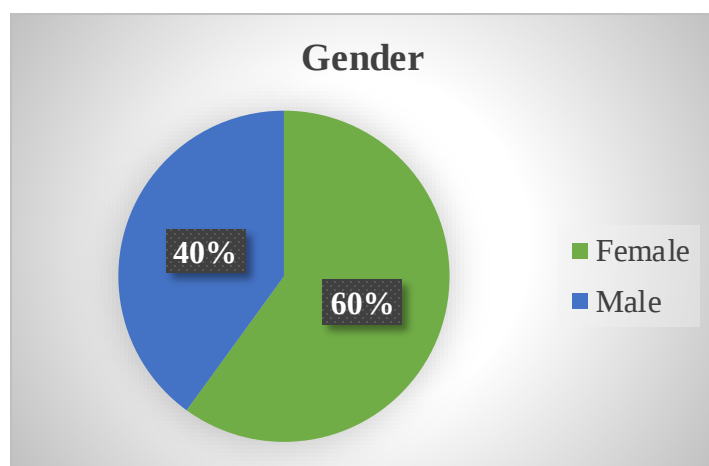
Table 4.1: Response Rate

	Expected	Responded	Response Rate
Representatives from Child Headed Households	10	10	100%
NGO Representatives	5	5	100%
Social Workers	3	3	100%
Traditional Leaders	2	2	100%

Local Authority Representatives	5	5	100%
Total	25	25	100%

2 Gender

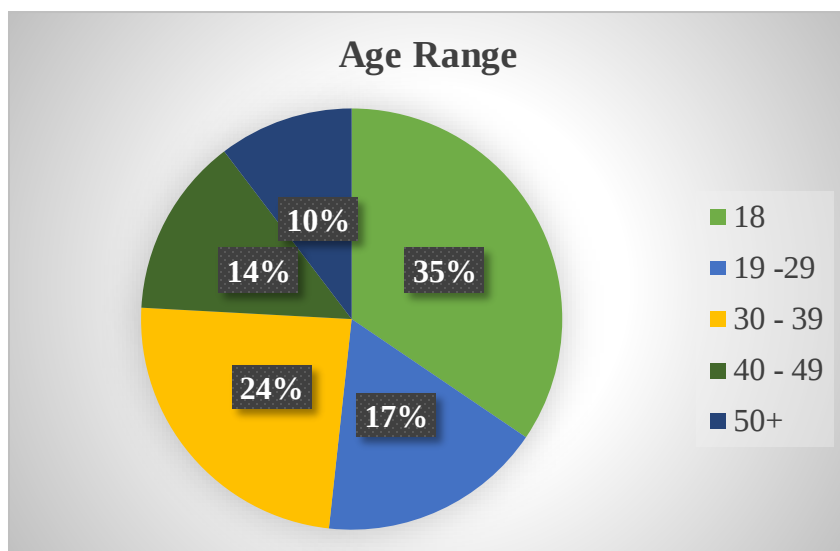
Figure 4.1: Gender of Participants



Approximately 60% of respondents were female while about 40% were male.

3. Age

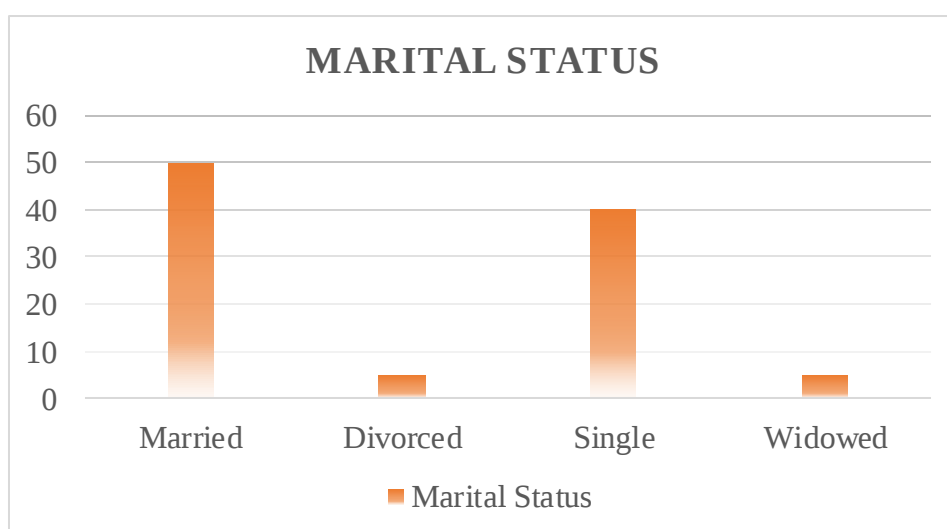
Figure 4.2: Age Range of Respondents



About 35% of participants were aged 18 years old. Additionally, about 17% of respondents were aged between 19 and 29 years of age. Furthermore, about 24% of respondents were aged between 30 and 39 years of age. Another about 14% of the respondents were aged between 40 to 49 years of age. Lastly, about 10% of respondents were 50 years of age and older.

4. Marital Status

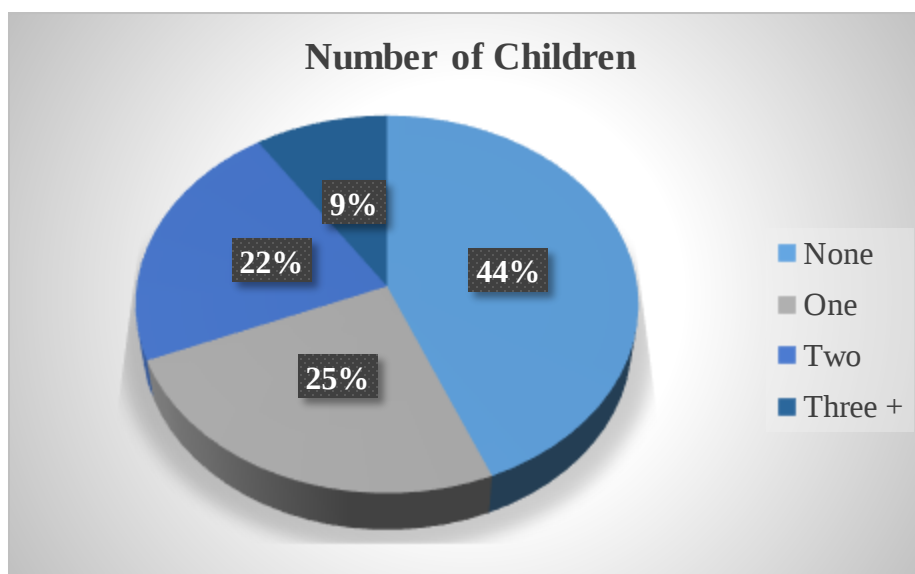
Figure 4.3: Marital Status of Participants



About 50 % of the respondents highlighted that that they are married. About 5% indicated they were divorced. Additionally, 40% of respondents indicated they were single. Lastly, 5% shared that they were widowed.

5 Number of Children

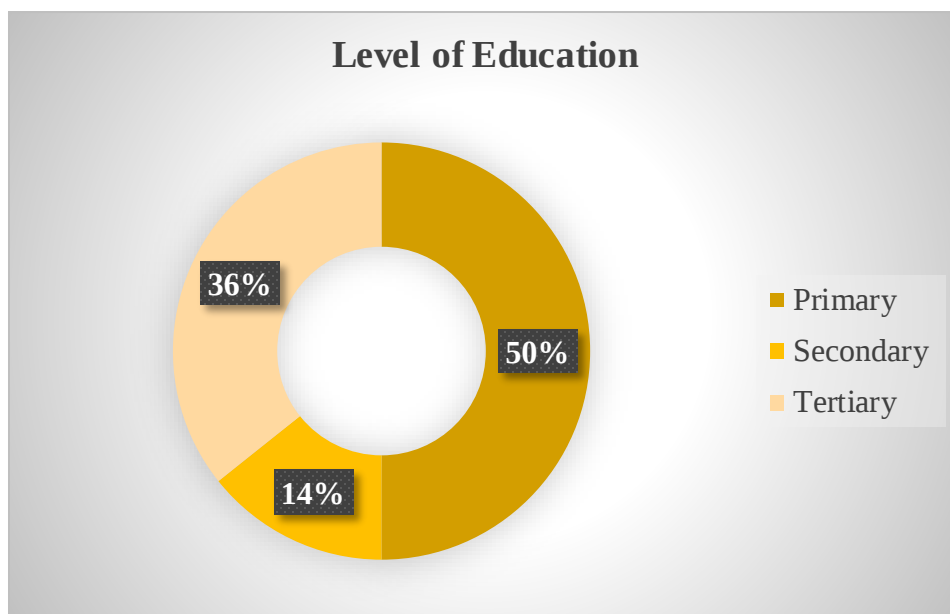
Figure 4.4: Number of Children



About 44 % of the respondents cited that they have no children. About 25% indicated they have one child each. About 22% of respondents indicated that they have 2 children. Lastly, about 9% of participants indicated they have 5 or more children.

6 Level of Education

Figure 4.5: Level of Education



About 50 % of respondents indicated they have primary school education. Another approximate 14% indicated they have secondary school education. About 36 % of respondents indicated they have tertiary level educational qualifications.

7 Employment Status

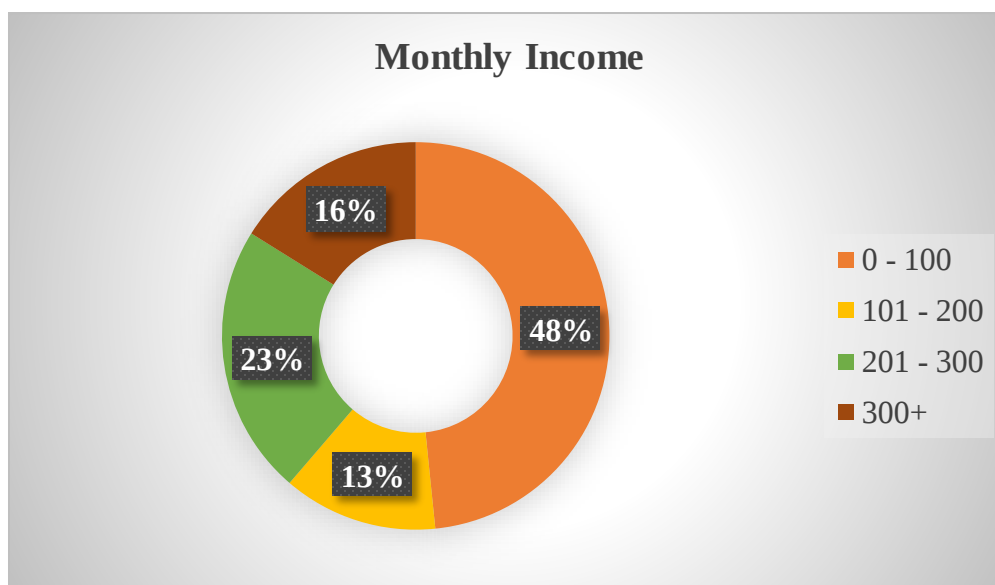
Figure 4.6 Employment Status



About 40% of respondents indicated that they are formally employed. Another estimated 40% of the respondents indicated they are unemployed. About 20% of respondents highlighted that they work part time.

8 Monthly Income

Figure 4.7 Monthly Income



About 48% of respondents showed that they earn 0 to 100 US dollars per month. About 13% responded that they earn around 101 to 200 dollars per month. Additionally, about 23% of respondents indicated they earn about 201 to 300 US dollars per month. Lastly, about 16% of respondents highlighted that earn more than 300 US dollars per month.

Section B:

4.3 The impact of Climate Change

The respondents were asked about the effects of climate change. Various themes emerged from the findings as to be discussed below.

4.3.1 Water Scarcity

The findings show that water scarcity is a significant result of climate change which affects communities in Rushinga in various ways. The following statements from respondents illustrate the profound impact of this issue. One government official stated,

Water scarcity has become a major issue in the area. People often have to walk long distances to find clean water. This affects everything, from their health to our ability to grow crops.

An NGO worker remarked,

Without reliable water sources, our crop yields have diminished. We can no longer depend on rain alone; we need better irrigation systems to cope with these changes.

A young household leader shared,

Sometimes we get water from contaminated water sources. We have acute water shortages in our area.

A teenager added,

I spend hours each day fetching water. This has become a regular routine because of water shortages.

Mekonnen and Hoekstra (2016) assert that water scarcity due to climate change significantly hinders agricultural productivity and community health, particularly in rural areas. Long distances to water sources increase the time spent collecting water, which could otherwise be used for productive activities, thereby exacerbating economic challenges.

4.3.2 Drought

The findings show that the increasing frequency and severity of droughts disrupt crop production, leading to heightened food insecurity in affected communities. The following statements from respondents highlight the challenges they face,

A traditional noted,

Last year's drought has been the worst we've ever experienced. My fields are parched, and I've lost almost all my crops. It's devastating for my family.

A community elder stated,

Droughts used to be rare, but now they come almost every season. We can't grow enough food and many families are going hungry.

A young household leader expressed her concern,

I can barely afford to feed my siblings. This drought has severely affected us

Another traditional leader shared,

We're trying to adapt by planting drought-resistant crops, but it's not always enough. The unpredictability of weather makes planning nearly impossible.

The IPCC (2021) highlights that prolonged drought conditions significantly disrupt agricultural productivity. This leads to food insecurity and nutritional deficits. The increasing unpredictability of weather patterns complicates farming practices. It forces communities to adapt rapidly or face dire consequences.

4.3.3 Climate Variability

The respondents indicated that many communities in Rushinga Rural District rely on agriculture and natural resources. This makes them particularly vulnerable to climate variability. The following statements from respondents illustrate the difficulties they face. A local community leader explained,

Our entire livelihood depends on what we can grow. When the rains fail or come too late, we lose everything. It's a constant struggle.

Another community leader stated,

Climate change has altered our seasons. We can't predict when to plant, and that uncertainty puts our food supply at risk.

A young woman involved in agriculture projects said,

We're trying to diversify our crops to adapt, but it's challenging. We need resources and training to do it effectively.

Mastrorillo et al. (2016) asserts that communities dependent on agriculture and natural resources are particularly susceptible to climate variability. This disrupts traditional practices and threatens their livelihoods. Mastrorillo et al. (2016) further notes that the reliance on predictable weather patterns makes these communities vulnerable to shifts that can lead to economic instability and food insecurity.

4.4 To investigate the impact of climate change on food security of child headed households in Rushinga District.

Participants were asked about the effects about how climate change affects child headed households affect child headed households in Rushinga. Various themes emerged from the findings.

4.4.1 Loss of Livelihood

The impact of climate-related events, such as droughts and floods, significantly disrupts livelihoods, particularly for vulnerable groups like child-headed households. Social workers and NGOs have provided insights into the challenges faced by these communities. A social worker commented,

When a drought hits, it's not just the crops that are lost, it's the entire income for families. Child-headed households are particularly at risk, as they lack the support systems that other families might have.

An NGO representative stated,

We see many children taking on adult responsibilities after climate disasters. They are forced to find work or beg for food, which affects their education and future opportunities.

Another social worker noted,

The emotional toll on children is immense. They deal with the loss of their homes and livelihoods while trying to support their siblings. It's a tough situation.

Baird et al. (2018) indicates that climate-related events exacerbate existing vulnerabilities, particularly in child-headed households. These households often lack adequate financial and emotional support. The loss of livelihoods due to extreme weather can lead to long-term challenges, including increased poverty and decreased access to education (IPCC, 2021).

4.4.2 Food Insecurity

Changes in agricultural productivity due to climate variability significantly affect food availability, leading to food shortages that impact the nutritional intake of children. The

following statements reflect the concerns of community members and experts. A local NGO worker noted,

When crops fail due to drought or floods, families struggle to provide enough food for their children. This lack of nutrition can have long-lasting effects on their growth and cognitive development.

Another community leader expressed,

I worry about my children's health. With rising food prices and less available food, I can't always give them the balanced diet they need.

An NGO representative stated,

Food insecurity is linked to malnutrition, which is particularly critical during the early years of a child's life. We need to focus on both immediate food aid and long-term solutions to improve agricultural resilience.

A community leader emphasized,

Education about nutrition is essential. Even when food is available, families may not know how to make healthy choices, especially under economic stress.

FAO (2020) highlights that fluctuations in agricultural productivity directly influence food security, which in turn affects the nutritional status of children. Malnutrition during early childhood can lead to developmental delays and long-term health issues (UNICEF, 2019).

4.4.3 Reduced School Attendance

The findings also show that economic hardships resulting from climate-related events significantly impact children's ability to attend school. Many children are forced to drop out to

work or care for younger siblings, which limits their educational opportunities. The following statements illustrate this issue. A traditional leader remarked,

We've seen an increase in absenteeism. Many students are missing school because they need to help their families earn money or take care of their siblings due to parents being unable to work.

A social worker noted,

When families face economic strain, education often becomes a lower priority. Children are pulled out of school to contribute financially, which has long-term effects on their future prospects.

A community leader stated,

It's unfortunate to see children who want to learn but can't because they have to support their families. Education is critical for breaking the cycle of poverty.

An NGO representative emphasized,

We need to provide support not just for food security but also for education. Scholarships or financial aid can help keep children in school during tough times.

UNESCO (2020) concurs that economic pressures, particularly those stemming from climate-related disruptions, can lead to increased dropout rates among children. The loss of educational opportunities can have lasting impacts on individual and community development, perpetuating cycles of poverty and limiting future economic mobility (World Bank, 2018).

4.4.4 Risk of Exploitation

It also emerged that increased poverty and lack of supervision due to economic hardships can make children more susceptible to exploitation and abuse. The following insights from community members and professionals highlight this critical issue. A social worker commented,

When families struggle to make ends meet, children often find themselves alone or in unsafe situations. This lack of support makes them vulnerable to exploitation.

Another social worker noted,

We've seen cases where children are forced into labor or are at risk of trafficking. Economic instability can push families to make desperate decisions that put their children in harm's way.

A community leader stated,

It's important to raise awareness about the risks children face in our community. We need to ensure that families have the resources and support to keep their children safe.

An NGO representative emphasized,

Programs that provide financial assistance and education on child rights are essential. Empowering families can help reduce the risk of exploitation.

ECPAT International (2018) asserts that children living in poverty are at a higher risk of exploitation and abuse, particularly in contexts where economic pressures diminish parental supervision. This is a risk that has been cited in relation to child headed households.

4.4.5 Emotional Burden

Children in economically unstable households face significant emotional burdens, often resulting in stress and anxiety. Factors such as loss of caregivers and the pressure of managing household responsibilities contribute to their mental health challenges. The following perspectives illustrate these issues. An NGO worker stated,

We're seeing increased levels of anxiety and depression among children from vulnerable families. They're not just worried about their immediate needs but also about their families' future.

A social worker commented,

Many children feel the weight of responsibility at a young age. They often have to care for younger siblings or contribute to household income, which is a heavy burden.

A community leader noted,

The loss of caregivers due to economic strain or illness can lead to feelings of abandonment and fear among children. They need emotional support and a safe space to express their feelings.

An NGO representative emphasized,

It's crucial to integrate mental health support into programs for vulnerable families. Children need counseling services that can help them cope with their emotional challenges.

WHO (2019) highlights that children in unstable environments often experience heightened levels of stress and anxiety, which can negatively impact their mental health and development.

Providing emotional support and resources is essential to help mitigate these effects and promote resilience in affected children (Child Trends, 2021).

4.5 To explore the food security challenges faced by child headed households in Rushinga District .

Respondents were asked about the food security challenges that are faced by child headed households. The following themes emerged from the findings.

4.5.1 Limited Income Sources

Child-headed households encounter significant food security challenges largely due to limited income sources. The following insights reflect the experiences of community members and experts. A social worker stated,

These children often have no stable income. They might take on odd jobs, but the pay is minimal and inconsistent, making it hard to afford enough food for themselves and any siblings.

An NGO worker noted,

Some students go to school hungry. Their guardians are often absent, and they lack the financial stability that comes with adult caregivers, which directly impacts their ability to eat properly.

A community leader commented,

Child-headed households are at a disadvantage. Without a reliable income, they can only afford the cheapest food, which is often devoid of necessary nutrients.

These findings show that limited income is a critical barrier to food security in child-headed households. It often leads to inadequate nutrition and increased vulnerability to health issues (FAO, 2021).

4.5.2 Cycles of Poverty

Child-headed households frequently experience severe food security challenges due to high poverty rates, which diminish their purchasing power. The following insights reflect the perspectives of community members and experts. A social worker stated,

Many child-headed households are living in extreme poverty. This situation makes it nearly impossible for them to buy enough food, let alone nutritious options.

A local NGO worker noted,

Students from these households often come to school without breakfast. Their families are in such dire financial situations that even basic meals are a struggle.

Another social worker commented,

Economic hardship forces these children into a cycle of poverty. With reduced purchasing power, they can only afford the cheapest food, which isn't enough to support their growth and education.

An NGO representative emphasized,

Addressing the high poverty rates in these communities is crucial. We need comprehensive programs that not only provide food assistance but also focus on income generation and skills training.

According To UNICEF (2020) high poverty rates significantly limit the purchasing power of child-headed households, resulting in insufficient food intake and increased risk of malnutrition. Tackling poverty through targeted interventions is essential for improving food security and overall well-being in these vulnerable populations.

4.5.3 Inability to Afford Diverse Diets

Economic constraints significantly affect child-headed households, limiting their ability to afford diverse diets and increasing the risk of malnutrition. The following insights reflect the experiences of community members and experts. A social worker stated,

Many children in these households end up eating the same cheap foods every day. This reliance on low-cost, nutrient-poor options puts them at high risk for deficiencies and health issues.

Another social worker noted,

I've seen children headed households struggling to focus in class, and I believe it's linked to their diet. They often come from homes where nutritious food is a luxury they can't afford.

Another social worker commented,

Economic hardship forces these children to prioritize quantity over quality. They may fill their stomachs but miss out on essential nutrients necessary for their growth and development.

FAO (2021) highlights that economic constraints lead to a reliance on low-cost, nutrient-poor foods in child-headed households, significantly increasing the risk of malnutrition and related health problems

4.5.4 Lack of Knowledge about Nutrition

The respondents indicated that children lack knowledge about nutrition. Child-headed households often struggle with food security due, in part, to a lack of knowledge about nutrition. This hinders their ability to make healthy food choices. The following themes emerged from the findings. An NGO health worker stated,

Many of these children are unaware of what constitutes a balanced diet. Without guidance, they tend to choose foods that are cheap but not nutritious.

A social worker noted,

Children often don't understand the long-term effects of poor nutrition on their health and academic performance.

Another social worker commented,

When children are responsible for feeding themselves or their siblings, they often lack the knowledge to make informed choices. This can lead to diets that lack essential nutrients.

These findings highlight that a lack of knowledge about nutrition significantly impacts food choices in child-headed households. Educating children on healthy eating habits is essential for fostering better dietary practices and improving overall health outcomes (UNICEF, 2021).

4.6 Challenges Faced by Child Headed Households as a Result of Climate Change

The respondents were asked about the challenges that are faced by child headed households as a result of climate change. The following themes emerged from the findings.

4.6.1 Increased Vulnerability

It emerged that climate change has caused increased vulnerability for these households. Child-headed households are increasingly vulnerable to food security challenges exacerbated by climate change. An NGO worker stated,

Changes in weather patterns have disrupted our planting seasons. When crops fail, it's the children who suffer the most as their families struggle to find enough food.

A community leader noted,

Droughts have become more frequent. This directly impacts food availability. Child-headed households often lack the resilience to cope with these shocks.

A social worker commented,

Climate change increases the instability of food supplies. Many of these children are already in precarious situations, and environmental challenges push them further into vulnerability.

These findings show that climate change significantly affects food security, particularly in vulnerable populations such as child-headed households. Ntuli et al (2020) asserts that increased frequency of extreme weather events can lead to crop failures and food shortages, exacerbating existing inequalities.

4.6.2 Limited Support Services

The findings show that child-headed households often face significant food security challenges due to limited access to essential support services, including social services, healthcare, and educational resources. The following insights were recorded in light of the matter. A social worker stated,

These children often lack access to social services that could provide financial assistance or food support. This absence exacerbates their already difficult situation.

A social worker noted,

Many students from child-headed households struggle to get the healthcare they need. Illness can prevent them from attending school, which further limits their opportunities and food security.

A community leader commented,

Without proper educational resources, these children miss out on opportunities to improve their skills and knowledge, which could help them secure better jobs in the future.

An NGO representative emphasized,

We need to create a more integrated support system that connects these households to healthcare, education, and financial assistance to help them overcome their challenges.

These findings show that limited access to support services significantly impacts food security in child-headed households, leading to poor health and educational outcomes. Strengthening social safety nets and access to essential services is crucial for improving the resilience and well-being of these vulnerable populations (UNICEF, 2021).

4.6.3 Forced Relocation

The findings also show that child-headed households are increasingly vulnerable to food security challenges due to forced relocation caused by climate-induced disasters. Some may end up living on the streets especially in urban areas. A local leader stated,

Children in these households often lose community support, which is vital for their survival. Some end up scavenging as street kids in big cities.

A social worker commented,

Displaced children face immense challenges in adapting to new environments. They might struggle to find food, and the lack of familiarity can lead to increased anxiety and insecurity.

Another NGO worker noted,

Relocation and displacement is a common trend among child headed household. These children often do not have social safety nets.

Mabhaudhi et al. (2019) concurs that climate-induced disasters significantly increase the vulnerability of child-headed households. This often leading to forced relocation and loss of support networks. This disruption can severely impact their food security, health, and overall well-being (IPCC, 2021).

4.7 To identify remedies or solutions to address food security challenges faced by child headed households in Rushinga.

Respondents were asked about the solutions that be implemented as a means to assist child headed households that are dealing with the effects of climate change.

4.7.1 Food Assistance Programs

The findings show that effective food assistance programs can play a crucial role in alleviating food insecurity among child-headed households. These programs not only provide immediate relief but also promote long-term well-being. A community leader stated,

Implementing food distribution programs is essential. When children have access to nutritious meals, it directly impacts their health and ability to learn.

A social worker noted,

School meal programs can significantly reduce food insecurity. When students receive healthy meals at school, it encourages attendance and engagement in their education.

Another social worker emphasized,

Cash transfer programs can empower families to make their own food choices. It allows them to purchase what they need, which is especially important for child-headed households.

An NGO representative commented,

Partnerships with local farmers can enhance food assistance programs. Sourcing fresh produce for distributions not only supports local agriculture but also provides better nutrition for children.

These findings show that food assistance programs, including both food distribution and cash transfers, are effective in improving food security among vulnerable populations, particularly child-headed households (FAO, 2020). These interventions can enhance the health and well-being of children, fostering better educational outcomes and overall resilience (UNICEF, 2021).

4.7.2 Scholarships and Sponsorships

It also emerged that the provision of scholarships and sponsorships can provide vital support for child-headed households, helping to ensure that children receive an education while also addressing their food security needs. An NGO worker stated,

Scholarships can relieve the financial burden on these families. When children have access to educational resources, it reduces the likelihood of them dropping out due to financial constraints.

A traditional leader emphasized,

Sponsorship programs can connect children with individuals or organizations willing to provide financial support. This can include covering school fees, uniforms, and even meal costs.

A social worker noted,

Many child-headed households struggle to afford basic necessities. Financial sponsorship can ensure that children not only attend school but also have enough to eat, which is critical for their development.

An NGO representative commented,

Partnerships with businesses and local organizations for sponsorship can create a more sustainable support system. These initiatives can help build a community around these children, providing them with both educational and nutritional support.

Research indicates that educational sponsorship and scholarship programs are effective in enhancing the educational attainment of vulnerable populations, including child-headed households. These initiatives help to improve both food security and overall well-being by ensuring that children have access to essential resources (UNESCO, 2021).

4.7.3 Microfinance Opportunities

The findings also show that providing microfinance opportunities, such as microloans, can empower child-headed households to enhance their food security through entrepreneurship and improved agricultural practices. An NGO worker stated,

Microloans can help these families start small businesses or invest in agricultural tools, leading to increased income and food production.

A community leader noted,

When children in these households can manage a small business, it not only provides financial support but also builds their skills and confidence for the future.

A social worker emphasized,

Access to microfinance can help child-headed households stabilize their income. This stability is crucial for ensuring they can afford nutritious food and other necessities.

An NGO representative commented,

Training programs accompanying microloans can enhance their effectiveness. Teaching financial literacy and business management ensures that families can successfully utilize the funds.

Research indicates that microfinance initiatives can significantly improve the livelihoods of vulnerable populations, including child-headed households. By providing access to financial resources, these programs can lead to enhanced food security and economic resilience (CGAP, 2020).

4.7.4 Counselling Services

The findings show that offering mental health support and counseling services is essential for helping children in child-headed households cope with the stress and trauma associated with their circumstances. A social worker stated,

Counseling can provide a safe space for children to express their feelings and experiences. This emotional support is vital for their mental well-being.

A community leader emphasized,

When children receive mental health support, they are better equipped to handle the challenges they face, including food insecurity and family responsibilities.

A social worker noted,

Trauma-informed care is crucial. Many of these children have experienced significant loss and stress; counseling can help them develop coping strategies.

An NGO representative commented, “Integrating mental health services with food assistance programs can create a holistic approach to supporting these children. Addressing emotional needs alongside physical needs is essential for their overall development.”

Research indicates that mental health support is critical for vulnerable populations, particularly children facing trauma. Access to counseling services can improve resilience and coping mechanisms, leading to better educational and health outcomes (WHO, 2021).

4.7.5 Resilience Building

The findings indicate that implementing programs that teach adaptive agricultural practices can significantly enhance the resilience of child-headed households against climate impacts, thereby improving their food security. A traditional leader stated,

Teaching children and their guardians sustainable farming techniques can help them adapt to changing climate conditions, ensuring a stable food supply.

A community leader emphasized,

When families learn to diversify their crops and use water-efficient methods, they become less vulnerable to climate-related shocks and can maintain their food production.

A social worker noted,

Resilience-building programs can also empower children by involving them in the decision-making process regarding agricultural practices, fostering a sense of responsibility and ownership.

An NGO representative commented,

Collaborating with agricultural extension services can provide ongoing support and resources, ensuring that these families have the tools they need to thrive in the face of climate challenges.

Research indicates that resilience-building programs focused on adaptive agricultural practices can significantly improve food security for vulnerable populations. By equipping families with the skills to respond to climate variability, these programs enhance both food production and community sustainability (FAO, 2021).

4.7.6 Advocacy and Awareness

The respondents highlighted that raising awareness about the challenges faced by child-headed households is critical for mobilizing community support and resources, ultimately enhancing their food security. A community leader stated,

Advocacy campaigns can help shed light on the unique struggles these children face, encouraging community members to contribute their time, resources, or expertise.

An NGO worker emphasized,

Educational workshops can inform the public about the importance of supporting child-headed households, fostering empathy and engagement within the community.

A social worker noted,

Social media and local events can be powerful tools for raising awareness. By sharing stories and experiences, we can connect the community to these children's needs."

Another NGO representative commented,

Building partnerships with local businesses and organizations through advocacy can lead to resource mobilization, ensuring that child-headed households receive the support they need.

These findings indicate that community awareness and advocacy are essential components in addressing the challenges faced by vulnerable populations. Mobilizing community resources not only enhances food security but also fosters a supportive environment for child-headed households (UNICEF, 2020).

4.7.7 Social Protection Policies

The findings show that advocating for robust social protection policies is essential for creating safety nets for vulnerable households, including child-headed ones, thereby enhancing their food security. A policy advocate stated,

Implementing social safety nets can provide essential support to child-headed households, ensuring they have access to food, healthcare, and education.

A community leader emphasized,

Policies that include cash transfers or food assistance can alleviate immediate financial pressures, allowing children to focus on their education and well-being.

A social worker noted,

Comprehensive social protection policies should consider the unique needs of child-headed households, including access to mental health services and educational support.

An NGO representative commented,

Collaboration with government agencies is crucial. By advocating for inclusive policies, we can ensure that these vulnerable households receive the necessary assistance and protection.

These remarks show that effective social protection policies can significantly improve food security and overall well-being for vulnerable populations. By establishing safety nets, these policies help mitigate the impacts of poverty and insecurity (World Bank, 2021).

4.8 Chapter Summary

The findings show that climate change significantly challenges child-headed households in Rushinga, exacerbating their vulnerabilities and threatening their well-being. Key issues identified include water scarcity, frequent droughts, and unpredictable weather patterns, all of which adversely affect food security and livelihoods. Respondents underscored how these climate-related challenges lead to increased food insecurity, loss of educational

opportunities, and heightened emotional burden among children. The findings indicate that child-headed households are particularly susceptible to climate change repercussions, lacking the necessary support systems to cope with these adversities. Many children are compelled to assume adult responsibilities, often sacrificing their education and mental health in the process. Furthermore, these households frequently find themselves trapped in a cycle of poverty, as limited income sources and inadequate access to essential services hinder their ability to secure nutritious food and proper care. Insights gathered emphasize the urgent need for targeted interventions to address the unique challenges faced by these vulnerable groups. Effective solutions include food assistance programs, educational sponsorships, microfinance opportunities, and mental health support. Such measures are essential for alleviating food insecurity and improving emotional well-being in child-headed household.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

5.1 Introduction

This chapter provides concluding remarks on the study. It summarizes key findings, highlights the challenges faced by these households and offers targeted recommendations for addressing food security issues. Additionally, it identifies areas for further research.

5.2 Summary

Chapter One provided an introduction to the study on the impact of climate change on food security among child-headed households in Rushinga District, Zimbabwe. It began by outlining the global phenomenon of child-headed households, highlighting the challenges they faced, including limited access to food, education, and healthcare. The chapter emphasized how climate change exacerbated these vulnerabilities, particularly through recurrent droughts, which led to water scarcity and crop failures. The purpose of the study was clearly stated: to investigate how climate change affected food security in these households. The chapter articulated the problem statement, underscoring the increased risks faced by children who had to care for themselves and their siblings without adult support. It outlined the study's objectives and research questions, focusing on the impacts of climate change, the specific food security challenges encountered, and potential solutions. The significance of the study was highlighted, noting its potential contributions to policy-making and community awareness. Finally, the chapter discussed the delimitations and limitations of the research.

Chapter Two reviewed existing literature and theoretical frameworks relevant to the study of climate change's impact on food security among child-headed households. It examined the vulnerabilities faced by these households, emphasizing the interplay of social, economic, and environmental factors that heighten their risks. The chapter introduced vulnerability theory,

which highlighted how child-headed households are particularly susceptible to climate change impacts due to their lack of resources, social support, and economic stability. Additionally, the human security framework was discussed, illustrating the interconnectedness of food security with broader issues such as health, education, and socio-economic conditions. The chapter reviewed evidence from various regions, including Zimbabwe, where child-headed households face challenges exacerbated by climate variability, such as droughts and floods. It underscored the importance of understanding these vulnerabilities to inform targeted interventions. The literature also highlighted the role of government policies and community support in addressing food security challenges. By synthesizing findings from previous studies, the chapter aimed to provide a comprehensive context for the research, identifying gaps in existing knowledge and emphasizing the need for further exploration of adaptive strategies for child-headed households affected by climate change.

Chapter Three outlined the methodology employed in the study. The research adopted a case study design, which allowed for an in-depth exploration of the specific challenges faced by these households. A constructivist paradigm guided the study, emphasizing the importance of understanding multiple perspectives through qualitative methods. Qualitative research methods were utilized to gather rich, detailed data, primarily through in-depth interviews with participants, including child-headed households, traditional leaders, and NGO representatives. This approach facilitated the exploration of participants' experiences and perceptions regarding food security and climate change. The chapter described the population and sampling methods, employing simple random to ensure a diverse representation of voices. A sample of 15 participants was selected, allowing for comprehensive insights into the issue. Data collection methods included interviews and documentary analysis, which provided contextual information.

Chapter Four presented the findings of the study, highlighting the significant impact of climate change on child-headed households in Rushinga District. The chapter organized the results into key themes derived from interviews with participants, illustrating the multifaceted challenges these households face. Firstly, it emphasized water scarcity as a critical issue, with respondents noting the long distances they often had to travel to access clean water, which affected their health and agricultural productivity. The increasing frequency and severity of droughts were also discussed, revealing how such climate-related events disrupted crop production and heightened food insecurity. Additionally, the findings indicated that climate variability caused significant economic stress, leading to loss of livelihoods among child-headed households. Many children reported being forced to assume adult responsibilities, impacting their education and overall well-being. The chapter also addressed the emotional burdens experienced by these children, including anxiety and stress related to their precarious living situations. Moreover, the findings highlighted the limited access to support services, which exacerbated their vulnerabilities. Overall, the chapter underscored the urgent need for targeted interventions to support child-headed households in coping with the adverse effects of climate change and improving their food security.

Chapter Five provided concluding remarks on the study. In the conclusions, it highlighted the exacerbation of vulnerabilities due to water scarcity and increased drought frequency, leading to significant food insecurity. Respondents emphasized the unique challenges faced by these households, including loss of livelihoods and the emotional burdens on children. The chapter proposed targeted recommendations, such as establishing community support programs, enhancing educational access, and promoting climate adaptation strategies. Additionally, it identified areas for further research, particularly the psychological impacts of food insecurity on children.

5.3 Conclusions

To investigate the impact of climate change on food security of child headed households in Rushinga.

The research concluded that climate change significantly exacerbates existing vulnerabilities within child-headed households, primarily through water scarcity and increased drought frequency. This aligns with vulnerability theory, which emphasizes how marginalized groups are disproportionately affected by environmental changes. Respondents indicated that prolonged dry conditions lead to crop failures, heightening food insecurity, a finding consistent with the literature on the impacts of climate variability on agricultural productivity. The unique challenges faced by these households, stemming from a lack of adult supervision, make them more susceptible to climate change's adverse effects. Many children struggle to access sufficient food, often resorting to inadequate diets that increase their risk of malnutrition. This is in line with the human security framework that connects food security to overall well-being. Economic stress due to lost livelihoods forces children into adult roles, adversely affecting their education and emotional health, further complicating their resilience. Additionally, the unpredictability of weather patterns disrupts traditional agricultural practices, supporting the notion that climate change destabilizes established livelihood strategies, while limited access to support services hinders their coping abilities.

To explore the food security challenges faced by child headed households in Rushinga.

Respondents articulated several key challenges, primarily significant food insecurity due to crop failures from recurrent droughts. This aligns with vulnerability theory, which highlights how environmental stressors disproportionately affect marginalized groups. Many households struggle to grow enough food, leading to inadequate nutritional intake and

increased vulnerability to malnutrition, consistent with literature on the direct links between food security and health outcomes. Economic constraints emerged as a prominent theme, as these households often lack stable income sources. Without adult caregivers, children are compelled to engage in informal labor, limiting their educational focus. This is in line with the human security framework that connects economic stability to overall well-being. This cycle of poverty diminishes their purchasing power, complicating access to nutritious food. Additionally, the study identifies a lack of nutritional knowledge among children, hindering informed dietary choices, which exacerbates health issues. The emotional burden, including anxiety and stress from precarious living conditions, further illustrates how these factors intertwine to heighten vulnerability. Limited access to essential services, such as healthcare and education, compounds these challenges.

To identify remedies or solutions to address food security challenges faced by child headed households in Rushinga.

The findings of the study identified several remedies to address the food security challenges faced by child-headed households in Rushinga. Firstly, the establishment of community-based support programs was emphasized, which aligns with vulnerability theory by providing essential resources such as food aid and agricultural training. These programs empower children to develop sustainable farming practices and improve crop yields, thereby enhancing food security. Secondly, increasing access to education emerged as a critical solution. Establishing scholarship programs tailored for child-headed households could help maintain their focus on learning, ultimately improving long-term economic prospects. This is in line with the human security framework regarding food security. Education initiatives should also include nutrition awareness, teaching children about balanced diets and food preparation, which addresses gaps in nutritional knowledge. Furthermore, strengthening social safety nets

is crucial. Targeted policies providing financial support, healthcare, and psychosocial services can alleviate economic pressures. Additionally, promoting community gardens and cooperatives fosters collaboration, allowing households to share resources, knowledge, and labour.

5.4 Recommendations

In light of the study, the following recommendations have been made:

1. It would be helpful for local NGOs to establish local initiatives that provide food aid, agricultural training, and financial assistance specifically for child-headed households. These programs should aim to empower children with skills for sustainable farming practices.
2. The Ministry of Local Government, in collaboration with partners can implement scholarship programs and educational resources tailored for child-headed households to ensure they remain in school.
3. Local leaders can encourage the establishment of community gardens and cooperatives that enable collaboration among households. This would not only improve food security but also foster social networks and shared resources.

5.5 Areas for Further Research

The study sought to investigate the impact of climate change on food security of child headed households in Rushinga District. It would be helpful to research about the psychological impact of food insecurity on children in these households. Understanding emotional and mental health challenges can inform targeted support services.

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Appendix B: Research Permission Letter

BINDURA UNIVERSITY OF SCIENCE EDUCATION



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DEPARTMENT OF PEACE AND GOVERNANCE

20 March 2025

TO WHOM IT MAY CONCERN

RE: REQUEST TO UNDERTAKE RESEARCH IN YOUR ORGANISATION

This serves to introduce the bearer, CHIWARA TATENDA Student Registration Number B211050B who is a HBSC PEACE AND GOVERNANCE student at Bindura University of Science Education and is carrying out a research project in your area/institution.

May you please assist the student to access data relevant to the study, and where possible, conduct interviews as part of a data collection process.

Yours respectfully

J. KUREBWA (DR)
Acting Chairperson



Appendix B: Interview Guide for Participants

My name is Tatenda Chiwara, I am a student of Peace and Governance Studies at Bindura University of Education (BUSE). I am studying for a Bachelor's degree program. To fulfil my studies, I'm required to write a research paper on the impact of climate change on child headed households in Rushinga District. The title of my research is The Impact of Climate Change on Food Security of Child Headed Households in Rushinga District.

In order to achieve my studies, I will interview my key informants. In this category, there are members from child headed households, NGO representatives, academics and community leaders.

The information that is provided during this interview will only be used for academic purposes. The researcher will guarantee the confidentiality of the information. The identities of the participants will not be shared with anyone.

Data Collection Tool

Section A

Biographical Data of Respondents

	18 - 25	26 - 36	36 - 55	56 – 64
Age				
	Married	Single	Divorced	Widowed
Marital Status				
	No School	Primary	Secondary	Tertiary
Level of Education				
	1	2 - 3	3 - 4	5+
Size of family				
	Formally Employed	Unemployed	Business Owner	Part-time Worker
Status of Employment				
	0 – 100 USD	101 – 200 USD	201 – 300 USD	301 USD +
Monthly Income				

Section B

1. What is the impact of climate change in your area?
2. How has climate change affected child headed households in your area?

Section C

3. In general, what food security challenges are faced by child headed households?
4. What challenges are faced by child headed households as a result of climate change?

Section D

4. What solutions would you recommend in order to address food security challenges faced by child headed households in your district?

chiwara

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"Religion, Climate Change, and Food Security in Africa", Springer Science and Business Media LLC, 2024

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Mpolase, Eric Thandisizwe. "Experiences of Teachers in Managing Discipline of Learners from Child-Headed Families", University of Pretoria (South Africa), 2023

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