



**CLIMATE DIPLOMACY AND HUMAN SECURITY. THE
CASE OF THE DEMOCRATIC REPUBLIC OF CONGO (DRC)**

Candidate: Bahati Mnyaci

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Supervisor: Prof. Mario Taraborrelli

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DECLARATION

By submitting this thesis, I declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated), and that I have not previously in its entirety or in part submitted for obtaining any qualification.

Date: 1 June 2024

ABSTRACT

The Democratic Republic of Congo has been plagued by persistent insecurities, particularly in the form of armed conflicts and wars from the M23 rebels and now a new phenomenon of Climate Change that has entered the world has exacerbated the insecurity situation in the country. In recent years, the impacts of climate change have added a new layer of complexity to the existing challenges faced by the country. Despite the extensive research on climate change in the DRC, there is a noticeable gap in exploring how climate diplomacy can be utilized as a tool to address human security concerns exacerbated by climate change. The DRC is highly vulnerable to the effects of climate change, with rising temperatures, changing rainfall patterns, and increased frequency of extreme weather events posing significant threats to the population. These environmental changes have direct implications for food security, health, environment, water availability, and overall livelihoods in the country. The ongoing conflicts in the eastern part of the DRC have been further exacerbated by the impacts of climate change. Competition over scarce natural resources, such as land and water, has intensified due to environmental degradation and resource scarcity caused by climate variability. This has led to increased tensions and violence, undermining human security in the region. While scholars have extensively researched the implications of climate change on human security in the DRC, there is a lack of focus on how climate diplomacy can play a crucial role in addressing these challenges. Climate diplomacy involves negotiating and implementing agreements on climate action at national and international levels. By integrating human security concerns into climate diplomacy efforts, it is possible to foster cooperation, build resilience, and mitigate the adverse impacts of climate change on vulnerable populations in conflict-affected areas like the eastern DRC. This dissertation aims to fill the existing gap in research by exploring how climate diplomacy can be leveraged to address the implications of climate change on human security in the Democratic Republic of Congo. By examining case studies, policy frameworks, and best practices in climate diplomacy, this study seeks to provide insights into effective strategies for promoting sustainable development, peacebuilding, and resilience in conflict-affected regions facing the dual challenges of conflict and climate change.

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LIST OF ACRONYMS

DRC – Democratic Republic of Congo

NAP- National Adaptation Program

UNFCC- United Nations Framework for Climate Change

COPs – Conference of the Parties

REDD – Reducing Emission from Deforestation and Forest Degradation

CHAPTER 1

INTRODUCTION

1. Introduction

In this subsection, the research starts with the introduction part that captures the background information. There is a clear explanation of the main guiding issues that outline the entire research process. The research in this chapter directs all its energy toward the core issues and aims of the study without engaging in the literature review. The introduction captures the key problem under investigation and gives a clear sign of the main research objectives, research questions, assumptions, delimitations, and limitations. This thesis will focus on climate diplomacy and human security in the Democratic Republic of Congo and an understanding of how the implication of climate change on human security has been addressed by climate diplomacy initiatives.

1.1 Background

Effective engagement with climate action is crucial in addressing the global challenge of climate change, yet it is often fragmented, constrained, and politicized. The debate surrounding the relevance and effectiveness of current mechanisms and the value attached to climate diplomacy reflects the complexities involved in tackling this issue. In the context of the Democratic Republic of Congo (DRC), these challenges are further exacerbated by limited institutional capacity and political instability. The DRC has faced significant hurdles on both security and environmental fronts over the past decades. Areas of civil unrest, political instability, and a lack of attention from major world powers have hindered the country's progress towards achieving its full potential in addressing climate change and sustainable development. The need for cohesive, inclusive, and sustainable climate action in regions like the DRC underscores the importance of overcoming fragmentation and political constraints to effectively combat climate change on a global scale.

The recent emergence of more severe environmental challenges, in the form of not only climate change itself but, also the increasing industrialization and deforestation in the DRC, has brought to light the very real possibility that a natural resource conflict will emerge in the not-too-distant future. Such a conflict embroils all the neighbouring countries in a full-scale war, owing to the sheer abundance of vital resources found in the Congo rainforest and surrounding areas. Furthermore, the largely top-down approach, driven by national-level politics and lack of inclusive governance arrangements, disincentives the formulation of effective people-centered

climate policy. It is within this context that the potential for climate diplomacy can be assessed, and for this research climate diplomacy will be understood as the cooperative addressing of human well-being and security problems caused by negative environmental or climatic occurrences, with the eventual aim of bettering global and individual human wellbeing and security.

Moreover, the development of climate diplomacy as an area of study and practice offers some hope considering that climate change is a new global problem that can only be addressed by cooperation between governments, development organizations, media, and public opinion. Efforts such as these, working towards aligning the different interests in the world are to drastically reduce carbon emissions and protect those vulnerable to the impact of climate change. According to Anderson (2023), Climate diplomacy plays a crucial role in addressing human security challenges caused by climate change through fostering international cooperation, promoting sustainable development, and facilitating conflict prevention and resolution. In addition, by engaging in diplomatic efforts, countries can work together to mitigate the impacts of climate change, reduce vulnerabilities, and build resilience in communities facing environmental threats, ultimately contributing to peace and stability, (Tarif, 2023).

The Democratic Republic of the Congo (DRC) has been actively involved in various multilateral conferences and negotiations focused on addressing climate change and its significant implications for human security. The country's participation in events such as the United Nations Framework Convention on Climate Change (UNFCCC) and conferences of the Parties (COPs), notably the pivotal COP21 in Paris and the upcoming COP28 in UAE 2023, underscores the DRC's dedication to tackling the multifaceted challenges posed by climate change. These conferences have provided a crucial platform for the DRC to advocate for international support and emphasize the urgent need to address the adverse social impacts of climate change on human security within its borders. Through its engagement in these global forums, the DRC aims to raise awareness, foster collaboration, and drive action towards building a more sustainable and resilient future for its people amidst the growing threats of climate change.

Noteworthy instances include the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa 2002, where DRC underscored the significance of addressing climate change and its implications. More so, the United Nations Climate Change Conference

in Copenhagen, Denmark 2009 emphasized the crucial requirement for financial and technological assistance to mitigate the impact of climate change on the nation.

Furthermore, the commitment exhibited by the DRC during COP 21 in Paris 2015, where it pledged to implement the Paris Agreement and reduce greenhouse gas emissions, emphasizes the nation's recognition of the interconnectedness between climate diplomacy and human security. The global consensus in 2009, during the Copenhagen COP15 Climate Summit, to limit global warming to below 2 degrees Celsius highlights the critical nature of these engagements. This study on climate diplomacy and human security in the DRC is therefore indispensable, as it seeks to unravel the intricate dynamics of how diplomatic efforts and commitments made in these conferences contribute to or potentially hinder the protection of human security in a nation grappling with various sociopolitical and environmental challenges.

1.2 Problem Statement

The Democratic Republic of Congo (DRC) is grappling with a myriad of challenges at the intersection of climate change, diplomacy, and human security. As a country highly vulnerable to the impacts of climate change, the DRC faces unique challenges in balancing its diplomatic efforts to address climate change with the need to protect human security. This thesis aims to explore the complex relationship between climate diplomacy initiatives and their consequences on human security in the DRC.

Climate change poses significant threats to the DRC, including increased frequency and intensity of extreme weather events, such as floods and droughts, and changes in temperature and precipitation patterns. These changes have direct and indirect impacts on human security, affecting access to food, water, and other essential resources, as well as exacerbating existing socio-political tensions.

Climate diplomacy refers to the efforts of states and non-state actors to address climate change through international cooperation and negotiations. These efforts aim to reduce greenhouse gas emissions, promote adaptation and resilience, and support sustainable development. In the context of the DRC, climate diplomacy initiatives have focused on reducing deforestation and forest degradation (REDD+), promoting renewable energy, and building climate resilience.

However, the effectiveness of these initiatives in promoting human security in the DRC is a subject of debate. While some argue that these efforts have contributed to reducing greenhouse gas emissions and building climate resilience, others point to potential vulnerabilities and conflicts arising from these initiatives. For instance, REDD+ programs have been criticized for

dispossessing local communities of their land and resources, leading to conflicts over land use and resource access, (Alasiola et, al., 2021). Similarly, renewable energy projects have been associated with human rights abuses, including forced displacement and violence against local communities.

Moreover, the DRC's diplomatic efforts to address climate change have been shaped by its broader geopolitical context. The country's position as a major producer of minerals critical for renewable energy technologies, such as cobalt and coltan, has influenced its engagement in international climate negotiations. The DRC has used its mineral wealth as leverage in these negotiations, advocating for greater financial support for climate adaptation and mitigation efforts in exchange for access to these minerals. However, this approach has been criticized for prioritizing economic interests over human security concerns.

To address these challenges, there is a need for a more nuanced understanding of the interplay between climate diplomacy initiatives and human security in the DRC. This requires considering the specific contextual factors that shape the impacts of these initiatives on human security, including social, political, economic, and environmental factors.

1.3 Research Objectives and Methodology

The primary objective of this research is to conduct a comprehensive analysis of the relationship between climate diplomacy and human security in the Democratic Republic of Congo. The study aims to delve deeply into the effectiveness of climate diplomacy initiatives within the context of DRC, specifically evaluating how these initiatives contribute to addressing the myriad human security challenges prevalent in the region.

The study will employ a mixed methods approach, combining qualitative interviews and quantitative data analysis. Interviews will be conducted with government officials, non-governmental organizations, local communities, and international organizations involved in climate diplomacy efforts in the DRC. These interviews will provide insights into the perceptions, challenges, and potential solutions related to climate change and human security. Additionally, quantitative data will be collected and analyzed to assess the impact of climate diplomacy initiatives on human security indicators such as displacement, food, security, and social cohesion.

1.4 Research Questions and Hypothesis

To achieve the above objectives, the following questions need to be answered.

- How effectively have climate diplomacy initiatives, particularly those undertaken in international conferences such as the UNFCCC COPs and the Paris Agreement, translated into tangible policies and actions addressing environmental, socio-economic, and political dimensions of human security in the Democratic Republic of Congo as reflected in efforts to combat food insecurity, environmental threats, health risks, and climate-induced migration?
- What are the key challenges and opportunities encountered by the DRC in implementing and benefiting from climate diplomacy and how do these factors influence the overall effectiveness of addressing human security concerns in the nation?
- How well do international climate goals, as stipulated in agreements like the Paris Agreement, align with the specific human security needs and vulnerability faced by the Democratic Republic of Congo and what adjustments or enhancement in climate diplomacy strategies could lead to more tailored and impactful outcomes for the country?

1.4.1 Hypothesis

H.0 Effective implementation of climate diplomacy initiatives, as witnessed through international agreements and conferences, positively correlates with improved human security outcomes in the Democratic Republic of Congo. Successful diplomatic efforts are expected to result in policies and actions that address environmental, socio-economic, and political dimensions of human security.

H.1 Challenges faced by the Democratic Republic of Congo in implementing and benefiting from climate diplomacy initiatives, such as financial and technological constraints, political instability, and institutional limitations, will negatively impact the overall effectiveness of these endeavors in addressing human security concerns. The mismatch between international climate goals and the specific needs of DRC may hinder the translation of diplomatic efforts into meaningful actions on the ground potentially exacerbating existing vulnerabilities.

1.5 Significance of Study

The significance of the study lies in its potential to contribute valuable insights to both academic and practical realms. Firstly, the research informs policymakers and decision-making both in the Democratic of Congo and on the international stage with an understanding of the interplay between climate diplomacy and human security. This knowledge can enhance the development of more effective policies and strategies to address the unique challenges faced by the DRC.

Secondly, this study will better climate diplomacy strategies by offering recommendations after having examined the effectiveness of the previous initiative. This ensures that more tailored strategies are put in place to address the specific needs of the nation. This as a result will contribute to much more impactful and meaningful collaboration on climate change. Furthermore, the study contributes to academic knowledge by enlightening the complex relationship between climate diplomacy and human security, particularly in a country facing socio-political and environmental challenges. It can serve as a reference for scholars and researchers interested in similar intersections. Moreover, findings from the study will raise awareness about the critical linkages between climate change, diplomacy, and human security. As a result, the study will stimulate advocacy efforts, encouraging stakeholders to address the identified challenges and collaborate for sustainable solutions. Lastly, by assessing the effectiveness of support in addressing climate-related human security challenges in the DRC, the study will underscore the importance of fulfilling global responsibilities in assisting vulnerable nations, thereby fostering a sense of shared accountability in the international community.

1.6 Delimitation and limitation of the study

It is important to acknowledge both the limitations and delimitation of this research, firstly the study will specifically focus on the Democratic Republic of Congo, excluding other countries or regions. This will help maintain a clear and manageable scope. Secondly, the study may be delimited to a specific period, considering that climate diplomacy and its effects evolve. This as a result will ensure a focused investigation within the defined timeframe. Most importantly, the research aims to provide valuable insight into the relationship between climate diplomacy and security.

1.6.1 Limitation

The accessibility and quality of data related to climate diplomacy and human security in the DRC may be limited, impacting the depth and reliability of the study. Moreover, time, budget, and availability of resources may impact the extent of data collection and the thoroughness of the analysis. The research will rely on self-reported data from interviews which may be subject to biases and limitations. Additionally, access to the interviewees from international organizations like UNFCCC and government officials in the specific field of climate diplomacy could be a challenge, and hence efforts will be made to ensure requests for meetings and interviews are done in advance.

1.7 Research Assumptions

In climate diplomacy research, assumptions play a crucial role as they form the foundational elements upon which the study is built. Four key assumptions often made in this field are the assumption of international cooperation, data reliability, agreement adherence, and the assumption of policy implementation.

The first assumption revolves around the belief that there exists a certain level of international cooperation and collaboration in climate diplomacy efforts. This assumption suggests that nations engage in meaningful partnerships to address climate-related challenges, including those impacting human security in regions like the Democratic Republic of Congo (DRC). It presupposes that countries are willing to work together towards common goals, despite potential differences in interests or priorities. This assumption is essential for shaping research perspectives on how global cooperation can drive effective climate action and address complex environmental issues that transcend national boundaries.

The second assumption pertains to the effective implementation of policies developed through international climate agreements, such as the Paris Agreement. This assumption implies that participating nations, including countries like the DRC, are committed to translating policy commitments into tangible actions on the ground. It presupposes that governments have the capacity and willingness to enforce climate policies, allocate resources accordingly, and monitor progress toward meeting their climate targets. Understanding this assumption is crucial for assessing the real-world impact of climate agreements and evaluating the extent to which policy frameworks translate into meaningful change at the national and global levels.

The assumption that countries, including the Democratic Republic of Congo (DRC), adhere to the commitments and agreements made in international climate conferences suggests a level of trust in the integrity of these agreements. This belief is essential for global cooperation in addressing climate change. However, various factors can influence the level of adherence to such agreements, including political stability, economic constraints, and national priorities. In the case of the DRC, factors such as internal conflicts, corruption, and poverty may affect the implementation of climate diplomacy initiatives.

The study may assume the reliability and accuracy of the available data related to climate diplomacy initiatives, human security indicators, and related factors in the DRC. This assumption is crucial for drawing valid conclusions and making informed recommendations. However, data collection in developing countries like the DRC can be challenging due to

various factors such as limited infrastructure, lack of resources, and conflicting data sources. Moreover, the dynamic nature of climate change and its impacts on human security further complicates data collection and analysis.

1.8 Chapter Summary

The opening chapter of the study on climate diplomacy and human security in the Democratic Republic of Congo (DRC) lays the groundwork for a detailed examination of the intricate relationship between these two critical aspects. It commences by offering a thorough background analysis, shedding light on the complex socio-political and environmental context within the DRC. This contextualization serves to underscore the necessity and timeliness of investigating how climate change intersects with human security concerns in a nation already burdened by a multitude of challenges. The chapter then proceeds to outline the core problem statement, succinctly articulating the key issues that propel the research forward. There is acknowledgement of the delimitations and limitations inherent in the study, encompassing factors such as geographical scope, time constraints, and potential biases. By outlining these considerations, the study provides a contextual framework for interpreting its findings. Additionally, the assumptions that underpin the research are explicitly stated, serving as foundational premises that influence the interpretation of findings. The organization of the thesis is structured to provide an overview of subsequent chapters, delineating how each section contributes to achieving the research objectives and addressing the identified problem. Central to this exploration is an emphasis on understanding the repercussions of climate change on human security within the DRC and evaluating the significance of international diplomacy in mitigating these pressing challenges.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

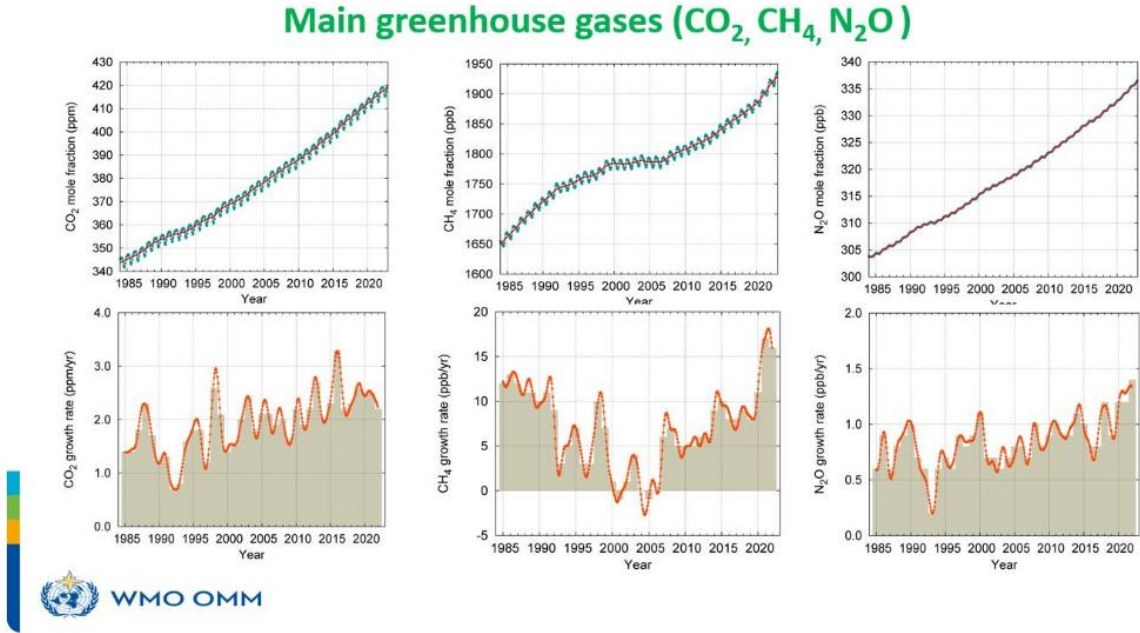
This chapter delves into a comprehensive review of the literature surrounding the intricate relationship between climate diplomacy and human security within the Democratic Republic of Congo, providing a detailed examination of the historical backdrop of climate change, to climate diplomacy discourse starting from pivotal moments such as Rio de Janeiro conference in 1992 and spanning to more recent gathering in COP 28 2023. Furthermore, with a specific focus on the DRC's involvement, the chapter investigates the country's participation in climate conferences, offering an analysis of its demands, interventions, and overall engagements. By examining the country's participation and positioning within these conferences, the narrative unfolds to reveal the impact and effectiveness of such involvement in addressing the multifaceted challenges posed by climate change, particularly concerning human security. Additionally, the chapter sheds light on the various human security challenges that have been exacerbated by climate change in DRC, spanning from food insecurity, land degradation, mass migration, and heightened conflicts as a result, the repercussions of changing climate are deeply felt across the nation. By clarifying these interconnected issues, the chapter aims to underscore the urgency of holistic approaches to climate action that prioritize both environmental sustainability and human well-being. In essence, this chapter serves as a vital exploration of the intersection between climate diplomacy, human security, and the complex realities faced by the country, offering valuable insights into the complex interplay of global environmental policies and local socio-economic dynamics.

2.1 Historical Context of Climate Change

In 2004, the UK Government's chief scientific advisor made a striking statement by comparing climate change to international terrorism, emphasizing that climate change poses a far greater threat to the world's stability, (BBC, 2004). Article 1 of the framework convention on climate change postulates that climate change is an alteration of climate that is attributed to human activity that modifies the composition of the global atmosphere and is in addition to natural climate variability observed over comparable periods, (UNFCCC, 1992). Climate Change is not merely a contemporary issue rather its historical context spans millennia. In the Commission document dealing with the European Climate Pact from 2020, climate change is once again presented as an urgent threat through droughts, forest fires, sea level rise, land degradation, and

massive floods, (EC, 2020). The document underscores the pressing need for collective action to address these challenges and emphasizes the importance of mitigating greenhouse gas emissions to combat the adverse impacts of climate change. The earth’s climate has undergone fluctuations for millions of years due to various natural factors, such as solar radiation, volcanic eruptions, and shifts in the earth's orbit. For instance, the ice ages, which occur approximately every 100,000 years over the past million years reflect significant climatic shifts. These periods of glacial advance and retreat have shaped the landscape and biodiversity of the planet, illustrating the natural variability of the climate system (National Research Council, 2006). The Industrial Revolution marked a significant turning point in the historical trajectory of climate change. With the advent of industrialization in the 18th century, human activities began to significantly alter the composition of the atmosphere through the release of greenhouse gases, primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), (Foresight International, 2011). The burning of fossil fuels, deforestation, and industrial processes contributed to the unprecedented increase in the greenhouse effect and led to global warming (IPCC, 2014).

Fig 2.1 shows the main greenhouse gases



Graphs - Main greenhouse gases - November 2023

Source: WMO, 2023

Climate change in the 20th century witnessed a significant acceleration due to the rapid spread of industrialization across the globe. The advancements in scientific research and technology

played a crucial role in enabling more precise monitoring and understanding of Earth's climate system. This led to the identification of alarming trends such as rising global temperatures, melting ice caps, and shifting precipitation patterns. The establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988 by the United Nations marked a pivotal moment in global efforts to address climate change, (IPCC, 2021). The IPCC has been instrumental in synthesizing scientific knowledge on climate change, providing comprehensive assessments that serve as a guide for policymakers worldwide. Through its reports and findings, the IPCC has highlighted the urgent need for collective action to mitigate the impacts of climate change and transition towards a more sustainable future.

The late 20th and early 21st centuries marked a significant period of heightened awareness and concern regarding the repercussions of climate change. Over the years, the Earth's average surface temperature has surged by approximately 1.2 degrees Celsius since the late 19th century, as reported by NASA in 2021. This warming trajectory has set off a chain reaction of environmental consequences, such as more frequent and severe heatwaves, extreme weather occurrences, rising sea levels, and disruptions to both ecosystems and agriculture. The pivotal Paris Agreement, established in 2015, stands as a monumental global initiative aimed at combatting climate change by striving to cap global warming at well below 2 degrees Celsius above pre-industrial levels, as outlined by the United Nations in 2015. Addressing climate change remains a significant challenge due to numerous socio-economic and political factors. These factors include the dependence on fossil fuels for energy, the influence of vested interests in the fossil fuel industry, geopolitical tensions, and disparities in economic development. These complications make it difficult to transition to a low-carbon economy, which is essential for mitigating greenhouse gas emissions, adapting to the impacts of climate change, and ensuring a sustainable future for generations to come (IPCC, 2018).

The Global Average Surface temperature

Fig 2.1.1 below illustrates the surface temperature trends from 1880 – 2023 relative to the 20th-century average (1901-2000). Cooler-than-average years are illustrated by blue bars, while warmer-average years are depicted by red bars. The approximately 2-degree Fahrenheit (equivalent to 1 degree Celsius) rise in the global average temperatures since the pre-industrial era (defined as 1850-1900 in NOAA's record) may appear modest, yet it signifies a substantial escalation in accumulated heat. This is data provided by the National Centre for Environmental Information.

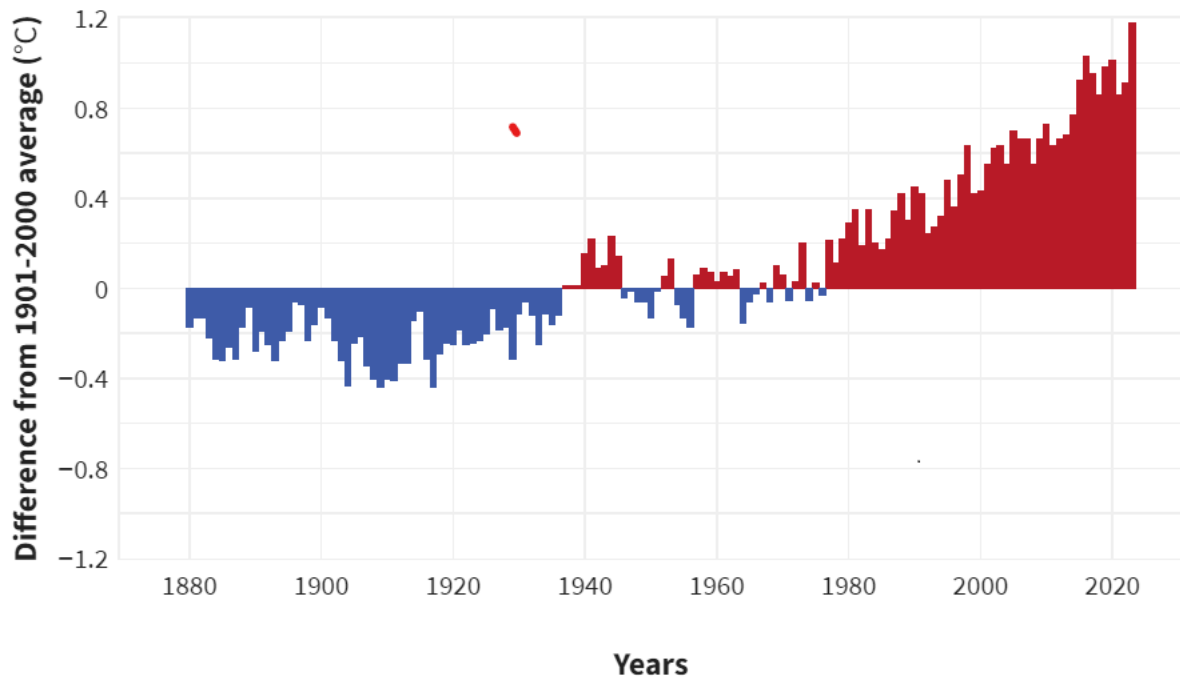
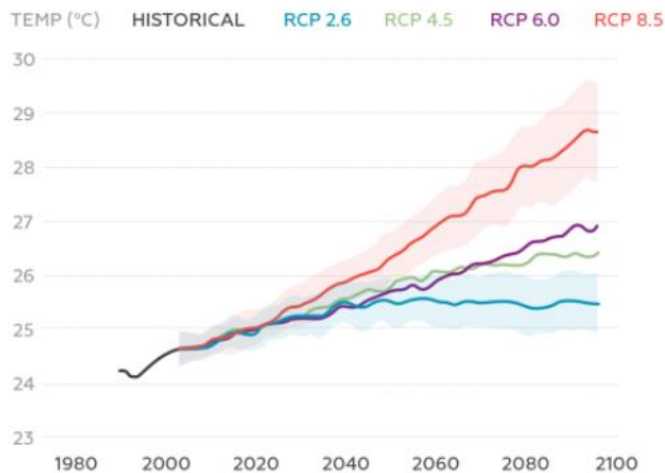


Fig 2.1 Source: NOAA Climate.gov

The changing climatic conditions in the Eastern Democratic Republic of Congo (DRC) are exacerbating existing inequalities by worsening food insecurity and displacement, which in turn contribute to the dynamics of conflict in the region. As temperatures rise and precipitation patterns become more erratic, livelihoods are being significantly impacted, leading to increased tensions over land, water, and other resources across the country, for instance, in the northeastern province of Ituri, clashes have erupted between the Hema herder communities and the Lendu farmers due to disputes over land and water resources. The escalating conflicts between different communities are expected to intensify as changes in precipitation force semi-nomadic herding groups to encroach upon settled agriculturalists' territories in search of water sources. This movement driven by environmental pressures is likely to heighten competition and trigger further disputes over access to essential resources. The strain on livelihoods caused by these climate-induced challenges is exacerbating existing tensions and increasing grievances among various groups within Eastern DRC.

Fig2.1.2 Historical and Projected temperature for the DRC from 1986 to 2099



Source: DGAP (2023)

Fig2.1.2 shows the future change in the DRC based on different emission scenarios. Shades represent uncertainty ranges and are shown for RCP2.6 (Paris consensus) and RCP8.5 (Business as usual).

The urgency of collective action to address climate change cannot be overstated, as it is one of the most pressing challenges of the 21st century. Concerted action at the global, national, and local levels is necessary to tackle this issue effectively. This includes implementing policies and initiatives aimed at reducing greenhouse gas emissions, promoting renewable energy sources, and investing in sustainable infrastructure. This is what gave birth to international gatherings on climate action to come up with the best measures on how the challenges that are posed can be addressed. Adding to the fact that developing countries are the most vulnerable and unable to quickly adapt due to various imbalances like finance, technology, and knowledge gap which justifies the relevance of the thesis in addressing the role climate diplomacy initiatives in solving the challenges posed by climate change on human security in the democratic republic of Congo.

2.2 DRC Role in Climate Diplomacy

The concept of climate diplomacy can be defined as the strategic use of diplomatic tools and negotiations to address the complex challenges posed by climate change at both national and international levels, (Climate Diplomacy, 2023). The European Commission postulates that climate diplomacy plays a crucial role in addressing the implications of climate change on peace and security. On the same note, climate diplomacy, as defined by the German Advisory Council on Global Change, "includes all diplomatic measures that aim to initiate, coordinate and sustain

processes, which guide societies and their international interactions towards preventing, managing and resolving conflicts of interests and values that will arise from climate changes or in reaction to climate policies, in such a way as to limit resultant harm to human security, development and the environment, and to facilitate sustainable development, (Climate Diplomacy, 2023). Climate change presents a permanent material threat to human security, a risk multiplier in fragile social, economic, and political systems, and thus a threat to the goals of international peace, security, sustainable development, and poverty eradication. No country is immune to the impact of climate change, but it is the world's poorest countries that will be affected most. These countries are also the least able to mitigate the potential impacts, shield their populations from harm, or exploit any opportunities that may arise. The DRC epitomizes the least developed and most fragile states that are highly or critically vulnerable to climate change, (NUPI, 2023). The following analysis explores the relationship between climate change and security in the DRC, the climate diplomacy that has emerged, and the DRC's expressed preferences for overseas interventions in activities related to climate change.

By recognizing that environmental degradation and resource scarcity can exacerbate existing conflicts and contribute to instability, climate diplomacy aims to integrate climate considerations into peace-building efforts. This involves understanding how climate change can act as a threat multiplier, amplifying tensions over scarce resources and increasing the risk of conflicts. By incorporating climate-related risks into conflict prevention strategies, diplomatic efforts can help mitigate potential security threats arising from the impacts of climate change, (Climate Diplomacy, n,d). The idea has evolved in response to the growing recognition of climate change as a global challenge that requires collective action. Initially, environmental issues were not a central focus of traditional diplomacy. However, as the scientific consensus on climate change solidified and its impacts became more apparent, countries began to realize the need for coordinated efforts to address this complex issue.

Climate diplomacy gained prominence with the negotiation of international agreements that commenced in Rio de Janeiro where the United Nations Framework Convention on Climate Change (UNFCCC) began, the Paris Agreement, and the recent COP 28. These agreements established frameworks for countries to work together towards common goals, setting emission reduction targets and promoting sustainable practices. Over the years, climate diplomacy has become a key component of foreign policy for many nations. It involves not only negotiating treaties and agreements but also engaging in dialogue, capacity-building, and knowledge-sharing to enhance global cooperation on climate-related issues. At the broadest level, climate

change threatens the basic human needs of people in the DRC. Increased temperatures and changing precipitation patterns will decrease agricultural productivity and food availability. Reduced freshwater availability will exacerbate a range of health issues, particularly waterborne diseases. High-rainfall areas are expected to suffer more frequent and severe flooding. With nearly half the population living in areas highly vulnerable to natural disasters, the population's displacement and loss of shelter infrastructure will be considerable. Although many of these potential direct impacts on climate change are harmful, it is the exacerbation of the DRC's existing vulnerabilities and conflicts that pose the greatest threat to security.

2.3 Rio de Janeiro

Initially, climate change and international cooperation were just notional ideas. It was only by the late 1980s that states began to address the political implications of climate change and the first major international treaty concerning the global climate, the 'United Nations Framework Convention on Climate Change' (UNFCCC), came to light. Firstly, the international dimension was marked by the Rio Conference from May 31st to June 11th, 1992, in Rio de Janeiro which established a clear objective outlined in Article 2: to stabilize greenhouse gas emissions in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system, (UNFCCC, 1992). Climate change had been on the international agenda and building on the work of the World Meteorological Organisation and the United Nations Environment Programme, the 1992 Rio Conference urged countries to sign and implement the UNFCCC, (Bonn, 2002). The Convention set out a framework for future action. The signatories, at present numbering 192 states, undertook to meet every year at a Conference of the Parties (COP) for further agreements and settlement of disputes. The theory of common but differentiated responsibilities was built into the Convention to distinguish between developed and developing countries. Whilst all countries had to adopt environmental protection measures, it is accepted in the Rio Declaration and the UNFCCC that the responsibility of paying for the full costs of managing climate change should be "borne by the developed country parties." Also, the developed countries agreed to take the lead in combating climate change and the adverse effects thereof. This notion has been succeeding the UNFCCC in successive agreements, particularly in the struggle facing COP15 in 2009 to replace the Kyoto Protocol. Given what we face today, this understanding and planned sequence of actions from Rio has not been a success. But it is of course essential to remember that the Rio Agreement and the UNFCCC generally were at the time the most progressive plan to combat climate change and, with the continued churning up

of fossil fuels, the failure to improve and expand upon it is simply a sign of the still unprogressive world.

2.4 The Kyoto Protocol

The Kyoto Protocol is a legally binding agreement under international law. It sets binding targets for 37 industrialized countries and the European community, mandating that they reduce their greenhouse gas emissions by an average of 5% against 1990 levels over the five years 2008-2012, (UNFCCC, 2022). By the time of its first commitment period in 2012, only around 20% of global emissions were down to countries signed up to Kyoto. The Democratic Republic of the Congo (DRC) played a significant role in the negotiations and discussions of the Kyoto Protocol. The DRC intervention focused on highlighting the importance of addressing climate change and its impacts on developing countries, particularly those in Africa. The DRC emphasized the need for developed nations to take responsibility for their historical contributions to greenhouse gas emissions and to provide financial and technological support to developing countries to help them adapt to and mitigate the effects of climate change, (DRC-NAP, 2021). The DRC also called for increased transparency and accountability in monitoring and reporting emissions reductions.

The protocol allowed for joint implementation, where a developed country could finance a project in another developed country that reduced emissions, and then claim credit for the reduction. It also paved the way for the clean development mechanism, where developed countries could invest in low-cost emission reduction projects in developing countries, and the developed countries could be credited for their reduction. During the Kyoto Protocol negotiations, the DRC made several demands to ensure that the agreement would be fair and effective in addressing climate change. These demands included advocating for a more ambitious target for reducing greenhouse gas emissions, as well as calling for mechanisms to support sustainable development in developing countries. The DRC also pushed for provisions that would allow developing nations to access funding for climate change adaptation and mitigation efforts, recognizing their limited resources and capacity to address these challenges on their own, (DRC-NAP, 2021). The functions of the protocol were overseen by the parties to the protocol - that is, by countries that had ratified it - and by the meeting of the parties at the protocol conference. By 2010, the federation and all federal states and territories of Australia, all member states of the European Community (except for Cyprus and Malta), Kazakhstan, Japan, and New Zealand formally notified the Secretary-General of the UN of their acceptance of the transition of the protocol. However, due to the importance of the protocol at that time,

some countries rushed to accept the transition before the second commitment period began. The second commitment period of the protocol started on 1 January 2013 and ended on 31 December 2020. During this time, parties had an 8% target of reducing their emissions against 19% in the first commitment period. Also, a provision was made for parties to trade emissions to help each other meet specific binding targets. The protocol is now in a 'compliance state', as parties wind up any remaining legal obligations.

The Paris Agreement was supposed to bring the remaining countries, such as the US and China, into the fray as well as renew the existing obligations for the 190-odd countries that were still part of the Kyoto Protocol. By the time of its first commitment period in 2012, only around 20% of global emissions were down to countries signed up to Kyoto. Overall, the DRC's intervention in the Kyoto Protocol underscored the importance of global cooperation in addressing climate change and ensuring a sustainable future for all nations. By advocating for equity, transparency, and support for developing countries, the DRC sought to ensure that the Kyoto Protocol would lead to meaningful action on climate change that benefits all countries, especially those most vulnerable to its impacts. The protocol allowed for joint implementation, where the developed country could finance a project in another developed country that reduced emissions, and then claim credit for the reduction.

2.5 The Copenhagen 2009 Conference

The turn of the millennium saw efforts to reach a global agreement to succeed the Kyoto Protocol in the form of a new legally binding treaty that would cover all major greenhouse gas emitters. In 2007, a process towards this new agreement began under the United Nations Framework Convention on Climate Change, (IISD, 2009). This new agreement would be negotiated by all the 192 Parties to the UNFCCC and was intended to address the current and future (post-2012) global efforts to fight climate change, as well as the funding and technologies necessary to make the required sustainable energy transition. It was agreed that the negotiations would be completed by December 2009, just slightly before the end of the first commitment period of the Kyoto Protocol. In his assessment of the conference, Bodansky contended that it yielded a significant positive outcome by initiating the dismantling of the firewall that historically divided Annex 1 (developed countries) and non-annex 1 countries, (Bodansky, 2010).

The Democratic Republic of the Congo (DRC) made several interventions and demands statements at the Copenhagen Convention. The DRC emphasized the importance of addressing climate change in a way that considers the specific vulnerabilities and needs of developing

countries, particularly those in Africa. The country highlighted the disproportionate impact of climate change on vulnerable populations and ecosystems, stressing the urgent need for global action to mitigate these effects. Additionally, the DRC called for increased financial and technical support from developed nations to assist developing countries in adapting to and mitigating climate change. Over the two subsequent years, various states pledged different emissions cuts or mitigation actions, alongside pledges of financial aid to the developing world and policy changes in various sectors. Many of these pledges were inscribed in a document, informally known as the Copenhagen Accord, in which the major economies of the world, such as the US and China, for the first time set out specific national actions and targets. However, the formal negotiations under the Bali Roadmap, intended to establish the new treaty in a series of meetings of subsidiary bodies, were overshadowed by major demonstrations and a public dispute between delegates from major developed and developing countries over the drafting of the agreement and the procedures used in a plenary session on the final day, (UN, 2009). This was exacerbated by the leaking of a draft "Danish Text" compromise, which was seen by members of the G77 group of developing countries as a 'take it or leave it' attempt to bypass the UN negotiating process.

Nevertheless, the DRC highlighted the significance of sustainable development practices that prioritize environmental conservation and social equity. The country advocated for policies that promote renewable energy sources, reduce greenhouse gas emissions, and enhance resilience to climate-related disasters. The DRC also emphasized the importance of promoting biodiversity conservation and ecosystem restoration efforts as part of a comprehensive approach to addressing climate change, (DRC-NAP, 2021). Overall, the DRC's intervention at the Copenhagen Convention reflected a commitment to advocating for climate justice and equitable solutions that benefit both present and future generations. After a long, difficult, and often chaotic conference, and after two postponements in the hope of reaching a consensus, the conference noted the Copenhagen Accord and agreed that parties would inscribe their emissions-cutting pledges by the end of January 2010, (IISD, 2009). However, more than thirty parties from the G77 subsequently formally rejected the Accord, citing procedural and evidential objections, and the conference instead 'took note' of the Accord as forming an agreement between some 26 countries. Critics suggest that the impact of COP 15 has been to undermine the traditional approach of taking the broad framework convention and its principles as the starting point and instead to move to a smaller grouping, led by some of the major economies of the world, (IISD, 2009).

In addition, the Accord was criticized for its perceived lack of ambition, with only a commitment to work towards limiting global temperature rises to 2°C, and for compromising the principle of common but differentiated responsibilities by allowing developed and developing countries to act together, based on their own capabilities and historic responsibilities in cutting emissions. However, the DRC's intervention and demands statements at the Copenhagen Convention highlighted the urgent need for global cooperation to address climate change effectively. By emphasizing the unique challenges faced by developing countries, particularly in Africa, the DRC underscored the importance of inclusive and sustainable approaches to climate action. The country's calls for increased support from developed nations, investment in renewable energy, and conservation efforts demonstrate a commitment to advancing environmental protection and social justice on a global scale.

2.7 The Paris Agreement COP21

The Conference of the Parties (COP) is a known conference organized by the United Nations (UN) for countries to take measures to eradicate global warming. The 21st conference was held in Paris, France, whereby an agreement was made addressing the concern on climate change. The agenda is to come out with a new international agreement on climate change and address issues on global warming, particularly the emission of greenhouse gases, (UNFCCC, 2015). The Democratic Republic of Congo (DRC) is already feeling the impact of climate change. The majority of the population are farmers, and the output of crops decides the society's livelihood. With the change in the pattern of rainfall and an increase in temperature, pests, and diseases are no longer seasonal, and disasters/catastrophes are common. Furthermore, the emission of greenhouse gases from the DRC is among the lowest. The DRC depends on hydropower and wood-based energy. With this, the DRC qualifies to get green funds to adapt to climate change, mitigate actions, and REDD+ investments.

The DRC highlighted several key concerns at COP21, drawing attention to the adversities the country currently faces, which they believe will be exacerbated if additional preventative measures to address this globally are not implemented. DRC highlighted the increased risk and potential speed of climate change. Typically, climate change in the past has occurred over a large period of time allowing humans to adapt; this has been achieved in the Holocene through to the modern-day climate. However, during the late Holocene, there were instances of rapid climate change, defined within the last 3000 years, with durations of less than 100 years onsets of much colder, wetter climate, coming from Greenland temperature anomalies evidenced by ice core data. Coming into the modern-day climate, the equation between the causes and effects

and the predicted very rapid onset of the effects shortly will act to turn the clock back to such rapid change experienced during the late Holocene and further back to instances of abrupt climate change (e.g. Younger-Dryas) whereby the changes will be too quick for humans and other organisms to adapt, leaving a cloud of uncertainty amidst the plethora of adverse effects, (Smith, 2011). The DRC fears that this means a more damaging climate will lead to a tougher life for the world's poor as an ingrained culture amongst some countries may mean that adaptation is done at the poorer nations' expense as demonstrated by land and resource-grabbing by foreign companies, a situation that is likely to increase when said resources are scarcer. High levels of migration and refugees in the world may also lead to increased ethnic tension and a higher probability of conflict, a situation the DRC fears may escalate in parts of the world to a genocidal scale when the international community is distracted by their climate-induced adversities. To deliver effective capacity-building to developing countries the DRC proposes that to realize the capacity-building framework for developing countries, it is important to establish clear institutional arrangements and ways to measure the improved capacity of developing country parties within the UNFCCC. They also state that this should involve effective recruitment and retention of expertise in these matters to ensure that it is present in all developing countries. Strengthen the global goal on adaptation and enshrining an adaptation target the DRC suggests that the Adaptation goal stated in the previous ad hoc working group on the Durban Platform should be kept and further extended by developing country parties. They also advocate for a global goal on adaptation that should be based on the assessment of the adverse effects of climate change and recognition of the significant threat this poses to development with enshrined quantified targets.

Collaboration was a central theme of the DRC presentation to the COP21. This is because they recognize the highly connected, globalized nature of the causes and effects of climate change. Links between deforestation in the Congo and the consumption of imported palm oil and timber products by nations around the world mean that the DRC's forests are not just a national resource but also a global one. A similar connection exists between the energy sector in the DRC and the impacts of increased emissions and climate change. The DRC's energy sector is almost exclusively dependent on biomass (wood and charcoal), with a mere 9% of the population having access to electricity. This makes it one of the lowest per capita emitters of greenhouse gases in the world but also means that the DRC's potential emissions are very high if it were to undergo large-scale development of its energy sector. This could have severe implications for climate change as well as deforestation if the DRC were to clear large areas of

forest to make way for hydroelectric or other energy projects. This increased emissions and deforestation in the DRC would undercut efforts by other nations to mitigate climate change and prevent global warming by reducing their emissions. The DRC recognized that it would be unreasonable to expect the world to forgo development in the country to stop climate change and safeguard global forest cover. Instead, they proposed that it would be far better to develop sustainably and to use the DRC's forests and their capacity to store carbon as a resource in a way that is beneficial for the global climate as well as the DRC itself. This would require close coordination with other nations, as well as financial and technical support in several forms. This is the overall objective of the DRC's proposals for collaboration and partnership at COP21.

2.8 COP 28 2023

The Conference of the Parties (COP28) held in Dubai marked a significant milestone in global climate action. Nearly 200 countries participated, acknowledging the imperative to transition away from fossil fuels. The event emphasized the need for justice and equity in ending the fossil fuel era, with UN leaders stressing support for developing nations throughout this transition, (UN, 2023). One of the pivotal outcomes of COP28 was the global stocktake, a comprehensive assessment of countries' progress towards climate goals under the Paris Agreement. This stocktake serves as a crucial mechanism for increasing climate ambition and ensuring collective action to combat climate change effectively. Agriculture, food systems, and biodiversity were central themes at COP28, (UNCC, 2023). The global stocktake highlighted the interconnectedness of climate change and food production, underscoring the need to address emissions from food systems. Additionally, discussions on deforestation, nature conservation, and sustainable land use practices were prominent during the summit.

At COP28, the Democratic Republic of Congo (DRC) delivered a significant statement emphasizing the critical role of preserving forests, enhancing biodiversity protection, and promoting sustainable agriculture practices in mitigating climate impacts. The DRC private investment in the New Climate Economy, particularly focusing on sectors that facilitate sustainable socioeconomic development for local populations, including youth, women, and Indigenous Peoples, while alleviating pressure on forested areas, is crucial for achieving long-term environmental and economic goals, (US Embassy, 2023). Sectors such as sustainable agriculture and forestry, renewable energy, and eco-tourism present significant opportunities for private sector engagement. Encouraging private sector investments can be achieved through the development of comprehensive investment plans tailored to these sectors, the establishment of appropriate financial instruments to attract investors, implementation of necessary reforms

to create a conducive investment environment, and the formulation of an investor's charter outlining commitments to sustainability and community well-being. Furthermore, by underlining the need to protect forests and biodiversity, the DRC showcased its commitment to sustainable development and environmental conservation on a global platform, (Carbon Brief, 2023). As one of the most biodiverse countries globally, the DRC recognizes the value of its forests not only for mitigating climate change but also for supporting diverse ecosystems, wildlife habitats, and indigenous communities. By prioritizing these aspects at COP28, the DRC reaffirmed its dedication to sustainable practices that balance economic development with environmental stewardship, (World Bank, 2023).

By advocating for sustainable agricultural methods that enhance resilience to changing climatic conditions, the DRC showcased its commitment to ensuring food security, reducing greenhouse gas emissions from agriculture, and fostering adaptation strategies for farmers. This emphasis underscores the country's recognition of agriculture as a vital component in addressing climate challenges. Through its intervention at COP28, the DRC showed its proactive approach towards implementing mitigation strategies to address climate impacts effectively. By emphasizing forest preservation, biodiversity protection, and sustainable agriculture practices, the country demonstrated a holistic understanding of how these measures can contribute to reducing carbon emissions, conserving natural resources, and building climate resilience. The DRC's stance reflects a comprehensive strategy aimed at combating climate change while promoting sustainable development goals nationally and internationally.

2.9 Importance of human security in the Democratic Republic of Congo

The UNDP (United Nations Development Programme) defined human security in 1994, within the UNDP Human Development Report, as "safety from chronic threats such as hunger, disease and repression and protection from sudden and hurtful disruptions in the pattern of daily life - whether in homes, jobs or communities", (UNDP, 1994). According to the UNDP, the concept of human security is a people-centered understanding of security that assumes that sustainable global security requires genuine concern for the individual and that the key to ensuring this is the protection of people from critical and pervasive threats and the enhancement of enabling structures and processes. Few African countries have suffered from such a complex and protracted security crisis as the Democratic Republic of the Congo (DRC). Human security in the Democratic Republic of the Congo stands as an urgent objective of both national and international priorities in the vast central African nation. In addition to the socio-cultural diversity of the country, the DRC is characterized by a rising threat of transnational terrorism.

While the Congolese government has made significant headway in recent years to combat these threats, ongoing conflict in certain outlying provinces such as North and South Kivu, and the Kasai region, have impeded the complete eradication of terrorist organizations, (NUPI, 2023). However, some have commented that terrorism, in the traditional sense, is not a major contributor to human insecurity in the Congo. Cockayne (2005) notes that these African conflicts are not the result of organized Islamic terrorists, but instead are largely due to a "crisis of governance and accountability". Human security in the Democratic Republic of Congo is influenced by a wide range of factors that include regional rivalries, and violent non-state actors all seeking to achieve power and exert control. The importance of climate change for human security in the DRC lies in both the severity of the projected biophysical changes and the particularly acute vulnerabilities of the wider society. As a least-developed country, with an overwhelming dependence on rain-fed agriculture for household welfare, the DRC is highly exposed to and relatively ill-equipped to deal with the impacts of climate change on water resources and food production. Furthermore, the country is still in a phase of recovery from a wide-ranging and much-storied conflict through the late 1990s and early 2000s, which saw armed violence, human rights abuses, and large-scale displacement in various parts of the country. This left behind a complex and fragile post-conflict situation, characterized by social and institutional fabrics in need of repair, and an extended period of "high and to make matters more complicated, there is a recurrence of intra-state conflicts over the past 10 years that have largely upset the pattern of development. The peace today is so "highly packed" with the elections, both local and national, and leading to violent incidents and growing displacement.

Climate change is likely to adversely affect each of these social contexts, with negative implications for human security in the DRC. The newly burgeoning interest in medical geography is motivated by profound concern over the myriad ways in which global environmental changes are likely to affect the health and well-being of the people of the world. This issue is particularly acute in regions that are already characterized by grave social tensions and a high prevalence of disease. The DRC is one such place, and given the strong links between climate change, ecology, and health, there is an urgent need to understand the health implications in the Congolese context. This entails what might be called "structural violence". That is a form of violence wherein some repressive system prevents individuals from realizing their full potential as human beings. This could range from the prevention of access to essential life resources to the undermining of communal relations detrimental to societal achievements. The effects of climate change on health and disease and how they translate into increased human

susceptibility to a range of diseases (possibly leaving millions more to die from avoidable causes) are all types of structural violence. Today, one of the greatest public health issues in the DRC is the burden of disease caused by the wrenching conflict of the past decades, and the current complex social and ecological contexts are still not conducive to good health. Thus, any more pressure on these contexts from environmental change represents a further threat to human security.

Human security involves being able to enjoy life while being free from violence and having basic human needs satisfied. The last twenty years have seen the concept of human security rise within the policy world, and it has been generally accepted that 'states' have a responsibility to provide a safe environment for the people. However, the DRC is a nation that struggles to uphold traditional conceptions of state-centric security, and its relevance in the context of contemporary national and international security today.

2.10 Human Security Challenges Caused by Climate Change in the DRC

Climate change would be seen as a pervasive threat, and enhancing the enabling structures and processes would involve building resilience to climate change through sustainable livelihoods and environmental practices. Climate change exacerbates human security challenges in the DRC through increased livelihood and food insecurity, disrupted agricultural cycles, loss of soil fertility, competition over resources, threats of water availability, and heightened vulnerability to natural disasters such as floods and storms, (NUPI, 2023). These challenges are further compounded by armed conflicts, displacement, and natural resource exploitation, creating a complex web of interconnected risks to human security in the region.

2.10.1 Food insecurity

Climate change has significantly worsened livelihood and food insecurity in the Democratic Republic of Congo by directly impacting agricultural productivity. The changing climate patterns, characterized by temperature rises and precipitation variability, have had detrimental effects on agriculture in the country. These changes have led to a disruption in agricultural cycles, loss of soil fertility, and decreased crop yields, ultimately contributing to heightened vulnerability and food insecurity among the population, (NUPI, 2023). Particularly in regions like North Kivu and South Kivu, local communities have been disproportionately affected by new pests, soil degradation, and disruptions to traditional farming practices because of climate change.

Moreover, the ongoing impacts of climate change in the Democratic Republic of Congo are expected to worsen food insecurity in the coming years. Increased periods of drought resulting from shifting climate patterns are likely to further reduce water availability for agricultural purposes, exacerbating the challenges faced by farmers and communities reliant on agriculture for their sustenance. The compounding effects of climate change on agricultural productivity not only threaten food security but also pose significant challenges for sustainable development efforts in the country. Addressing these issues will require comprehensive strategies that consider both short-term adaptation measures and long-term resilience-building initiatives.

2.10.2 Land Degradation

In the Democratic Republic of the Congo (DRC), land degradation is a pressing issue exacerbated by climate change. The country's rich biodiversity and fertile soils are under threat due to various factors such as deforestation, overgrazing, and unsustainable agricultural practices. Climate change has led to more frequent and severe droughts, which further accelerate soil erosion and reduce soil fertility. As a result, the DRC is experiencing decreased agricultural productivity, loss of biodiversity, and challenges to food security.

The degradation of land resources in the DRC poses multifaceted challenges that extend beyond agriculture. Decreased soil fertility not only impacts crop yields but also affects water availability and quality. Soil erosion contributes to sedimentation in rivers and streams, leading to ecosystem disruptions and declines in aquatic biodiversity. Additionally, land degradation can exacerbate climate change by releasing stored carbon into the atmosphere, further perpetuating environmental challenges.

To address the impacts of climate change-induced land degradation in the DRC, sustainable land management practices are crucial. Implementing techniques such as agroforestry, conservation agriculture, and reforestation can help restore soil health, enhance biodiversity, and improve water retention capacity. By promoting sustainable land management strategies, the DRC can mitigate the effects of climate change on its ecosystems, safeguard food security, and ensure long-term environmental.

2.10.3 Mass Migration or Climate Change-Induced Displacement

Climate change has significantly affected migration dynamics in the DRC, particularly through altering patterns of transhumance driven by climate-related phenomena such as droughts and water scarcity. This environmental instability has compelled pastoralist communities like the Mbororo to migrate further north into the comparatively wetter climate of the eastern DRC over

the last two decades, (International Crisis Group, 2014). As a result, of this increasing transhumance, there has been a notable escalation in pressure on already scarce resources, leading to heightened tensions and conflicts between herders and farmers in the region (United Nations, 2020). In November 2023, there were reports highlighting the worsening migration and displacement crisis in the Democratic Republic of Congo (DRC) due to ongoing armed conflicts, particularly concentrated in the eastern regions. The escalation of violence in North Kivu since March 2022 has forced more than 880,000 individuals to flee their homes, abandoning their communities to seek safety from conflict zones. These displaced populations, often referred to as internally displaced persons (IDPs), face heightened vulnerability to the effects of climate change, such as floods and storms that are frequent in the area. Additionally, the arrival of displaced groups often results in increased strain on natural resources as communities adopt unsustainable practices for survival, leading to further deforestation and land degradation (UNHCR, 2023).

The DRC's migration patterns have been significantly impacted by the intersection of climate change and conflict. Over the period from 2008 to 2022, around 1.7 million Congolese experienced internal displacement due to climate-related disasters like floods and storms, with a noticeable rise in incidents observed in recent years, (NUPI, 2023). Recent studies highlight that migration has become a common strategy for communities in North Kivu and South Kivu, where changes in mobility patterns influenced by climate change have contributed to increased conflicts. The traditional transhumance from the Sahel into the DRC, a centuries-old practice, is transforming, partly attributed to climate change-induced droughts and water scarcity in the Lake Chad Basin, (NUPI, 2023). The migration of Mbororo pastoralists and others towards the eastern Democratic Republic of Congo (DRC) in recent decades reflects the evolving patterns of transhumance influenced by climate change. This shift has intensified competition for resources, leading to heightened tensions and conflicts between herders and farmers, further complicating an already precarious situation, (International Crisis Group, 2014). Resolving these intricate challenges necessitates holistic approaches that combine climate change adaptation measures with conflict resolution initiatives, emphasizing the safeguarding of vulnerable populations' well-being and livelihoods in the DRC.

2.10.4 Heightened Conflicts

Climate change aggravates conflicts in the Democratic Republic of Congo (DRC) through various interconnected pathways, contributing to heightened tensions and violence within the region. One significant factor is resource scarcity, where climate change-induced phenomena

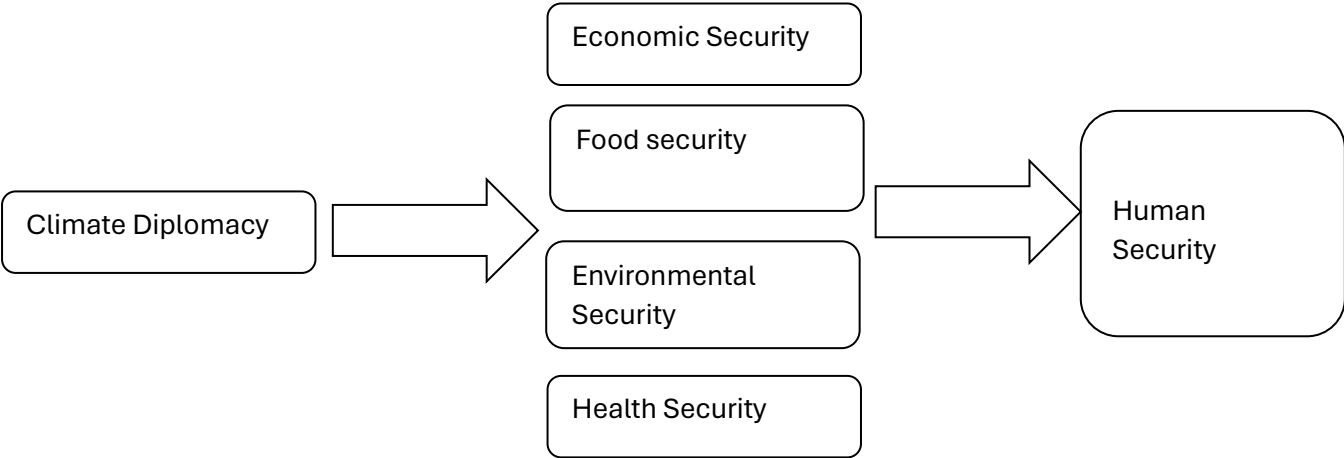
like droughts, water scarcity, and shifts in precipitation patterns worsen competition over limited natural resources such as water, land, and forests, (NUPI, 2023). This scarcity amplifies existing conflicts between different groups, like farmers and herders, as they compete for vital resources crucial for their survival. The increased rivalry for resources can lead to violent clashes and escalate social tensions, further fuelling conflict dynamics in the DRC. Climate change-related disruptions to agricultural production, such as crop failures and reduced yields, have the potential to worsen food insecurity and malnutrition in the Democratic Republic of Congo (DRC). Particularly in regions heavily dependent on subsistence farming, these disruptions can lead to social unrest and conflict as communities struggle to access an adequate food supply. The competition for limited food resources can escalate existing tensions and contribute to instability within the affected areas.

Additionally, displacement and migration are exacerbated by climate change-induced environmental hazards like floods, storms, and land degradation, forcing populations to flee their homes, (International Crisis Group, 2014). This leads to internal displacement and migration within the DRC, with displaced communities facing heightened vulnerabilities such as inadequate shelter, limited access to clean water and sanitation, and increased exposure to diseases. The concentration of displaced populations in host communities' further strains local resources and infrastructure, leading to social tensions and conflicts over scarce resources. The intersection of climate change and conflict has significantly impacted migration patterns in the Democratic Republic of Congo (DRC). According to a report spanning from 2008 to 2022, around 1.7 million Congolese individuals were internally displaced due to climate-related events like floods and storms, with a noticeable surge in incidents observed in the last five years (NUPI, 2023). Recent studies have highlighted that migration has become a prevalent coping mechanism for communities residing in North Kivu and South Kivu, regions heavily affected by climate change-induced alterations in mobility patterns, which have subsequently exacerbated conflicts within these areas (Author, Year). The intricate relationship between climate change, conflict, and migration underscores the multifaceted challenges faced by populations in the DRC as they navigate environmental vulnerabilities and social unrest.

2.11 Climate Diplomacy and Human Security Conceptual Framework

The integration of climate diplomacy and human security recognizes that climate change poses significant risks to human security, including economic, food, environmental, and health-related challenges. Economic security is crucial for individuals to meet their basic needs and sustain

their livelihoods. In the context of climate change, economic security can be threatened by disruptions in industries such as agriculture, tourism, and fisheries. Food security is another critical dimension affected by climate change, as shifts in weather patterns can impact crop yields and food production. Environmental security encompasses the protection of ecosystems and natural resources that are essential for human well-being. Climate change exacerbates environmental degradation, leading to issues such as deforestation, water scarcity, and biodiversity loss. Health security is also a key concern as climate change contributes to the spread of diseases, heat-related illnesses, and malnutrition.



Source: The Researcher

In the Democratic Republic of Congo (DRC), addressing these dimensions within the framework of climate diplomacy is essential for achieving human security. The country faces challenges related to economic instability, food insecurity, environmental degradation, and public health crises exacerbated by climate change impacts. By prioritizing policies that promote sustainable development practices, enhance agricultural resilience, protect natural resources, and improve healthcare systems, the DRC can enhance its human security outcomes amidst a changing climate landscape.

2.12 Securitization theory

Following the Cold War, there was a significant shift in the global security landscape, with the conventional emphasis on military threats diminishing in importance. Security entities like NATO and the US defense apparatus expanded their scope to address a broader spectrum of concerns previously categorized as low politics according to Trombetta (2009). This evolution

included acknowledging and addressing violent environmental conflicts as emerging challenges within the realm of security affairs. The concept of security was originally described by Buzan and the Copenhagen school as relating to conceptions of exceptionality priority, survival, competition, and confrontation, (Boas, 2015). In this thesis, the theory of securitization will be used to argue the role of climate diplomacy in addressing climate change implications on human security in the democratic republic of Congo. Securitization refers to the process by which climate is framed as a security issue, thereby justifying extraordinary measures and responses to address its impacts, (Warner & Boas, 2019). In the field of security studies, securitization involves defining an issue as an existential threat that requires urgent action beyond normal political processes. When applied to climate change, securitization elevates the issue to a level where traditional security actors like military and intelligence agencies become involved in addressing environmental challenges. This is clarified in a 1998 study by Buzan, Ole Waever, and Jaap di Wilde who delineated two contrasting perspectives on security, the new approach advocated by the wideners and the old traditionalist viewpoint centered on military and state concerns, (Buzan, Waever & Wilder, 1998). This broadened understanding of security emerged from a recognition of emerging threats that extend beyond state-centric considerations, evolving from a focus solely on state security to encompass individual, social, and human security concerns, (Buzan, Waever & Wilder, 1998). This approach has significant implications for climate diplomacy and human security.

In climate diplomacy, securitization can lead to increased attention and resources being devoted to climate-related issues at international forums like the United Nations Security Council (UNSC). In terms of human security, securitization of climate change can impact vulnerable populations disproportionately. By framing climate change as a security threat, policymakers may focus on protecting state interests rather than ensuring the safety and well-being of individuals and communities most affected by environmental disruptions, (Warner & Boas, 2019). This shift towards state-centric security approaches could neglect the human dimensions of insecurity caused by climate change, such as food and water scarcity, displacement due to extreme weather events, or loss of livelihoods. Therefore, while securitization can raise awareness about the urgency of addressing climate risks in diplomatic circles, it is crucial to balance these efforts with a human security perspective that prioritizes the needs and rights of individuals facing the immediate consequences of environmental changes.

In the case of the DRC, securitization theory can play a crucial role in framing climate change as a security issue that requires immediate attention. By securitizing climate-related challenges

such as food insecurity, displacement, resource conflicts, and health risks, policymakers can mobilize political will and resources to address these issues effectively. Climate diplomacy complements securitization theory by providing a platform for international cooperation and collaboration in tackling climate change impacts in the DRC. Through diplomatic channels, countries can work together to implement mitigation and adaptation strategies, share best practices, build resilience among vulnerable populations, and negotiate agreements that promote sustainable development while addressing human security concerns.

By integrating securitization theory with climate diplomacy efforts in the DRC, policymakers can elevate the discourse on climate change from being solely an environmental issue to a critical security challenge that demands collective action at national, regional, and global levels. This holistic approach can help enhance human security outcomes by addressing the root causes of vulnerability and promoting sustainable solutions that benefit both people and the planet.

2.13 Chapter Summary

This Chapter explained the literature relating to the study by defining all the terms and showing the link between climate diplomacy and human security in the Democratic Republic of Congo. It examined the theoretical framework, shedding light on the evolution of climate change discourse, and highlighting human security challenges aggravated by climate change. The chapter emphasizes the pressing necessity for comprehensive approaches to address climate change that prioritizes both environmental sustainability and human well-being. Additionally, it introduces a theoretical framework that illustrates the interconnectedness of various factors and how they relate to the research being conducted. In the subsequent chapter, the researcher looks at the research methodologies.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The chapter on research design and methodology delves into the framework used to address the research questions and evaluate the two hypotheses concerning climate diplomacy and human security in the Democratic Republic of Congo. It elucidates how the sample was selected, detailing the rationale behind the sample size determination, the research instrument employed, the methodologies for data collection, the analysis tools utilized, and ethical considerations taken into account throughout the study. By meticulously outlining these aspects, the chapter provides a comprehensive understanding of the systematic approach adopted to investigate the intricate interplay between climate diplomacy and human security within the context of the DRC.

3.2 Research Design

Sekaran (2003) emphasized the importance of identifying variables in developing the conceptual framework for a research study, followed by designing the research to facilitate data collection and analysis. This process is crucial as it sets the foundation for the entire research endeavour. Malhotra (2004) further elaborated on the significance of research design in research, defining it as a structured plan that outlines the methods and procedures to be followed during data collection. The research design serves as a roadmap for researchers, guiding them on how to gather relevant information effectively to address specific research problems. By systematically organizing the data collection process, researchers can ensure that the information obtained is accurate, and reliable, and ultimately contributes to informed decision-making in various strategies.

The study employs an explanatory research approach, aiming to clarify the connection between various ideas and discern their interrelationships. Building upon Saunders et al. (2009) assertion, the primary objective is to ascertain the existing relationship between variables, delving into how one variable influence another while also striving to offer insights into the causative factors and consequences of these variables. The research methodology predominantly relies on primary data sources, which will be rigorously analyzed utilizing qualitative research methods. Through this approach the study endeavors to provide a comprehensive understanding of the intricate dynamics underlying the phenomena under investigation, thereby contributing to the advancement of knowledge in the field.

Qualitative research is a type of scientific research that consists of an investigation seeking answers to questions. It systematically employs a predefined set of procedures to answer the question, collects evidence, and produces findings that were not determined in advance, (Family Health International, 2005). Moreover, qualitative research produces findings that are applicable beyond the immediate boundaries of the study. The research is mainly aimed at analysing climate diplomacy and human security in the democratic republic of Congo.

3.3 Research Approach

Researching the topic of climate diplomacy and human security in the Democratic Republic of Congo (DRC) requires a comprehensive approach that considers the complex interactions between environmental challenges, political dynamics, and human well-being. Different research approaches can be employed to study this topic, including quantitative methods such as statistical analysis of data related to climate change impacts and conflict incidents in the region, as well as qualitative methods that involve in-depth interviews, case studies, and content analysis of policy documents and diplomatic negotiations. Given the multifaceted nature of climate diplomacy and human security issues in the DRC, a qualitative approach would be most relevant for this research. Qualitative methods allow researchers to explore the underlying causes and implications of climate-related conflicts, analyze the perspectives and experiences of key stakeholders involved in diplomatic efforts, and understand the socio-political context shaping decision-making processes, (Adelphi, 2023).

Qualitative research is particularly suited for studying complex phenomena like climate diplomacy and human security in the DRC because it enables researchers to capture the nuances, meanings, and contextual factors that quantitative data alone may not fully elucidate. By conducting interviews with government officials, diplomats, civil society representatives, and local communities affected by climate change impacts, researchers can gain insights into the challenges and opportunities for advancing climate diplomacy initiatives that promote human security in the region, (DGAP, 2023). Additionally, qualitative methods allow for a more holistic understanding of how environmental degradation intersects with political instability, resource competition, and social vulnerabilities in conflict-affected areas like the DRC. Through qualitative analysis of narratives, discourses, and power dynamics shaping climate governance practices in the region, this research approach can generate valuable knowledge for informing policy interventions aimed at enhancing resilience and sustainability in fragile contexts.

3.4 Target Population

The target population encompasses a diverse range of stakeholders at various levels of governance, including government officials, diplomats, civil society representatives, and local communities impacted by climate change. This population also includes individuals involved in diplomatic negotiations and policy formulation related to climate issues within and outside the DRC. Due to complex interactions between environmental challenges, political dynamics, and human well-being in the region, understanding the perspectives, experiences, and interests of these stakeholders is crucial for effective research and policy development. Additionally, individuals directly affected by climate change impacts such as local communities facing climate-induced displacement in areas like South Kivu Uvira where floods forced many to flee, food insecurity, and resource scarcity, are integral members of the target population, as their insights can provide valuable perspectives on the ground realities and priorities for addressing climate-related vulnerabilities. Qualitative research methods are highly suitable for engaging with the diverse target population and investigating the intricate aspects of climate diplomacy and human security issues in the Democratic Republic of Congo (DRC). Through the utilization of in-depth interviews, case studies, and content analysis of policy documents, researchers can deeply explore the root causes and consequences of conflicts related to climate change, as well as comprehend the socio-political environment that influences decision-making processes.

3.5 Sample Design

In conducting a study on climate diplomacy and human security in the Democratic Republic of Congo (DRC), the sample design is crucial for ensuring the representativeness and reliability of the research findings. Given the complex nature of the topic and the diverse stakeholders involved, a snowball sampling approach would be suitable for this study. Snowball sampling involves identifying initial participants who then refer other potential participants, creating a chain referral process. This method is particularly useful in hard-to-reach populations or when studying sensitive topics where traditional sampling methods may not be feasible. In the context of climate diplomacy and human security in the DRC, utilizing snowball sampling can help researchers access key informants such as policymakers, NGOs, local communities, and experts who have valuable insights into the intersection of climate change and human security in the region.

Considering the geographical location approach to be used for this study, snowball sampling becomes even more relevant. The DRC is a vast country with diverse regions facing different challenges related to climate change and human security. By leveraging snowball sampling,

researchers can tap into networks of individuals across various regions of the DRC who possess unique perspectives on how climate diplomacy impacts human security at the local level. This approach allows for a more refined understanding of the complexities at play within different geographical contexts within the country, enabling researchers to capture a comprehensive range of experiences and viewpoints that would be challenging to achieve through traditional random sampling methods.

3.6.1 Sample Frame

The thesis sample frame is constituted of local organizations, non-governmental organizations, international organizations, diplomats, and government officials in policy formulation who are well-versed in the field of climate change and diplomacy.

3.6.2 Sample Size

The sample size in qualitative studies is typically smaller compared to quantitative studies due to the in-depth nature of qualitative research. (Boddy, 2016). Sample size is a critical aspect of research methodology that refers to the number of subjects or observations included in a study. A well-chosen sample size is essential for ensuring the reliability and validity of research findings. When researchers select a sample that adequately represents the population under study, they increase the likelihood that their results can be generalized to the larger population. Saunders et al. (2009) highlighted that the size of the sample and the method used for its selection significantly impact the confidence level in the data collected and the extent to which findings can be extrapolated. The research was conducted through interviews to the point of achieving data saturation. Data saturation occurs when collecting more data ceases to provide new insights or information relevant to the research questions or themes being explored. The Researcher continued sampling until reaching a point where additional data did not contribute substantially to the understanding of the phenomenon under study. A total of four interviews were conducted constituting interviewees who provided insightful data relevant to the study.

Samplings -Table 1

Name	Occupation
Dr. Bade Alembe	Head of Center for Climate and Foreign Policy
Barthelemy Mwanza	Global Climate Change Activists in DRC

Christian Bakenze	Assistant to special envoy of new climate economy (Policy)
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3.6.3 Sampling Technique

Convenience sampling, a non-probability sampling technique utilized in this research, involves selecting elements from the target population based on their accessibility or convenience to the researcher, as noted by Golzar et al. (2022). This method's significance lies in its ability to provide factual accuracy, thereby enhancing the validity of the study's findings. While convenient for researchers due to its ease of implementation, it is essential to acknowledge the limitations associated with this approach. The reliance on easily accessible subjects may introduce bias and limit the generalizability of results beyond the sample studied. Despite these drawbacks, convenience sampling can be valuable in certain research contexts where practicality and efficiency are prioritized over representativeness.

3.7 Data Collection Instrument

Data are essential components in research studies, serving as the foundation upon which conclusions are drawn. Cooper and Schindler (2008) emphasize that data represent the factual information obtained by researchers within the study environment. These data can be broadly categorized into two main types: primary data and secondary data. Primary data refers to information collected firsthand by the researcher through methods like surveys, interviews, or experiments. On the other hand, secondary data encompass existing data sources such as published literature, reports, and databases that have been previously gathered by other researchers or organizations.

3.7.1 Primary Data Collection

The researcher used primary data because it resulted in the accumulation of current and relevant information for conclusions and recommendations on the topic under study. Primary data collection involves gathering data firsthand specifically for a research project, ensuring that the information is original and directly related to the research objectives. By collecting primary data, the researcher was able to tailor the data collection methods to suit the specific needs of their study, allowing for a more targeted and in-depth analysis of the research topic. This led to more accurate results and enabled the researcher to draw meaningful conclusions based on the most up-to-date information available on climate diplomacy and human security in the DRC. In this research, primary data was collected mainly from interviews. Using primary data

collection methods enhances the validity and reliability of research findings, providing a solid foundation for making informed decisions and recommendations.

3.8 Research Instrument

Research instruments are essential tools utilized by researchers to gather data for their studies. As highlighted by Canals (2017), there exists a variety of research instruments that researchers can employ, including interviews, questionnaires, surveys, and experiments. In the context of a study on climate diplomacy and human security in the Democratic Republic of Congo (DRC), interviews were identified as the primary research instrument utilized for data collection. Interviews provide researchers with the opportunity to engage directly with participants, allowing for in-depth exploration of complex topics and the gathering of rich qualitative data that can offer valuable insights into the dynamics of climate diplomacy and human security within the DRC.

3.9 Interviews

The interviews are frequently used in qualitative research due to their ability to delve into the complexities of participants' experiences, attitudes, and beliefs. The decision to employ this research instrument stemmed from the ability of engaging with a diverse range of participants and delve deeply into their experiences, attitudes, and beliefs. Through interviews the researcher managed to collect more refined data directly linked to diplomacy and human security in the democratic republic of Congo. The value of interviews enhanced the researcher's ability to gain a true understanding of participants and the actual reality on the ground.

3.10 Validity and Reliability

Validity in research is a critical concept that pertains to the credibility and authenticity of the research findings. It ensures that the data collected and analyzed accurately represents the phenomenon being studied. Validity can be viewed as the essential truthfulness of the data, indicating whether the research methods and procedures used are appropriate for answering the research questions at hand. Stewart (2022) emphasized that validity signifies that correct methodologies have been employed to derive answers to the research inquiries, thereby enhancing the trustworthiness of the results. When data is deemed valid, it means that it offers an accurate portrayal of the subject under investigation, reinforcing the reliability of the study outcomes.

To achieve validity through interviews, the researcher had to employ several strategies. Firstly, careful wording of interview questions was crucial to ensure that the questions were

clear, relevant, and aligned with the research objectives. Establishing rapport with interviewees was essential to encourage open and honest responses, reducing the likelihood of respondent bias. Additionally, being mindful of the power dynamics between the interviewer and participant helped mitigate any influence on the responses because some respondents were government officials.

3.10. 1 Reliability

Reliability in research refers to the consistency and repeatability of findings. It questions whether a study, if conducted again, would produce the same results. If the data is reliable, it means that the findings are stable and trustworthy. Researchers often emphasize the importance of reliability as it speaks to the accuracy of their data. Essentially, it's about the ability of a research instrument to generate consistent responses under similar circumstances.

Ascertaining the reliability of this study on climate diplomacy and human security in the DRC the researcher took into consideration studies conducted by reputable institutions as sources of my research such as UNFCCC, German Council on Climate Change and NAP Global network to mention a few.

3.11 Data Presentation

When presenting data collected through interviews, it is essential to ensure clarity and coherence in conveying the information gathered from participants. The presentation typically included a summary of key findings, direct quotes or excerpts from the interviews which provided context and authenticity, and thematic analysis to highlight recurring patterns or themes observed across different responses. Visual aids such as charts, are also used to enhance the presentation and make complex information more digestible for the audience. Additionally, providing a detailed methodology section outlining the interview process, sample size, and any limitations encountered during data collection can help establish the credibility and reliability of the presented findings.

3.12 Data analysis

NVivo is a qualitative data analysis software commonly used to manage and analyze large volumes of unstructured data, particularly text-based data from various sources such as interviews, focus groups, and open-ended survey responses. The software facilitates the process of organizing, coding, and analyzing data to identify patterns, themes, and relationships. For this thesis, the researcher utilized the NVivo tool to examine the data collected through interviews to derive meaningful insights and patterns for the study. The data was collected on

record and the researcher went on to transcribe the audio to textual format and later transferred it to NVivo for analysis. The outcome of the analysis was offered in the form of visualization like charts, and graphs. By following a structured approach that includes transcription, coding, thematic analysis, node relationships, querying, and visualization, researchers can gain valuable insights from their interview data efficiently and effectively, (PubMed Central, 2008).

3.13 Ethical Considerations

The study was meticulously conducted with a strong focus on ethical considerations, prioritizing the well-being and rights of the participants. Prior to their involvement, each respondent was provided with comprehensive information regarding the purpose and objectives of the study, ensuring transparency and informed consent. This enabled participants to fully understand the nature of their involvement and the implications of their participation. Moreover, the researcher took a proactive measure to safeguard the privacy and confidentiality of the respondents, assuring them of anonymity to encourage open and honest responses. By focusing on these ethical principles, the researcher not only upheld the integrity of the study but also demonstrated a commitment to respecting the autonomy and dignity of the individuals involved, thereby contributing to the credibility and validity of the research findings.

3.14 Chapter Summary

This chapter provides a comprehensive overview of the steps, tools, and procedures implemented by the researcher to ensure the collection of relevant and reliable data pertinent to the study's objectives. It begins with outlining the research design utilized, explaining the reasoning behind the selected approach and its alignment with the research inquiries. Moreover, it delves into the complexities of the sampling methods employed, providing insights into how participants were chosen to accurately represent the desired population. Additionally, it clarifies the procedures for data collection carried out, detailing the specific tools or methodologies used and any adjustments made to cater to diverse participant requirements. This chapter concludes by assessing the dependability of the study's findings and implementing strategies to bolster the authenticity and accuracy of the data. By doing so, it safeguards the research's credibility and trustworthiness. This detailed exploration not only outlines the research procedure but also emphasizes the robust methodological foundation supporting the investigation, thereby accentuating the importance and durability of its results.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The introduction chapter of the forthcoming exploration into data presentation and analysis utilizing Nvivo as a pivotal tool promises an immersive journey into the intricate world of qualitative inquiry. Delving deep into the methodology, this chapter will explore the foundational principles underpinning the utilization of codes and themes within Nvivo, showing their crucial role in enlightening patterns and insights embedded within complex datasets. Furthermore, it will showcase the transformative visual aids, such as charts and tables, in bridging the gap between raw data and interpretive understanding, offering a visually compelling narrative that explains the interdependent relationship between the main research question and the ensuing analysis. Through a holistic examination of Nvivo’s capabilities, this chapter sets the stage for refined exploration into the research under study.

4.2 The Main Themes

Subsequent to conducting the data analysis different themes emerged that were later connected to the main research question of how effectively climate diplomacy initiatives, such as those witnessed in the UNFCCC, COPS, and Paris Agreement translated into concrete policies and actions addressing human security challenges of climate change in the DRC, as reflected in efforts to combat food insecurity, environmental threats, health risks, and climate-induced migration. The table below shows a connection between the main research question and the emerging themes.

Table 4.2

Research Question	Themes
How effectively climate diplomacy initiatives, such as those witnessed in the UNFCCC, COPS, and Paris Agreement translated into concrete policies and actions addressing human security challenges of climate change in the DRC, as reflected in efforts to combat food	Climate Change-Induced Migration Dynamics Environmental Security Dynamics Food Security Dynamics Health Security Dynamics

insecurity, environmental threats, health risks, and climate-induced migration?	
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4.3 Climate Change-Induced Migration Dynamics

After conducting the data analysis, the researcher developed different codes that contributed to the existence of the theme of climate change-induced migration dynamics. Climate-induced natural disasters and barriers to climate migration initiatives are highlighted as aspects that have contributed to the negative impact of climate diplomacy initiatives in addressing human security challenges as reflected in the efforts to combat climate-induced migration. As a result, these codes led to the evolution of the theme of climate change-induced migration dynamics.

Displacement occurs as a result of natural disasters such as floods, droughts, and landslides, which destroy homes, disrupt livelihoods, and render land uninhabitable.

desertification and sea-level rise

Implementation gaps, resource constraints, and governance challenges hinder the competitiveness of these initiatives.

A comprehensive approach to climate migration resilience in DRC and international collaboration on climate-induced migration are also significant codes that were deduced from the responses collected from the respondents. These factors communicated actionable pathways to follow that provided a positive means by which climate diplomacy initiatives can be applied to make a difference and contribute to minimizing the challenges of climate-induced displacement catastrophic effects.

Respondents

“Developing policies and strategies for disaster risk reduction, strengthening early warning systems, and investing in resilient infrastructure and livelihood diversification programs”.

The government can address climate-induced migration through partnerships with regional organizations, humanitarian agencies like UNHCR, and donor countries.

These collaborations focus on knowledge sharing, capacity building, and resource mobilization.

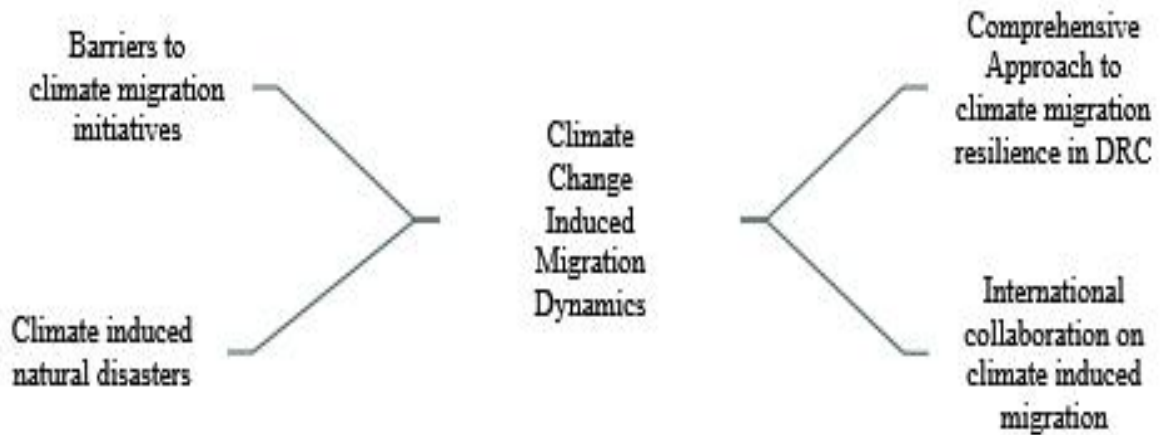


Fig 4.3 shows the factors that constitute climate change-induced migration dynamics in the Democratic Republic of Congo. The above mind map provides a clear and pictorial explanation of what issues are causing climate-induced migration on the left side which has had a very devastating and detrimental outcome on many lives and livelihoods. Therefore, the democratic republic of Congo needs a comprehensive approach to build a nation that will be more resilient and natural disaster-ready. This can be achieved through international cooperation and partnerships with nations willing to share their knowledge and skills in this field to enhance the human security factor as shown on the right side.

4.4 Environmental Security Dynamics

Furthermore, through the data analysis, the researcher discovered the environmental security dynamics theme. This constituted various codes that aided in expanding the understanding of the research sub-question that investigated the challenges and opportunities of implementing climate diplomacy initiatives and how these factors influence the overall effectiveness of addressing human security concerns in the nation. The following Fig 4.3 which shows a mind map shows the factors attributed to environmental security dynamics and the relationship.

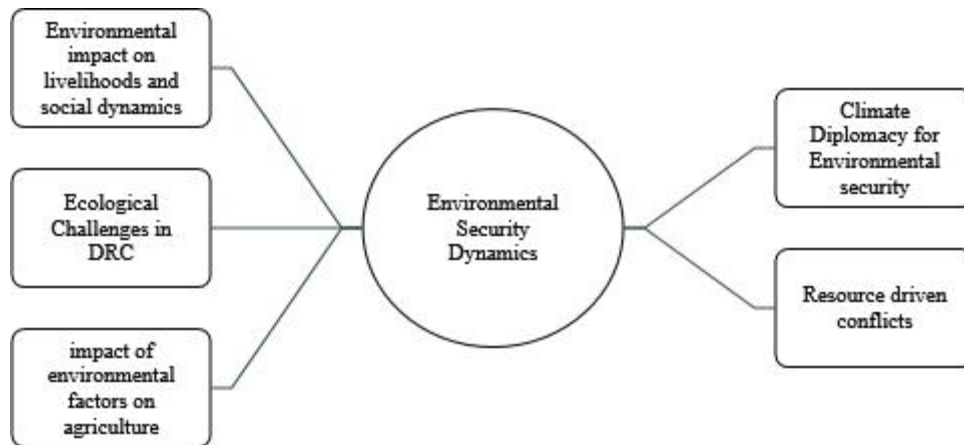


Fig 4.4

The diagram presented highlights a pressing issue regarding human security in the Democratic Republic of Congo, particularly emphasizing ecological challenges and resources-driven conflicts as prominent concerns. This visual representation underscores the gravity of the situation, indicating that these issues pose significant threats to the environment, and consequently to human well-being. The escalating ecological challenges across the DRC, notably in regions like Uvira, and Kazimia Village within the South Kivu Province, have become catalysts for conflicts over the dwindling resources. This nexus between environmental degradation and conflict underscores the urgent need for comprehensive strategies to address both the ecological crisis and the resultant humanitarian implications, particularly in vulnerable areas heavily impacted by shifting temperatures and environmental stressors. Below are some of the quotes by the respondents on these very factors.

Communities in the DRC confront a myriad of environmental threats including deforestation, habitat destruction, soil degradation, water pollution, and biodiversity loss.

Unsustainable land use practices, illegal logging, mining activities, and inadequate environmental governance.

“Instances of conflict and tension related to environmental resources in the DRC, particularly in regions rich in natural resources like minerals, timber, and land suitable for agriculture”

“Competition over access to and control”

“Communities and external actors, including extractive industries and government agencies”.

Additionally, other significant codes enlightened on the impact of environmental challenges on agriculture, which is crucial for the livelihoods of many Congolese communities. With agriculture being a primary source of income and sustenance for a large portion of the population, any disruptions caused by environmental factors such as erratic weather patterns, soil degradation, and water scarcity have profound consequences. Respondents pointed out instances where these environmental stressors directly hinder agriculture productivity and lead to reduced crop yield, livestock losses, and ultimately threatening food security. Such impacts not only undermine individual livelihoods but also contribute to broader social dynamics, including increased vulnerability to poverty, food insecurity, and social unrest.

“Deforestation and land degradation, for instance, lead to loss of livelihoods, exacerbate poverty, and contribute to social tensions and conflicts”.

“natural disasters, further endangering human lives and exacerbating vulnerabilities.”

Nevertheless, climate diplomacy for environmental security is one of the positive codes that was derived in the interviews as this plays a pivotal role in addressing environmental security challenges by fostering collective effort from both local and international partners. Through leveraging diplomatic channels, the DRC is formulating and coming up with an implementation action plan outlined in instruments like the National Adaptation Plan (NAP) and the recently announced New Climate Economy plan. These indeed do serve as frameworks for coordinated efforts to mitigate the impacts of climate change and environmental challenges.

4.5 Food Security Dynamics

Another major theme that emerged from the analysis is food security dynamics which is very significant in providing an adequate response to the research question. The factor encompassed various codes that were mapped to a visual mind map that illustrates a clear picture of the derivatives. Below is a pictorial diagram showing all the codes attached to the theme and each one of them will be explained on how it was derived from the interview and how much contribution they bring to the study.



Fig 4.5

One of the notable codes extracted from the data underscores the dire state of food security in the Democratic Republic of Congo, emphasizing the precariousness of ensuring a stable provision of food without disruptions. This revelation shed light on the significant challenges faced by the population in accessing an adequate and reliable food supply, laying bare the vulnerabilities inherent in the country’s food system. The precarious nature of food security not only jeopardizes the basic well-being of individuals and communities but also poses a grave threat to broader human security concerns. In the context where food insecurity is rampant, the ability of individuals to thrive, both physically and economically, is severely compromised, exacerbating existing socio-economic disparities and perpetuating a cycle of poverty and vulnerability.

The data analysis also revealed codes like the complexity of food security in DRC, indicating that they stem from a combination of environmental pressures, such as climate change and land

degradation as well as socio-economic issues including poverty, conflict, and inadequate infrastructure. An emerging code sheds light on the substantial impact of food price increases on agricultural productivity and food availability in the DRC. These price hikes are driven by various factors including market dynamics, supply chain disruptions, and environmental stressors. These pose serious threats to food security by undermining the viability of agricultural livelihoods, damaging crops, and degrading arable land. Particularly vulnerable are rural communities whose livelihoods depend heavily on agriculture for sustenance and income. As food shortages intensify and prices soar, these communities face heightened risks of malnutrition, and social instability, worsening the already precarious situation of food insecurity in the country.

Moreover, the data accentuates the profound implications of food accessibility challenges, with millions of people in the DRC lacking sufficient access to safe and nutritious food. This accessibility gap further intensifies food insecurity, especially among marginalized and disadvantaged populations. This challenge does not only threaten the health and well-being of the people but also hampers their socio-economic development and overall resilience.

The sustainable agriculture campaign was one of the most crucial strategies raised by the respondents in a bid to address and combat food insecurity in the DRC. This campaign not only emphasizes the recognition of the urgent need to transform agricultural practices but also signifies a proactive approach toward achieving long-term food security and environmental sustainability. By prioritizing sustainable agriculture methods like agroecology, organic farming, and conservation agriculture, stakeholders aim to mitigate the adverse impacts of conventional farming practices on ecosystems, soil health, and water resources. Moreover, the emphasis on sustainability reflects a broader perspective to achieve human security where the population well-being is put at the centre above all others.

After achieving sustainability, respondents emphasized that nutrition awareness becomes vital in enhancing human security within the DRC. Recognizing the integral link between sustainable agriculture, food security, and nutrition, stakeholders highlight the importance of educating communities about balanced diets, micronutrients-rich foods and healthy eating habits to improve overall wellbeing and resilience. These efforts are bolstered by diplomatic initiatives aimed at supporting sustainable agriculture and food security action plan in the country. Statement deduced from the data underline the transformative impact of these diplomatic efforts, noting how they have facilitated collaboration, resource mobilisation, and knowledge

sharing among national and international partners enabling the country to make significant strides towards food security and improving nutrition outcome for the population.

“Enhanced collaboration, sustained investment, and long-term commitment are necessary to tackle the complex interplay of climate change and food security effectively.”

“Programs targeting nutrition education and maternal and child health aim to address underlying causes of malnutrition”

4.6 Health Security Dynamics

Lastly, the fourth theme that arose from the data analysis conducted was the health surety dynamics which also aligns with providing more insights on responding to the research question. The mind map below shows the three main codes that are attached to the main theme.

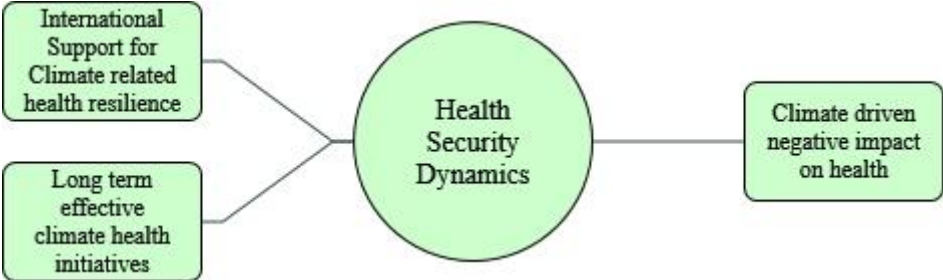


Fig 4.6

On the right side the map shows the climate-driven negative impacts on health which was most highlighted by the respondents contributing to high levels of human insecurity in the health context. This depiction shows the grave consequences of climate change on the public health outcomes, ranging from increased prevalence of vector-borne diseases like malaria and fever to heightened risks of heat-related illnesses and respiratory ailments due to extreme weather events. These climate-induced challenge increase existing vulnerabilities, particularly among marginalised communities like Kigonde, Kabogo, and other areas.

However, despite the challenges presented by health risks influenced by climate change, the participants emphasized the crucial significance of enacting effective climate health programs and securing global assistance to enhance resilience against climate-related health issues. These programs and support systems act as essential tools that have spurred significant transformation in the Democratic Republic of Congo (DRC), empowering the nation to address the diverse challenges of human insecurity within the healthcare sector. Through prioritizing investments in healthcare infrastructure resilient to climate impacts, enhancing capacity building, and implementing strategies for adapting public health to environmental changes, the DRC is better prepared to alleviate the negative health consequences of climate change and bolster its population's ability to withstand environmental threats. The international mobilization of support, encompassing financial resources, technical expertise, and knowledge exchange, strengthens national endeavours and eases the execution of evidence-based interventions to effectively tackle health challenges linked to climate change.

These measures demonstrate a proactive stance towards building resilience in health against climate-related challenges, showcasing an acknowledgment of the interconnection between environmental sustainability, public health, and human security. By incorporating climate considerations into health policies, programs, and systems, the DRC can bolster its ability to adapt to emerging health risks intensified by climate change, thus protecting the welfare and livelihoods of its populace. Additionally, global cooperation and partnerships are pivotal in expanding initiatives that address climate-related health issues, encouraging innovation, and fostering collaboration among countries in the Global South to tackle mutual obstacles and achieve common objectives. In the Democratic Republic of the Congo (DRC), as it grapples with the intricate relationship between climate change and human security, these programs and international assistance mechanisms play a crucial role in establishing resilience and promoting sustainable development amidst environmental unpredictability.

4.7 Chapter Summary

The chapter highlights the significant impact of visual aids, such as mind maps and tables, in clarifying the connection between the primary research question and the subsequent analysis. It then proceeds to examine the key themes identified during the data analysis phase, which include Climate Change-Induced Migration Dynamics, Environmental Security Dynamics, Food Security Dynamics, and Health Security Dynamics. Each theme is thoroughly explored, revealing the complex interactions between climate diplomacy efforts, human security challenges, and the specific dynamics within each area. By taking a comprehensive look at these

themes, the chapter offers valuable insights into the intricate challenges faced by the Democratic Republic of Congo and stresses the necessity of integrated approaches to effectively tackle climate-related human security issues.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the researcher summarized the major findings of the study, limitations, conclusions, and recommendations about the research objectives under study.

5.2 Summary

The research topic for the study was Climate Diplomacy and human security. The case of the Democratic Republic of Congo. The researcher seeks to assess the role of climate diplomacy in addressing climate change implications on human security in the DRC. Chapter 1 presented the background, problem statement, research questions, and objectives. Moreover, there was discussion on the significance of the study, research assumptions, limitations, and delimitation of the study. Chapter 2 presented the literature review segment where the theoretical framework was created. A deep dive into the historical aspects of Climate diplomacy from where it began and how the DRC has also intervened and provided statements. Furthermore, the chapter presented the climate diplomacy and human security conceptual framework and utilized securitization theory to argue that framing climate change as a security threat in the DRC can mobilize political will and resources to address challenges like food insecurity, climate-induced migration, and environmental and health risks.

Chapter 3 presented the research methodology, research design, population, sample, and sampling technique. More so, the research instrument which was the interview was mentioned on how it fulfilled the purpose of collecting data. The chapter presented the validity, reliability, and ethical considerations. Chapter 4 presented the main research objectives and data analysis using the Nvivo which provided visuals that translated the information through tables and mind maps. Lastly, Chapter 5 consists of the research findings, conclusion, and recommendations.

5.3 Research Findings

The research findings focus on the role of climate diplomacy in addressing climate change implications on human security in the Democratic Republic of Congo. The study emphasizes the importance of framing climate change as a security issue using securitization theory to garner increased attention and resources for climate-related issues. Key themes explored include climate change-induced migration dynamics, environmental security dynamics, food security dynamics, and health security in the DRC. The study utilized a mixed methods

approach, combining qualitative interviews with key stakeholders in the DRC to gather information. While limitations such as data accessibility and quality, time constraints, and reliance on self-reported data are acknowledged, the research defines the significance of informing policymakers, improving climate diplomacy strategies, contributing to academic knowledge, raising awareness, and fostering tailored global cooperation in addressing climate-related human security challenges in the Democratic Republic of Congo.

5.4 Recommendations

Based on the research findings on climate diplomacy and human security in the DRC, the researcher recommends implementing early warning systems. There is a need to enhance climate diplomacy initiatives by investing in early warning systems for extreme weather events, such as floods and droughts, to improve preparedness and response mechanisms for the vulnerable. This initiative or rather action will enable a reduction in the catastrophic losses of both lives and livelihoods when the disaster occurs, thereby achieving fundamental human security. International discourse that is aligned with strengthening sustainable policies will lead to the integration of climate resilience considerations into national policies and development plans to address environmental security challenges and promote sustainable practices in key sectors like agriculture, energy, and infrastructure. Moreover, enhanced community engagement is crucial in ensuring the success of sustainability initiatives in the DRC. Community participation fosters ownership of projects, promotes inclusivity, and enhances resilience among vulnerable populations. By involving local stakeholders in decision-making processes and empowering communities to act against climate change, policymakers can foster sustainable development outcomes that prioritize human security. In addition, by supporting capacity building through providing financial and technical assistance to governmental institutions, NGOs, and local stakeholders, these entities can more effectively implement climate adaptation strategies and contribute to sustainable development initiatives that address both current challenges and future risks posed by a changing climate.

5.5 Conclusion

Addressing climate change and its impacts on human security in the Democratic Republic of Congo (DRC) is of paramount importance. The DRC, like many other countries, is facing the adverse effects of climate change, including extreme weather events, changing rainfall patterns, and environmental degradation. These factors not only pose significant challenges to the environment but also have profound implications for human security in the region.

Integrated approaches that consider the interconnected nature of environmental, social, and economic factors are essential for effectively addressing climate change in the DRC. By adopting holistic strategies that consider various dimensions of sustainability, policymakers can better tackle challenges such as food insecurity, displacement, and environmental degradation.

Global cooperation is also crucial in combating climate change. Given that environmental issues transcend national boundaries, collaboration among nations is necessary to implement effective policies and initiatives. By working together, countries can share knowledge, resources, and best practices to address common challenges related to climate change.

Sustainable Practices for Human Security

Promoting sustainable practices is key to safeguarding human security in the DRC. Sustainable development initiatives that prioritize environmental conservation, resource management, and community resilience can help mitigate the impacts of climate change on vulnerable populations. By promoting sustainable practices such as renewable energy adoption, ecosystem restoration, and disaster preparedness, policymakers can enhance human security outcomes in the country.

Moving forward, sustained efforts in climate diplomacy and policy implementation are essential for promoting sustainability and human security in the DRC. Continued engagement in diplomatic negotiations and agreements will be critical for advancing global efforts to combat climate change. Additionally, effective policy implementation at both national and local levels is necessary to translate commitments into tangible actions that benefit communities most affected by environmental challenges.

In conclusion, addressing climate change and its impacts on human security in the Democratic Republic of Congo requires a multifaceted approach that integrates securitization theory, climate diplomacy, sustainable practices, global cooperation, policy implementation, and community engagement. By prioritizing these strategies moving forward, policymakers can work towards safeguarding human security and promoting sustainability in the DRC.

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Appendix Interview Questions

Dear Respondents,

My name is Bahati Mnyaci a student studying Master Global Management and Politics at Luiss University in Rome, Italy. I am currently working on a thesis titled Climate Diplomacy and Human Security. Case of the DRC and this meant to try to establish the role of climate diplomacy in addressing climate change implications on human security in the DRC. Before this interview, it is essential to emphasize that the information collected through these interviews will be used solely for academic purposes, with utmost respect for confidentiality and privacy. Your insights are invaluable in advancing our understanding of the complex interactions between climate change, diplomacy, and human security in the DRC. Your participation in this research contributes to the promotion of country initiatives and the pursuit of knowledge for the betterment of society. Thank you for your willingness to engage in this dialogue, and rest assured that your responses will be handled with integrity and used responsibly for academic purposes.

1. Food Security:

- a. How do you perceive the current state of food security in the Democratic Republic of Congo?
- b. In what ways do climate-related factors impact food availability and access in the country?
- c. Could you describe any initiatives or interventions aimed at improving food security that have been implemented nationally?
- d. How effective do you think international cooperation and diplomatic efforts have been in addressing food security challenges in the Congo amidst climate change?

2. Environmental Security:

- a. What are the most pressing environmental threats faced by communities in the Democratic Republic of Congo?
- b. How do these environmental challenges intersect with issues of human security, both locally and nationally?
- c. Have there been any instances of conflict or tension related to environmental resources, such as land degradation or deforestation?
- d. From your perspective, what role should climate diplomacy play in mitigating environmental security risks and promoting sustainable resource management?

3. Health Security:

- a. How has climate change impacted public health outcomes in the Democratic Republic of Congo?
- b. Are there specific diseases or health issues that have become more prevalent or severe due to environmental changes?
- c. To what extent do you believe international cooperation and diplomatic efforts have influenced health policies and interventions related to climate change and human security?

4. Climate Change Induced Migration

- a. How has climate change contributed to patterns of migration within the Democratic Republic of Congo, particularly in regions vulnerable to environmental degradation and extreme weather events?
- b. Could you describe the government's approach to addressing climate-induced migration in the DRC, including any policies or initiatives aimed at mitigating the impacts on affected populations?
- c. To what extent does the government of the DRC engage in international cooperation and collaboration to address climate-induced migration, including partnerships with regional organizations, humanitarian agencies, and donor countries?
- d. How do international agreements and frameworks, such as the Global Compact on Refugees or regional protocols on displacement, influence the government's approach to managing climate change refugees in the DRC?

Codes

Name	Files	Referenc
Climate Change Induced Migration Dynamics	1	6
Barriers to climate migration initiatives	1	1
Climate induced natural disasters	1	2
Comprehensive Approach to climate migration resilience in DRC	1	1
International collaboration on climate induced migration	1	2
Environmental Security Dynamics	1	10
Climate Diplomacy for Environmental security	1	2
Ecological Challenges in DRC	1	2
Environmental impact on livelihoods and social dynamics	1	2
impact of environmental factors on agriculture	1	1
Resource driven conflict dynamics	1	3
Food Security Dynamics	1	11
Adressing climate food security nexus	1	1
Complexity of DRC food security	1	1
Food Price increase challenge	1	1
Number of people with food accessibility challenges	1	1
Nutrition Awareness campaigns	1	1
Precarious food security in DRC	1	2
Sustainable Agriculture promotion	1	4
Health Security Dynamics	1	7
Climate driven negative impact on health	1	5
International Support for Climate related health resilience	1	1
Long term effective climate health initiatives	1	1