

## Leveraging Gender Inclusion and Partnerships in Reducing the Impacts of Climate Change in Northern Nigeria

By

Oluwasegun Ogunsakin<sup>1</sup>

### ABSTRACT

Millions of people are in danger of climatic and natural disasters because Nigeria, the most populous nation in Africa, is among the top ten most vulnerable to climate change. The impacts of climate change have resulted in a food crisis, the conflict between herders and farmers, violence against women and girls, and other negative issues. This study examines leveraging gender inclusion and partnerships to reduce the impacts of climate change in Northern Nigeria. Literature and reports indicate that the Northern region of Nigeria has the most vulnerabilities to climate change as the region experiences high levels of desertification, heat waves, and poor and extreme rainfalls. Meanwhile, building a common gender inclusion will accelerate the reduction of the impacts of climate change in the region. This study adopted the qualitative research method whereby data are sourced from the consultation of literature, articles, government reports, and the Internet. Findings from the study indicated that the national government policy will be successfully implemented when there is gender inclusion and partnership. However, challenges have impeded the inclusion of women and localization in implementing climate change policy in Nigeria. The study concludes and recommends that national policy on adaptation programming that is targeted at being gender-responsive, inclusive, and aware of the connections with other development agendas should be incorporated in reducing the impacts of climate change in Northern Nigeria.

**Keywords:** Climate change, Gender inclusion, Partnership, Policy, Northern Nigeria

**Themes:** Gender, Intersectionality & Climate Change Governance

**Article history:**

**Copyright License:**

**DOI:**



Journal homepage: [www.njssh.nust.edu.pk](http://www.njssh.nust.edu.pk)

## 1. INTRODUCTION

There are connections between how many societal sectors are affected by climate change. Food production and human health can suffer during a drought. Flooding has the potential to destroy infrastructure and cause diseases to spread. Problems with human health can reduce labor productivity, affect food supply, and raise mortality rates. The effects of climate change are evident in every facet of our global community. However, the

<sup>1</sup>Department of Peace and Security Studies Faculty of Multi-Disciplinary Studies  
Ekiti State University, Ado-Ekiti, Nigeria Email Address: [segunogunsakin4r@gmail.com](mailto:segunogunsakin4r@gmail.com)

<sup>2</sup> Oluwaseun Abiodun Ilemikun<sup>2</sup> Department of Peace and Security Studies  
Faculty of Multi-Disciplinary Studies  
Ekiti State University, Ado-Ekiti, Nigeria [ilemsathol19899@gmail.com](mailto:ilemsathol19899@gmail.com)

impact of climate change is unique throughout the nation and the world; in fact, it might vary even amongst neighborhoods or people in the same town. Underserved communities, which frequently have the highest exposure to dangers and the fewest means to respond, might become increasingly vulnerable due to long-standing socioeconomic disparities.

Increases in temperature, erratic rainfall, rising sea levels and flooding, drought and desertification, land degradation, an increase in the frequency of extreme weather events, an impact on freshwater supplies, and a decline in biodiversity are all signs of Nigeria's changing climate (Haider 2019). In many parts of Nigeria, especially in the northern region, the length and intensity of the rains have risen, resulting in significant runoff and flooding. The variation in rainfall is expected to keep growing. Rising sea levels are predicted to worsen flooding and the submersion of coastal lands and increase precipitation in southern regions (Tajudeen et al. 2022). Due to a decrease in rainfall and an increase in temperature, droughts have also become commonplace in Nigeria and are predicted to persist in the country's north. Many lakes nationwide, including Lake Chad, are drying up and may eventually vanish (Ross 2018).

Since they make up most of the world's impoverished, these shifts primarily impact women (Boko et al., 2007; Toulmin, 2009; Women Watch 2009). Women are more vulnerable to climate risk due to their increased reliance on natural resources and livelihoods that are typically more sensitive to changes in the climate, in addition to the fact that they make up the majority of the world's impoverished and lack the resources to deal with the negative effects of climate change (Habtezion and Wanjiru 2012). According to Durrani, Bwala, and Ibrahim (2024), Nigeria has extremely low levels of preparation and adaptation, making it not just one of the nations most susceptible to the effects of climate change. Local actors have emphasized that conflict and climate change have a major impact on the nation's development. The fishing, agricultural, and herding industries suffered from Lake Chad's retreat, which resulted in the loss of 90% of the lake's surface area (Jedwab, Haslop, Zarate and Castelan, 2023). Reduced agricultural land productivity has been a major factor in Nigeria's shifting conflict dynamics since it has led to lower real incomes and more intense competition for resources, forcing households to relocate.

The impact of climate change on northern Nigeria must receive proper attention. The most vulnerable areas are the Northeast and the Northwest. The loss of wetlands and the rapid decline in surface water, plant, and animal resources on land have resulted from the combination of increasing temperatures and less precipitation (Abdulkadir et al., 2017; Akande et al., 2017; Ebele and Emodi, 2016; Federal Ministry of Environment 2014).

The Nigerian federal government has reaffirmed its commitment to implementing policies that will address the effects of climate change (Egboboh 2024). In a report by Egboboh (2024), Abubakar Bagudu, the Minister of Budget and Economic Planning, indicated that the Nigerian government has started carrying out several initiatives, such as establishing the National Council on Climate Change, passing the Climate Change Act 2021 into law, and budgeting N130 billion for the energy transition plan's implementation in 2024.

Meanwhile, gender inclusion and partnership remain focal in reducing the impacts of climate change in northern Nigeria. One requirement for achieving the UN's Sustainable Development Goals is gender inclusion and equality. To tackle the effects of climate change, eradicate poverty, raise living standards and health outcomes, and defend women's fundamental human rights, gender equality is an essential development approach. More efforts are made to reduce poverty, raise living standards, promote good governance, create wealth, and create jobs when women are empowered, given a voice in policymaking and execution, and ensured to participate in economic activity and income generating. According to Policy Vault (2021), following a protracted research and consultation process, including numerous government and public sector development stakeholders and partners, the Nigerian government unveiled the National Gender Policy in 2006. The leveraging opportunities will focus on addressing the climate change issue in northern Nigeria thanks to a long history of partnering with local and national NGOs, community-based organizations, international NGOs, government agencies, research institutions, private sector companies, and funding entities. To make sure that the framework accurately reflects the needs of policy implementation, there is a need to develop through many internal and external consultations utilizing a range of inclusive methodologies.

Regrettably, Nigeria has seen a complicated web of hostilities that has left its people facing formidable obstacles. The nation's social fabric has been ripped apart by internal disputes that have resulted in extensive community displacement. These conflicts have been made worse by variables like climate change, economic inequities, ethnic differences, and religious tensions. A serious humanitarian crisis has resulted from the hostilities in the northeastern regions of Borno, Yobe, and Adamawa, forcing millions of people to flee their homes. People have suffered greatly as a result of the disruption of livelihoods, uprooting of communities, and tearing apart of families. The fact that these displaced communities frequently lack access to clean water, food, healthcare, and education highlights how urgent it is to confront this catastrophe on all fronts. Therefore, this study will examine leveraging gender inclusion and partnerships to reduce the impacts of climate change in northern Nigeria. The study examines the following research questions:

- I. What are the nexus of common gender inclusion and partnership for the reduction of the impacts of climate change in northern Nigeria?
- II. What are the implications of gender inclusion and partnership on climate change reduction in northern Nigeria?
- III. What challenges impede the inclusion of women and localization in implementing climate change policy and adaptation in northern Nigeria? and
- IV. What are the best practices or suggestions in accelerating gender inclusion and partnership on climate change reduction in northern Nigeria?

All the above research questions will lay out the proper channel for understanding and bridging the empirical gaps in the study.

## 2. CONCEPTUAL CLARIFICATION

### 2.1 Gender Inclusion and Partnership:

Beyond diversity, gender inclusiveness is essential. Gender inclusion fosters an atmosphere where individuals of all genders are encouraged to share their special abilities and viewpoints and feel appreciated, respected, and empowered (Naseer and Choden 2023). Creating an atmosphere where individuals of all genders feel appreciated and respected is the goal of gender inclusion. It is about acknowledging and appreciating the variety of gender identities and manifestations beyond closing the gender pay gap and attaining gender equality. A nation that embraces gender inclusion gets access to many varied perspectives, ideas, and experiences that stimulate innovation, improve decision-making, and ultimately strengthen its competitive edge. Also, society prioritizing gender inclusion and diversity typically has higher levels of innovation, better decision-making, and longer-term profitability. Pytlik (2023) reported that human rights are intrinsically linked to gender inclusion. It entails accepting and honoring each person's gender identification and ensuring they all have equal rights and protection from discrimination. The idea of gender inclusion goes beyond simple equality. It is the idea that gender stereotypes do not define society's responsibilities and expectations and that all opportunities, services, and businesses are accessible to all individuals. According to the World Economic Forum (2024), by enhancing gender parity and equipping women for upcoming economic and development obstacles, inclusion makes society flexible and competitive globally.

Partnership in promoting an inclusive society involves a collaboration effort. While establishing inclusive partnerships, an equity leader will always acknowledge and publicly recognize communities and cultures, and their ideas and solutions will be leveraged for shared benefit. Inclusive partnerships (IP) value and prioritize the diverse voices of women, men, boys and girls, and communities when making decisions that affect their lived experiences. This relationship requires the people and institutions with the power to account for past inequities and create conditions for developing and co-designing an equitable future. According to Women Deliver (2018), the key to advancing gender equality and addressing common difficulties is forming partnerships between individuals and organizations with varied resources, experiences, skills, and viewpoints. We must exchange best practices and lessons learned to advance gender equality. Exchanging experiences and showcasing the viewpoints of advocates at the international, regional, and local levels can lead to great success.

### 2.2. Climate Change

According to Turrentine, Jeff, and Denchak (2021), a substantial shift in average weather conditions over several decades or longer, such as a noticeable increase in temperature, precipitation, or dryness, is called climate change. What sets climate change

apart from natural weather variability is the longer-term tendency. Since the Industrial Revolution, human consumption of fossil fuels has been the main factor contributing to the rise in the average world temperature (Lynas, Houlton, and Perry 2021). Using fossil fuels, deforestation, and certain industrial and agricultural processes increase greenhouse gas emissions (Ritchie 2020). The lower atmosphere warms due to these gases absorbing part of the heat that the Earth emits after warming from sunlight. Carbon dioxide is the main greenhouse gas causing global warming, which has increased by almost 50% and is now at levels not seen in millions of years (Arias et al., 2021). In northern Nigeria, women are more likely to experience heat waves and warm spells. This is because women are more prone to labor through the night and suffer from heat stress, which is worsened by dry spells and heat waves (Foster et al., 2020). While males frequently slept in cool spots (such as under trees when the temperature increases) while waiting for their food to be prepared, most women reported experiencing abrupt dizziness after home duties in hot weather (Ayanlade et al., 2023). Although the northern region's crops are observed to be impacted by heat waves and dry spells, research also revealed that animals, particularly birds, were disproportionately harmed by heat waves (Damma and Alhassan 2020).

In Nigeria and worldwide, people are at risk from climate change due to greater flooding, intense heat waves, shortages of food and water, increased disease, and financial losses. Conflict and human migration may also follow (Cattaneo et al. 2019). According to the World Health Organization (WHO), climate change poses the biggest risk to world health in the twenty-first century (Pachauri and Meyer, 2014; World Health Organisation 2015). Inaction to slow global warming will expose societies and ecosystems to increasingly serious hazards (Pörtner et al., 2022, p. 9). Although there are already certain limits to adaptation, climate change hazards can be somewhat mitigated by actions like flood control measures or drought-resistant crops (Pörtner et al., 2022, 21–26; IPCC 2023, 8-9). Although they contribute very little to global emissions, poorer populations are most vulnerable to climate change and have the least capacity for adaptation (Tietjen, 2022).

### **3. THEORETICAL FRAMEWORK: CLIMATE JUSTICE THEORY**

Climate Justice Theory (CJT) informs this paper as largely espoused by Mary Robinson and Naomi Klein. The perspective was borrowed from environmental justice, and there was much advocacy from organizations, writers, researchers, and scholars on the impact of climate change distributive justice. This theoretical lens is predicated on the argument that climate change should be viewed beyond environmental issues to encapsulate human rights and social justice. To this end, vulnerable and marginalized groups who contribute less but bear enormous pains of climate change should be incorporated into interventionists' policies and programmes (Faustos and Tuziana, 2023). The theory assumes that the impact of climate change is discriminatorily tense on vulnerable, poor population communities, low-income countries, women, indigenous and ethnic marginalized groups whose contribution to greenhouse emissions is minimal but suffer comparatively. Another tenet of CJT is that gagged, vulnerable, and special needs

groups should be involved in decision-making processes that affect their predicament. In other words, inputs, demands, and efforts of most affected persons in climate change areas and emergencies must be included in intervention efforts and policies.

CTJ also advocated for a global approach to the problem of climate change, arguing that Western countries should take responsibility for their historical atrocities of environmental abuse by providing adaptation and mitigation support systems to countries at the receiving ends through funds, knowledge, and technological transfer. The developed nations are placed in remedying efforts owing to their long history of transnational industrialization and commercialization, which has depleted the environment. The theorists finally posited that climate change issue should not be treated in isolation from other pertinent societal challenges, including gender equity, minority rights, socio-political and economic justice, inequality as well as human rights (Fausto and Tuziana, 2023; Melanie and Hajo, 2016).

This perspective is relevant as it is premised on the argument that addressing the impact of climate change in Nigeria requires giving rapt attention to gender specifics and other accompanying issues brought mostly by environmental-related crises like floods, droughts, desertification, deforestation, famine, etc., in the country. Climate Justice Theory advocates for vulnerable groups (including women) to be incorporated in all efforts seeking to address the impact of climate on not only Nigerians but also elsewhere.

#### **4. METHODOLOGY**

The study adopted the qualitative research method. Since this study aims to comprehend and analyze discourse, experiences, and social realities on gender inclusion and partnerships in reducing the impacts of climate change in northern Nigeria, qualitative research is a crucial methodology in this domain. In order to collect and analyze non-numerical data—such as words, images, and behaviors—this kind of research uses a variety of qualitative techniques. The goal is to produce comprehensive and contextualized insights into the various research themes in the study.

The desk research technique is employed to derive data from secondary sources. The secondary sources include academic articles, papers, government reports, newspapers, and the Internet. All data are engaged in content analysis to provide better insights and harmonize the literature to provide a better opinion of the study. Qualitative content analysis is among the many qualitative techniques currently available for evaluating data and deciphering its significance (Schreier 2012). It serves as a methodical, objective way to describe and measure events in research (Downe-Wamboldt 1992; Schreier 2012). Meanwhile, in this qualitative research, credibility, transferability, dependability, and confirmability are all vital to establishing trustworthiness from the various secondary sources (Hecker and Kalpokas 2024). Furthermore, techniques, including peer debriefing, sentence checking, triangulation, and reflexivity, assist the researcher in the validity and reliability of all literature included in the study.

## **5. FINDINGS AND DISCUSSIONS**

### **5.1 Building a common gender inclusion and partnership for the reduction of the impacts of climate change in northern Nigeria**

The effects of climate change are evident and pervasive throughout northern Nigeria, as they are in many other parts of the world. "Any change in climate over time, whether due to natural variability or as a result of human activity," is how the Intergovernmental Panel on Climate Change (IPCC) defines it (Parry et al., 2007). Climate change is acknowledged globally as a significant phenomenon that profoundly affects human development and socio-ecological, biophysical, and human systems.

For many decades, the northern region of Nigeria has been recognized as an agrarian region that produces enough food to maintain the area and supply Lake Chad and other West African states (Sambo & Sule 2023). Climate change was the primary cause of the drastic reversal of this productive trend, which involved numerous other aspects as well. For instance, farmers are forced to move southward due to the lack of rainfall in the north, where it is relatively higher. In the south, excessive rainfall causes floods that force residents of many settlements to relocate. Due to these conditions, farmers and herders struggle to find enough land, which intensifies hostilities and leads to the exodus of those who have lost their houses due to the unrest.

The number of people killed by farmer-herder conflict has surpassed even the casualties from the Boko Haram insurgency (Lorimer 2021). Numerous thousands of individuals have either perished or had to escape their homes. These conflicts have also led to an increase in ethnic, regional, and religious divisions in Nigeria. In addition to these problems, it is anticipated that the country's north will see increasingly regular droughts and desertification, and the rest will see an increase in flooding. These developments will significantly impact the agricultural output—which is currently insufficient to meet the nation's food demands (Durrani et al., 2024). This catastrophe has undermined national unity and stability.

In order to ensure that everyone has access to the resources they need to adapt to and mitigate climate change, women must be involved as stakeholders and planners in Nigeria's climate change efforts. Women's contributions to enhancing catastrophe resilience and their pivotal role in promoting low-emission development are two instances of this kind of involvement.

In building gender inclusion and partnerships on curbing the impacts of climate change, these aims are included:

- i. develops climate change policy;
- ii. Work with organisations to lower carbon emissions; and
- iii. to assist nature and people in adjusting to a changing climate.

Establishing early-warning systems and improving readiness for extreme weather disasters are crucial for communities. Efficiency and ownership were increased by directly supporting disaster response (using localized methodologies) and improving system

capacity through grants for leadership development and training.

Progress has been uneven, and some of the gains are becoming more precarious as water stress intensifies due to climate change in the Lake Chad region in the northeast, unsustainable consumption and increased agricultural activity and land degradation in the south-east, south-south, and south-west, and thousands of Nigerian women are gaining access to basic water and sanitation services nationwide.

In Nigeria, women handle most food preparation, which uses energy from the home. Women all around the nation use cook stoves that run mostly on coal and solid fuels like biomass, which includes wood, charcoal, leftover agricultural waste, and animal dung (Climate and Sustainable Development Network CSDevNet and Jeyiol 2024). Women are essential to the upkeep of their families and communities and implementing adaptation strategies to lessen the adverse effects of climate change. Moreover, in this sense, they need everyone's assistance and support. In building a common gender inclusion and partnership for the reduction of the impacts of climate change in northern Nigeria, the following are the avenues:

The gender strategy heavily relies on gender-responsive and transformative techniques, which can assist us in creating a more inclusive and long-lasting solution. According to Mohammed (2023), gender-responsive climate change and peacebuilding address the effects of inequality and conflict. Gender transformative approaches aim to identify and shift some of the underlying - and interconnected - causes driving inequality and conflict in the first place. Because gender inequality rarely exists in isolation, we also look to analyze how gender interacts with other forms of inequality related to age, sexual orientation, race, and other factors.

To build a better gender partnership, all Nigerian ministries, departments, Agencies, and commercial entities should adopt a purposeful climate change policy (Amobi and Onyishi 2015). A national policy that allows policies and programs to be integrated and coordinated so that the impact of climate change is curbed. The Action Plan's execution will be overseen by a participatory research project that involves the public and commercial sectors, development partners, academic and research institutions, CSOs (especially those that support women and youth), and government officials at all levels.

Women's distinct knowledge and abilities can augment the effectiveness and resilience of endeavors to address climate change. Suppose policies considering variations in gender susceptibility and women's unique roles are implemented. In that case, advances in gender equality and social inclusion can bolster efforts to combat climate change (Ergas et al., 2021). As the world moves toward a new climate regime, governments must acknowledge the connection between gender inclusion and partnership and climate change and involve women in policy formulation.

Gender mainstreaming could be crucial in ensuring that a gender equality perspective is used when developing climate change adaptation and mitigation policies. Gender mainstreaming should be considered a crucial component of adaptation to guarantee success and sustainability, in addition to being a factor that needs to be addressed in



activities to reduce climate risks (Moungar 2019). In addition to being differentially impacted by climate change compared to men, women contribute distinctively to the fight against it. Women are essential to the upkeep of their families and communities and the implementation of adaptation strategies to lessen the adverse effects of climate change. To accomplish this, women must be represented in decision-making at all levels so that they may put forward creative and long-lasting answers to the problems that occur with the environment.

Therefore, all groups' full and meaningful engagement becomes vital in decision-making and implementation towards developing resilient communities in the face of climate change. The National Action Plan on Gender and Climate Change focuses on practical methods for incorporating gender into the execution of national climate change initiatives, such as the Paris Agreement and the Nationally Determined Contributions (NDC), in keeping with Nigeria's goal to empower and address the needs of women in the context of climate change (Federal Ministry of Environment, Department of Climate 2020). The Action Plan outlines benchmarks for ensuring that the vital and significant roles played by women, young people, and other vulnerable groups in developing a climate-resilient Nigeria are considered when pertinent national policies and strategies are implemented.

## **5.2 Implications of gender inclusion and partnership on climate change reduction in northern Nigeria**

The environment and economy of Nigeria are affected by climate change. Records of farmers and herders engaging in violent land battles and other events like flooding and extreme heat make this clear (Federal Ministry of Environment, Department of Climate Change 2020). These effects are consistent across the nation's many regions and fluctuate from year to year. Landslides, erosion, desertification, drought, and heat waves are just a few of Nigeria's severe environmental security issues due to climate change. These issues strain the country's infrastructure and natural resources (forests, water, and land). Communities that depend on natural resources for survival, such as farmers and impoverished households and families, are impacted in turn. Different demographic groups in the nation are affected by climate change risk differently.

According to the Federal Ministry of Environment, Department of Climate Change (2021), Nigeria has enacted several policies, strategies, and action plans to tackle climate change and incorporate environmental and climate change management into the nation's socioeconomic development initiatives. The three primary development plans—the Economic Recovery and Growth Plan (ERGP) 2017–2020, The Transformation Agenda (2011–2020), and Vision 20:2020—set strategies and priorities for pursuing climate-resilient and climate-compatible activities. The National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN) (2011), the National Renewable Energy and Energy Efficiency Policy (NREEEP) (2015), and the National Gas Policy (2017), National Policies on the Environment (2016), Nigeria Agricultural Policy 2001, Agricultural Promotion Policy (APP) 2016–2020, National Climate Change Policy and Respond Strategy (NCCPRS) 2012, National Biodiversity Strategy and Action Plan

(NBSAP) 2016, National Forest Policy (NFP) 2010, National Forestry Action Plan (NFAP) 1996, viii. National Policy on Environmental (2016), Nigeria Industrial Revolution Plan (2014), National Gender Policy (2006), REDD+ Strategy, 2019, etc., are additional policies and strategies that have an impact on the climate change challenge both directly and indirectly.

Women on the Front Lines of Climate Change demonstrates that acknowledging the importance of women smallholder farmers is essential for effective climate change adaptation. It tells the stories of millions of women who, thanks to gender-sensitive adaptation, can now provide greater assistance for their families and communities worldwide.

According to the International Fund for Agricultural Development (2014), experience demonstrates that women are essential to enhancing the quality of life for their families and communities and are essential to efforts aimed at adaptation. The Climate Change Adaptation and Agribusiness Support Programme in Nigeria, for instance, has a strong emphasis on women and offers financing and seed money for ventures aimed at generating revenue. It also supports women in decision-making positions. The action outlines precise goals, a schedule for action, indicators, accountable institutions, and results about implementing the connection between gender inclusion and climate change in its priority sectors.

Technology has grown more important in coping with and reducing climate change since the United Nations Framework Convention on Climate Change (UNFCCC) placed clean technologies at the center of international responses to climate change (Lorena 2009). In parallel, various UN frameworks and processes have begun to address technology and climate change. Additionally, as an alternative to more costly emission reductions in their own countries, industrialized nations can invest in projects that lower emissions in developing nations thanks to the Clean Development Mechanism (CDM), which was created due to the Kyoto Protocol (UN Women Watch 2009). The issue is that, as of right now, gender equality receives very little attention, and the extent to which men and women are affected differently by climate change has gone unnoticed (Lorena 2009). It is crucial to emphasize that equal participation by men and women in all facets of climate change initiatives, including technology, pays off. This is particularly true for technologies targeted at the jobs that women perform most of the time. Technologies for adaptation and mitigation must reach the poor and vulnerable, who are most in need if they are to be effective in Northern Nigeria. Therefore, focused initiatives must first ensure that it is acknowledged that women's situations may differ from men's, then ensure that technologies are created with their circumstances in mind, and finally ensure that women have complete access to knowledge, information, and adaptation-related technologies.

According to a report from Deininger and Canagarajah (2023), it is common for women to be disproportionately responsible for obtaining fuel, water, and food—tasks that are made more difficult in environments where environmental deterioration occurs. In low- and lower-middle-income nations, agriculture is the most significant industry for women

to work in. During the dry season in the northern region, women put in even more effort to provide for their families. Girls feel more pressure, so they respond by quitting school to assist their mothers in carrying heavier loads. So, building a common gender inclusion and partnership will create opportunities for women and young girls to be relieved of the implications of climate change on their livelihood opportunities.

### **5.3 Challenges impeding the inclusion of women and localization in implementing climate change policy and adaptation in northern Nigeria**

In order to address the gender aspects of climate change, Nigeria must overcome several obstacles (Satterthwaite et al., 2020), one of which is a deficiency of national expertise regarding gender inclusion and climate change and its consequences for national development (Rieckmann 2018). According to recent research, the social ramifications of climate change vulnerabilities are gendered (Rao et al., 2019). Different climatic, political, and socioeconomic situations can be found in the northern region of Nigeria. The effects of persistent exposure to extreme weather events are felt in social interactions, ecological services, and agricultural productivity because of the varied topography, biodiversity, and variations in precipitation and microclimate (Adeola, Evans and Ngare 2024).

Food security, water availability, land usage, assets, forestry resources, women's migration, policy, and climate awareness are all impacted by climate change in northern Nigeria. Women bear a disproportionate part of the risks and expenses associated with climate change, making up a major portion of the world's impoverished population (UNFCCC, 2018).

Due to a lack of financial support, food insecurity is more common in northern Nigerian states households headed by women than by men. Communities that rely on natural resources for their livelihoods are impacted by climate change, and women are frequently in charge of gathering firewood and water. Women have to go great distances to get water in areas where drought is a result of climate change. Save the Children International states that gender inequality can perpetuate harmful practices like child marriage, limiting girls' opportunities for education, development, and empowerment (Azubuike 2023). Girls and women are disproportionately affected by climate change impacts because they often shoulder the burden of caring for others and household duties in northern Nigeria. Girls are being violated across the nation as a result of rising rates of poverty and climate change, especially in the north, where child marriage is still a major problem.

Scholars and decision-makers concur that there is now a gender disparity in climate change. In addition to discriminatory laws and regulations that limit women's rights and empowerment, the disparities are caused by social, economic, and environmental injustices (Dawit et al., 2022; McOmer, 2020; Gonda 2019). Customary family regulations on marriage, which allow girls to be married off as early as 15 (Goemans et al., 2022), prevent women from participating in policy and decision-making in northern Nigeria (Cattaneo et al., 2020). The nexus between gender vulnerability, discrimination, and climate change in Nigeria has not been adequately addressed by policies about employment, political

engagement, and resource access (Bouchama et al., 2018).

According to a Pearson et al. (2017) study, gender stereotypes influence how people view and react to climate change. This study emphasizes the connection between gender and climate change. Abegunde (2014) noted that women are viewed as inferior to men in most parts of Nigeria, particularly in Northern Nigeria. This is also the case in other fields, such as politics, the music business, and education. Deeply rooted gender norms cast doubt on women's suitability for public leadership in the North and the South. Based on religious and cultural standards, these prejudices cause women in Northern Nigeria to doubt their place in public life.

Nigerian women make disproportionate contributions to society yet experience severe social injustices (Baskin 2022). Women perform many "productive and reproductive" responsibilities by caring for the home, working in trade or commerce, and cultivating the land to support their families (Makama 2013). The extent to which women participate in official and informal processes and institutions outside the home, such as community government, where decisions are made about how to use resources generated by both men and women, still needs to be bigger. Despite a rise in women's involvement in Nigerian politics throughout time, women still have "a pronounced level of underrepresentation" in the country's political system when compared to men.

"Only 7 out of 109 senators and 22 of the 360 members of the House of Representatives are women at this time" (Agbalajobi 2021). Regardless of educational attainment, all Nigerian women have obstacles to pursuing success and holding powerful positions. According to the study by Development Research and Projects Centre (dRPC) (2023), it is a common misconception that women cannot hold leadership positions in government. However, there are systemic and cultural prejudices that affect women, such as discrimination by male supervisors, harassment, and uneven expectations in Nigeria. Despite their equal performance, these biases lead to harsher judgments of women and prevent them from obtaining leadership roles. Female appointees expressed irritation that they are held to greater standards by society due to their gender, which they feel keeps them from progressing in their positions.

In circumstances of poverty, vulnerable groups—women, children, farmers, people with disabilities, the elderly, and young people in particular—often suffer increased dangers and heavier loads as a result of the effects of climate change. Their restricted involvement in labor markets and decision-making procedures exacerbates inequality. It frequently keeps them from completely participating in planning, policy-making, implementation, monitoring, and assessment connected to climate change. Based on the Intergovernmental Panel on Climate Change (IPCC) (2007) assessment report confirmed that the effects of climate change would differ based on gender, age, and class.

## **6. CONCLUSION**

This study has examined leveraging gender inclusion and partnerships to reduce the

impacts of climate change in northern Nigeria. The study pointed out that a "climate-neglect" approach to women, girls, boys, and men programming, or a gender-blind approach to addressing climate-related implication risks, can worsen the vulnerabilities of the groups most affected by the effects of climate change, escalating already-existing inequalities and possibly escalating environmental and security threats. However, strengthening the inclusion of all genders and partnerships can reduce the impacts of climate change in northern Nigeria. This is essential for women's empowerment because it gives them the authority to make decisions, enabling them to fully engage in and build a better socioeconomic opportunity for all. Those who are most directly affected by climate change must contribute their expertise and experience to developing effective adaptation methods in communities in northern Nigeria. Women frequently live on the front lines of climate change as the main sources of electricity, water, and food in rural regions. Because of this, they offer unique expertise and experience that can help develop effective adaptation measures. However, women continue to be disproportionately underrepresented in planning and decision-making processes, particularly at local levels, which can worsen already-existing patterns of marginalization. This is true despite growing awareness and recognition that women and local organizations are significant actors and influencers in climate change policy in Nigeria.

## **6.1 Recommendations**

The following recommendations are made in tackling the various challenges facing leveraging gender inclusion and partnerships in reducing the impacts of climate change in northern Nigeria:

i. By promoting education and delaying marriage, girls' rights investments enable them to realize their full potential and become significant leaders and members of their communities.

Women and girls who are empowered are essential in ending the poverty cycle and pushing for social change.

ii. The Nigerian government should prioritize implementing efficient mechanisms and initiatives to mitigate the effects of climate change, focusing on reducing its impact on women, girls, and children.

iii. Financial tools, as well as chances for women to pursue leadership and education, should be promoted in order to get past these barriers.

iv. Implementing gender-sensitive legislative frameworks and climate information services is also necessary. Several variables, including age, gender, and information access, affect how widely adopted climate change adaptations and mitigations are.

v. Women ought to participate actively in the decision-making process and be afforded equal opportunity in the creation of public policy, in governance, and the use of land across the 19 states in the northern region of Nigeria.

vi. Strong political will in engaging all genders and partners in implementing an action plan on

vii. Education for women and girls is essential because it promotes leadership and

participation in climate change, improves life skills, and increases a nation's ability to withstand climate-related disasters. To combat food insecurity, gender-responsive technologies like climate-smart agriculture should be encouraged.

viii. A more just and equal society that recognizes the contributions of all of its members, regardless of gender, can be achieved by advocating for universal education among the northern states in Nigeria.

ix. Encourage strategies to increase the ability of local communities to effectively plan for and manage climate change, with a particular emphasis on women, youth, and vulnerable communities in northern Nigeria.

The study identified that policy in building a common approach needs to be adopted in leveraging gender inclusion and partnership in reducing the impacts of climate change in northern Nigeria, and these policy implications include the following:

1. The federal and state governments should give women, climate change, and security approaches better attention because these gaps have negatively impacted women in northern Nigeria.

2. Strong economic and livelihood on smart agriculture should be implemented across the 19 northern states in Nigeria. Many farmers and women have experienced the negative impact of climate change on their farming programming.

3. A better community approach to relating with the nongovernment should be placed for all in creating strong partnerships.

4. Gender openness in legislature and policy should be reviewed to allow more women in climate change mitigation implementation in Nigeria. This indication shows that women are needed in partnership with minority groups across the country who are affected by climate change in Nigeria.

### **6.3. Future research prospects**

The study looks forward to engaging in a more dynamic approach to the following future research prospects:

1. Climate finance and building a funding need in implementing policy to curb the impacts of the crisis.

2. Inter-government collaboration on gender inclusion to fill the gaps in climate change mitigation.

3. Attitudinal needs to champion the development of women in climate change policy for economic empowerment in the least developing countries in the world.

## **REFERENCES**

Abdulkadir, A., Lawal, Maryam A., and Muhammad, T.I. 2018. Climate change and its implications on human existence in Nigeria: a review. *Bayero Journal of Pure and Applied Sciences*, 10(2), 152-158.

- Abegunde, Babalola. 2014. Gender Inequality: Nigerian and International Perspectives. *British Journal of Arts and Social Sciences*. 17: 168
- Adeola, Ogechi., Evans, Olaniyi., and Ngare, Innocent. 2024. *Gender and Climate Issues in Africa*. In: *Gender Equality, Climate Action, and Technological Innovation for Sustainable Development in Africa*. Sustainable Development Goals Series. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-031-40124-4\\_2](https://doi.org/10.1007/978-3-031-40124-4_2)
- Agbalajobi, Damilola. 2021, May 3. *Nigeria Has Few Women in Politics: Here's Why, and What to Do about It*. The Conversation. <https://theconversation.com/nigeria-has-few-women-in-politics-heres-why-and-what-to-do-about-it-159578>
- Akande, Adeoluwa., Costa, Ana Cristina., Mateu, Jorge., and Henriques, Roberto. 2017. Geospatial Analysis of Extreme Weather Events in Nigeria (1985–2015) Using Self-Organizing Maps. *Advances in Meteorology*, (2), 1-11. <https://doi.org/10.1155/2017/8576150>
- Amobi, Dennis., and Onyishi, Tony. 2015. Governance and climate change in Nigeria: a public policy perspective. *Journal of Policy and Development Studies*, 9(2), 199-210
- Arias, Paola A., Bellouin, Nicolas., Coppola, Erika., Jones, Richard G.; et al. 2021. *Technical Summary (PDF)*. IPCC AR6 WG1 2021.
- Ayanlade, Ayansina., Oluwatimilehin, Isaac A., Ayanlade, Oluwatoyin S., Ayanlade, Adeyeye, Olajumoke., & Usman, Sa'adatu Abatemi. 2023. Gendered vulnerabilities to climate change and farmers' adaptation responses in Kwara and Nassarawa States, Nigeria. *Humanit Social Sciences Communication*, 10, 911. <https://doi.org/10.1057/s41599-023-02380-9>
- Azubuike, Chima. 2023, November 15. *NGO laments negative effect of climate change over North girls*. <https://punchng.com/ngo-laments-negative-effect-of-climate-change-over-north-girls/>
- Baskin, Caste. 2022. Empowering Women's Land Rights as a Climate Change Mitigation Strategy in Nigeria. *Northwestern Journal of Human Rights*, 20(3), 217-238
- Boko, M., I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo and P. Yanda. 2007. "Africa. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change," M.L. Parry, O.F.
- Cattaneo, Cristina., Beine, Michel., Fröhlich, Christiane J., Kniveton, Dominic., et al. 2019. Human Migration in the Era of Climate Change. *Review of Environmental Economics and Policy*, 13(2), 189–206.
- Climate and Sustainable Development Network CSDevNet and Jeyiol, Elizabeth. 2024. *Gender mainstreaming in climate change mitigation and adaptation: A Call for A Gender-Enabled Nigeria*. <https://csdevnet.org/gender-mainstreaming-in-climate-change-mitigation-and-adaptation-a-call-for-a-gender-enabled-nigeria/>
- Damma, Mohammed Kamel, and Ishawu Alhassan. 2020. Survival Strategies of Women

Smallholder Farmers in Response to the Effects of Climate Change: A Case Study of the Kpachelo Community of Savelugu Municipality. *ADRRI Journal (Multidisciplinary)* 29.1 (6):1–29

- Deininger, Franziska and Canagarajah, Sudharshan. 2023, July 7. *Gender-smart climate finance is critical for progress, results, and impact*. <https://blogs.worldbank.org/en/climatechange/gender-smart-climate-finance-critical-progress-results-and-impact>
- Development Research and Projects Centre (dRPC). 2023, October 30. *Gender norms, media narratives and women in appointive positions in Nigeria*. Briefing Paper: ALIGN, development Research and Projects Centre
- Downe-Wamboldt, B. 1992. Content analysis: Method, applications and issues. *Health Care for Women International*, 13, 313-321.
- Durrani, Zahra Khan., Bwala Meshach Dauda., and Ibrahim, Sani Muhammed. 2024. When climate change and conflict collide: the need for localisation amid Nigeria's protracted crises. *Humanitarian Practice Network*, Iss. 84, Art. 5.
- Dawit, M., Dinka, M. O., & Halefom, A. 2022. Farmers' perception of climate change and gender sensitive perspective for optimised irrigation in a compound surface-ground water system. *Journal of Water and Land Development*, 52, 265–271.
- Ebele, N. E. and Emodi, N. V. 2016. Climate change and its impact in Nigerian economy. *Journal of Scientific Research & Reports*, 10(6), 1-13. <http://www.journaljsrr.com/index.php/JSRR/article/view/21917/40737>
- Egboboh, Cynthia. 2024, May 7. *Nigerian Government reiterates commitment to curb impact of climate change*. <https://businessday.ng/news/article/nigerian-government-reiterates-commitment-to-curb-impact-of-climate-change/>
- Ergas, C., Greiner, P. T., McGee, J. A., & Clement, M.T. 2021. Does gender climate influence climate change? The multidimensionality of gender equality and its countervailing effects on the carbon intensity of well-being. *Sustainability*, 13(7), 3956.
- Fausto and Tuziana, (2023). *Global Climate Justice: Theory and Practice*. E-International Relations Publishing, Bristol, England
- Federal Ministry of Environment. 2014. *United Nations Climate Change Nigeria*. National Communication (NC). NC 2. 2014. <https://unfccc.int/sites/default/files/resource/nganc2.pdf>
- Federal Ministry of Environment, Department of Climate Change, 2021. *National climate change policy for Nigeria 2021-2030*. [https://climatechange.gov.ng/wp-content/uploads/2021/08/NCCP\\_NIGERIA\\_REVISIED\\_2-JUNE-2021.pdf](https://climatechange.gov.ng/wp-content/uploads/2021/08/NCCP_NIGERIA_REVISIED_2-JUNE-2021.pdf)
- Federal Ministry of Environment Department of Climate Change. 2020. *National action plan on gender and climate change for Nigeria*. <https://climatechange.gov.ng/wp-content/uploads/2020/09/climate-change-and-gender-action-plan.pdf>
- Foster, Josh., Simon G. Hodder., Alex B. Lloyd., and George Havenith. 2020. Individual



responses to heat stress: implications for hyperthermia and physical work capacity. *Frontiers in physiology* 11: 541483.

- Goemans, C., Sheahan, J., & Loudon, S. 2022. *Financing for gender equality in the Sahel and West Africa*. OECD. [https://www.oecd-ilibrary.org/development/financing-for-gender-equality-in-the-sahel-and-west-africa\\_91275335-en](https://www.oecd-ilibrary.org/development/financing-for-gender-equality-in-the-sahel-and-west-africa_91275335-en)
- Gonda, N. 2019. Re-politicizing the gender and climate change debate: The potential of feminist political ecology to engage with power in action in adaptation policies and projects in Nicaragua. *Geoforum*, 106, 87–96. <https://doi.org/10.1016/j.geoforum.2019.07.020>
- Habtezion, Senay., Scott, Tim., and Wanjiru, Lucy. 2012. *Overview of linkages between gender and climate change*. United Nations Development Programme
- Haider, Huma. 2019. *Climate change in Nigeria: Impacts and responses*. K4D Helpdesk Report 675. Brighton, UK: Institute of Development Studies
- Hecker, Jörg., and Kalpokas, Neringa. 2024. *The Ultimate Guide to Qualitative Research - Part 1: The Basics*. <https://atlasti.com/guides/qualitative-research-guide-part-1/qualitative-research>
- Lorena, Aguilar Revelo. 2009. *Training manual on gender and climate change*. IUCN, UNDP, Global Gender and Climate Alliance. <http://data.iucn.org/dbtw-wpd/edocs/2009-012.pdf>
- [Lorimer, Shannon. 2021, February 23. Nigeria | Farmer-herder conflict claims more casualties than Boko Haram. https://www.zammagazine.com/politics-opinion/1348-nigeria-farmer-herder-conflict-claims-more-casualties-than-boko-haram](https://www.zammagazine.com/politics-opinion/1348-nigeria-farmer-herder-conflict-claims-more-casualties-than-boko-haram)
- Lynas, Mark., Houlton, Benjamin Z., Perry, Simon. 2021, October 19. Greater than 99% consensus on human caused climate change in the peer-reviewed scientific literature. *Environmental Research Letters*, 16 (11): 114005.
- International Fund for Agricultural Development. 2014, March 7. *The Gender Advantage: Women on the front line of climate change*. <https://reliefweb.int/report/world/gender-advantage-women-front-line-climate-change>
- IPCC. 2007. *Climate Change 2007: Mitigation of Climate Change*. London: Cambridge University Press
- IPCC. 2023. *Summary for Policymakers (PDF)*. IPCC AR6 SYR 2023.
- Jedwab, Remi., Haslop, Federico., Zarate, Roman David and Castelan, Carlos Rodriguez. 2023. *The Effects of Climate Change in the Poorest Countries: Evidence from the Permanent Shrinking of Lake Chad*. <https://www.iza.org/publications/dp/16396/the-effects-of-climate-change-in-the-poorest-countries-evidence-from-the-permanent-shrinking-of-lake-chad>
- Makama, Godiya Allanana. 2013. Patriarchy and Gender Inequality in Nigeria: The Way Forward, 9 *EUR. SCI. J.* 115, 134.

- Melanie, B. and Hajo, Z. (2016). Justice and Equity Implications of Climate Change Adaptation: A Theoretical Evaluation Framework. *Healthcare*, 4(3), 65;<https://doi.org/10.3390/healthcare4030065>
- McOmber, C. 2020. *Women and climate change in the Sahel*. West African Papers, No. 27, OECD Publishing, Paris, <https://doi.org/10.1787/e31c77ad-en>.
- Mohammed, Janet Adama. 2023. *What are gender responsive and transformative approaches and how can they strengthen peacebuilding? Lessons from Nigeria*. <https://www.c-r.org/news-and-insight/what-are-gender-responsive-and-transformative-approaches-and-how-can-they>
- Moungar, Vanessa. 2019. *Mainstreaming gender in our climate action for sustainable impact*. African Development Bank.
- Naseer, Shamha and Choden, Tshering. 2023, March 7. *Breaking Barriers, Building Success: The Power of Gender Inclusivity in Business*. <https://www.undp.org/asia-pacific/blog/breaking-barriers-building-success-power-gender-inclusivity-business>
- Pachauri, R.K., and Meyer, L.A. (eds.). 2014. *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Geneva, Switzerland: IPCC.
- Parry, M.L., Canziani, O.F. Palutikof, J.P. van der Linden, P.J. & Hanson, C.E. (Eds.) 2007. *Climate Change: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change - Annex I*, Cambridge University Press, Cambridge, UK, pp 976.
- Policy Vault. 2021, October 11. *Deconstructing Nigeria's National Gender Policy (2006)*. <https://www.policyvault.africa/national-gender-policy/>
- Pörtner, H.-O.; Roberts, D.C.; Tignor, M.; Poloczanska, E.S.; Mintenbeck, K.; Alegría, A.; Craig, M.; Langsdorf, S.; Löschke, S.; Möller, V.; Okem, A.; Rama, B.; et al. (eds.). 2022. *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.
- Pytlik, Kelsey. 2023, April 14. *Understanding the Concept of Gender Inclusion: Everything You Need to Know*. <https://www.gildcollective.com/blog/what-does-gender-inclusive-mean>
- Rao, N., Lawson, E. T., Raditloaneng, W. N., Solomon, D., & Angula, M. N. 2019. Gendered vulnerabilities to climate change: Insights from the semi-arid regions of Africa and Asia. *Climate and Development*, 11(1), 14–26.
- Rieckmann, M. 2018. Learning to transform the world: Key competencies in Education for Sustainable Development. *Issues and Trends in Education for Sustainable Development*, 39, 39–59.
- Ritchie, Hannah. 2020, September 18. *Sector by sector: where do global greenhouse gas emissions come from?* Our World in Data.

- Ross Will. 2018. *Lake Chad: Can the vanishing lake be saved?*  
<https://www.bbc.com/news/world-africa-43500314>
- Sambo, Usman., & Sule, Babayo. 2023. Impact of Climate Change on Food Security in Northern Nigeria. *Green and Low-Carbon Economy*, 2(1), 49–61.  
<https://doi.org/10.47852/bonviewGLCE3202560>
- Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D., & Patel, S. (2020). Building resilience to climate change in informal settlements. *One Earth*, 2(2), 143–156.
- Schreier, M. (2012). *Qualitative content analysis in practice*. Thousand Oaks, CA: Sage
- Tajudeen, Tawakalitu Titilayo., Omotayo Ayo., Ogundele, Fatai Olakunle., and Rathbun, Leah C. 2022. The Effect of Climate Change on Food Crop Production in Lagos State. *Foods*, 9;11(24):3987. doi: 10.3390/foods11243987. PMID: 36553731; PMCID: PMC9778574.
- Tietjen, Bethany. 2022, November 2. *Loss and damage: Who is responsible when climate change harms the world's poorest countries?* The Conversation.
- Toulmin, C. 2009. *Climate Change in Africa*. London: Zed Books.
- Turrentine, Jeff and Denchak, Melissa. 2021, September 1. *What is climate change?*  
<https://www.nrdc.org/stories/what-climate-change#whatis>
- UN Women Watch. 2009. Women, Gender Equality and Climate Change. Fact sheet.  
[https://www.un.org/womenwatch/feature/climate\\_change/downloads/Women\\_and\\_Climate\\_Change\\_Factsheet.pdf](https://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf)
- UNFCCC. 2018. *Introduction to women and climate change*. <https://unfccc.int/gender>
- Women Deliver. 2018, September 26. *The Power of Partnerships that Deliver for Girls and Women*. <https://womendeliver.org/the-power-of-partnerships-that-deliver-for-girls-and-women/>
- Women Watch. 2009. *Women, Gender Equality & Climate Change*. Fact Sheet.
- World Economic Forum. 2024, March 8. *Why gender inclusion is an imperative for future-ready workplaces*. <https://www.weforum.org/agenda/2024/03/why-gender-inclusion-is-a-imperative-for-future-ready-workplaces/>
- World Health Organisation. 2015 November. *WHO calls for urgent action to protect health from climate change – Sign the call*. World Health Organization.

**Acknowledgments:** I want to express my deepest gratitude to all the authors I referenced in this study and the National University of Sciences and Technology (NUST), Gender, Intersectionality, and Climate Change Conference 2024, for providing me the platform to present my paper.

**Funding:** This research received no external funding.

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of and/or the editor(s). and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.