

Management, Knowledge and Learning International Conference Technology, Innovation and Industrial Management Sustainable Development

Women Integration in National Adaptation Plans: A Case Study of Nigeria and Sierra Leone

Priscilla Mbarumun Achakpa

International School for Social and Business Studies (ISSBS) mbarumun1@gmail.com

Živilė Stankevičiūtė

Kaunas University of Technology zivile.stankeviciute@ktu.lt

Abstract

Just like any other continent, Africa is not immune to climate change. Climate change challenges stable socio-economic conditions and has a significant impact on crisissensitive areas such as agriculture and water management. Due to existing systemic vulnerabilities, women, who make up a large part of the agricultural labor force, are among the most affected. This research examines gender integration in the National Adaptation Plans (NAPs) of Nigeria and Sierra Leone, focusing on how these plans contribute to building resilience among vulnerable groups. Using a comparative approach, the study analyzes policy documents and field observations to explore the institutionalization of processes, stakeholder participation, and implementation mechanisms. The study will also highlight key aspects of women's involvement in adaptation planning, including achievements, ongoing efforts, and areas requiring further action, while identifying challenges and strategies for overcoming them.

Keywords: Climate change adaptation, Gender equality, Gender-responsive planning, National Adaptation Plans (NAPs), Nigeria, Sierra Leone, Vulnerability and resilience.

1 INTRODUCTION

Climate change is already having profound effects on vulnerable populations in Africa, particularly through more frequent and severe extreme weather events (Wright et al., 2024). Rising temperatures and unpredictable rainfall patterns threaten livelihoods, especially in climate-sensitive sectors such as agriculture, water management, and forestry. These environmental changes place increased pressure on already limited resources, reducing the capacity of affected communities to adapt (IPCC, 2021).

Globally, surface temperatures have risen by 1.09°C from 1850–1900 to 2011–2020, with projections indicating continued warming throughout the 21st century (IPCC, 2021). However, Africa has experienced an even faster rate of surface temperature increase, exacerbating climate-induced challenges. The IPCC's Fifth Assessment Report (AR5) predicts more frequent and prolonged heatwaves and warm spells, particularly across sub-Saharan Africa, along with shifting precipitation patterns that will worsen droughts and floods (IPCC, 2014). These climatic changes pose severe risks to food security, disrupt global supply chains, and negatively affect agricultural workers and consumers (Wheeler & von Braun, 2013; Lesk et al., 2016).

The urgency of climate change action has led to the establishment of various global frameworks, particularly targeting regions with socio-economic and institutional vulnerabilities (UNFCCC, 2011). One of the key frameworks, National Adaptation Plans (NAPs)—introduced under the Cancun Adaptation Framework (CAF) in 2010—aims to support developing countries in integrating climate change considerations into national development planning (UNFCCC, 2010, 2011). While NAPs are essential for enhancing climate resilience, a significant gap remains in their gender responsiveness (Terry, 2009). In many cases, adaptation planning fails to systematically incorporate gender-sensitive approaches, limiting the effectiveness of these policies in addressing the differentiated vulnerabilities of men and women.

Women play a crucial role in climate-sensitive industries such as farming, fishing, and forestry, yet systemic inequalities prevent them from accessing critical resources such as education, financial capital, land ownership, and political decision-making power (Asomah, 2024). Given that women constitute the majority of the workforce in these sectors, they are more vulnerable to climate-related shocks. The lack of gender-sensitive policies exacerbates these challenges, leaving women disproportionately affected by climate risks. While international climate agreements, such as the Paris Agreement, emphasize gender balance, their implementation at the national level often lacks substantive integration into NAPs, particularly in Africa.

Nigeria, as Africa's most populous country, faces severe climate challenges that disproportionately affect women and rural communities (Federal Ministry of Environment Nigeria, 2011). Similarly, Sierra Leone, still recovering from the civil war and the Ebola crisis, grapples with climate-induced threats to food security, livelihoods, and gender equity. In both countries, climate change threatens women's economic participation, food security, and overall well-being, underscoring the need for gender-responsive adaptation strategies.

This study analyzes the extent to which gender equality has been integrated into the NAPs of Nigeria and Sierra Leone and evaluates how this integration influences the adaptive capacity of vulnerable populations. It argues that mainstreaming gender in NAPs is essential for equity, effective policy formulation, and sustainable development. However, there remains a lack of systematic studies evaluating the content, process, and impact of gender integration in African NAPs. This research seeks to fill this gap by examining the policy frameworks, institutional arrangements, implementation mechanisms, and real-world adaptation projects in Nigeria and Sierra Leone. It further assesses the responsiveness of these adaptation strategies to gendered vulnerabilities, offering insights that can enhance the effectiveness of future adaptation planning in the region.

2 THEORETICAL BACKGROUND

2.1 History and Objectives of National Adaptation Plans (NAPs)

National Adaptation Plans (NAPs) were established as part of the international climate governance framework under the United Nations Framework Convention on Climate Change (UNFCCC). Their origin can be traced to the 2010 Cancun Agreements at the 16th Conference of the Parties (COP16) in Cancun, Mexico, where Parties formally recognized the need for a structured approach to adaptation planning, particularly for developing countries. The NAP process was introduced as part of the Cancun Adaptation Framework (CAF) to help countries systematically assess and address medium- and long-term adaptation needs.

Before the introduction of NAPs, adaptation efforts primarily focused on short-term, project-based interventions, often supported through National Adaptation Programmes of Action (NAPAs). The NAPA framework, established in 2001 under the Marrakesh Accords at COP7, was specifically designed to assist Least Developed Countries (LDCs) in identifying their urgent and immediate adaptation needs. However, NAPAs had limitations, as they primarily emphasized short-term priorities and did not integrate adaptation into broader development planning. Recognizing these challenges, the NAP process was created to provide a more comprehensive, long-term, and strategic approach to adaptation.

The primary goal of the NAP process is to facilitate the integration of climate adaptation into national policies, strategies, and development planning. Unlike NAPAs, which were primarily designed for LDCs, NAPs are open to all developing countries, including middle-income nations. The process is country-driven and flexible, allowing governments to tailor their adaptation strategies based on national circumstances, vulnerabilities, and development priorities.

Aims and Objectives of NAPs

The overarching aim of NAPs is to reduce vulnerability to climate change by building adaptive capacity and resilience in key sectors. The process also seeks to ensure that adaptation planning is integrated into broader sustainable development efforts, helping countries achieve long-term resilience. More specifically, the objectives of NAPs include:

Identifying Medium- and Long-Term Adaptation Needs: NAPs aim to move beyond short-term responses to climate change by assessing risks and vulnerabilities over the long term, ensuring that adaptation measures are sustainable and forward-looking.

Mainstreaming Adaptation into Development Planning: One of the key features of the NAP process is integrating adaptation into national and sectoral policies, including economic development plans, infrastructure projects, and social protection programs. This ensures that climate risks are systematically considered in decision-making.

Strengthening Institutional and Technical Capacities: NAPs help governments build institutional frameworks, improve coordination among ministries and stakeholders, and enhance technical capabilities to develop, implement, and monitor adaptation strategies effectively.

Promoting Stakeholder Engagement and Inclusivity: The NAP process encourages participatory approaches by involving local communities, the private sector, civil society organizations, and marginalized groups, including women and Indigenous populations, in adaptation planning and decision-making.

Mobilizing and Allocating Financial Resources for Adaptation: A well-developed NAP can help countries access international climate finance, including funding from the Green Climate Fund (GCF), the Adaptation Fund, and bilateral or multilateral support, to implement adaptation measures.

Monitoring, Evaluating, and Learning from Adaptation Actions: NAPs emphasize the importance of establishing robust monitoring and evaluation (M&E) systems to track progress, assess the effectiveness of adaptation interventions, and refine strategies based on lessons learned.

Since their introduction, many countries have progressed in developing and implementing NAPs, but challenges remain, including financing, cross-sectoral coordination, and socio-economic barriers (UNFCCC, 2024). By aligning adaptation efforts with global climate agreements like the Paris Agreement and the SDGs, NAPs enhance resilience and reduce climate-related vulnerabilities (UNFCCC, 2023). The first Global Stocktake highlighted that current adaptation efforts fall short of long-term goals and emphasized the financial challenges developing countries face in implementing NAPs (UNFCCC, 2023). To accelerate progress and raise adaptation ambition, the UNFCCC Executive Secretary launched the NAP 3.0 initiative at the NAP Expo in April 2024 (UNFCCC, 2024). According to UN Climate Change News (2023), a record 11 countries submitted their National Adaptation Plans (NAPs) to the United Nations Framework Convention on Climate Change (UNFCCC) secretariat in 2023, marking significant progress in global climate adaptation efforts. The 2023 progress report on NAPs, published by the Least Developed Countries Expert Group (LEG) in November 2023, highlights that 142 developing countries that are Parties to the UNFCCC are actively formulating and implementing NAPs (LEG, 2023). With the second five-year review of NAPs initiated at COP 29, NAP 3.0 focuses on attracting diverse financing sources to accelerate adaptation goals (UNFCCC, 2024).

2.2 Gender Integration in National Adaptation Plans (NAPs).

Gender-responsive climate change approaches actively promote gender equality by addressing gender norms, roles, and inequalities (NAP Global Network & UNFCCC, 2019; World Health Organization, 2009). These approaches are inherently intersectional, acknowledging that different groups owing to established social norms, status, power and access to resources, among others, are less capable of dealing with the impacts of climate change and remain at the bottom of the receiving end (NAP Global Network & UNFCCC, 2019; Least Developed Countries Expert Group, 2015). In the context of the NAP process, an intersectional gender lens must be applied throughout all stages, from assessing vulnerabilities to prioritizing, implementing, tracking, and reporting adaptation actions.

Gender-responsive NAP processes recognize and address gender-differentiated adaptation needs and priorities, ensuring equitable participation and influence in decision-making (Dazé & Hunter, 2024). The Cancun Adaptation Framework underscores this imperative by establishing gender-sensitive approaches as a fundamental principle for adaptation planning and action (Gebert, 2015). Integrating gender considerations enhances adaptation effectiveness, mitigates inequalities, addresses the needs of the most vulnerable, and fosters equitable participation in decision-making. Women, in particular, serve as critical agents of change within adaptation processes (Least Developed Countries Expert Group,

2015). This mandate has been reinforced by the United Arab Emirates Framework for Global Climate Resilience (UAE FGCR), adopted at COP 28 of the UNFCCC, which sets a target for all countries to establish gender-responsive and participatory NAP processes that encompass vulnerable communities by 2030 (UNFCCC, 2023a).

Accordingly, NAP processes must yield equitable outcomes for people of all genders and social groups, recognizing how gender intersects with other factors such as age and Indigeneity. The NAP Global Network emphasizes that NAP processes must address gender and social considerations throughout planning, implementation, and monitoring, evaluation, and learning (MEL). In the planning phase, this may involve applying a gender lens to climate risk assessments or prioritizing adaptation actions that yield gender-equality benefits. During implementation, strategies must ensure equitable opportunities for participation and guarantee that climate finance is gender responsive. Gender-responsive MEL tracks gender-related outcomes and evaluates the equitable distribution of benefits from adaptation investments. Achieving these outcomes requires enabling factors such as financing, institutional arrangements, capacity-building, data and knowledge generation, effective communication, engagement, and leadership (Dazé et al., 2024).

Recent assessments indicate progress in integrating gender considerations into NAP processes. A systematic review by the NAP Global Network of 56 multisectoral NAP documents submitted to the UNFCCC as of June 30, 2024, revealed that 72% of the documents mention the term "gender" at least ten times. A significant proportion of NAPs employ the term "gender-responsive" rather than "gendersensitive." Furthermore, 85% of NAPs identify women as particularly vulnerable to climate change impacts, yet only 16% acknowledge women as agents of change in adaptation. More than half of the NAP documents recognize the role of gender ministries or departments in NAP development, institutional arrangements, or specific adaptation actions. Similarly, over half provide evidence of gender considerations in implementation strategies, either through identifying roles for women and women's organizations or integrating gender budgeting. Additionally, 64% of NAPs include provisions for capacity strengthening related to gender and adaptation, targeting institutions or women and girls specifically. Among the reviewed documents, 62% reference gender considerations in their MEL frameworks. Women play a vital role in climate adaptation due to their strong ties to natural resource management, agriculture, and household sustainability, especially in developing countries. As primary caregivers and food producers, they are disproportionately impacted by climate change through extreme weather events, water scarcity, and declining agricultural yields. However, they also hold valuable knowledge in resource management, disaster risk reduction, and community resilience, making their participation essential in shaping effective adaptation strategies. Ensuring women's full and equal participation aligns with international frameworks such as the Universal Declaration of Human Rights (United Nations, 1948), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (United Nations, 1979), and Sustainable Development Goal 5 (SDG 5) (United Nations, 2015), which emphasize gender equality and the empowerment of women in sustainable development.

Integrating gender considerations into National Adaptation Plans (NAPs) helps address systemic inequalities while strengthening community resilience. The UNFCCC Gender Action Plan (United Nations Framework Convention on Climate Change [UNFCCC], 2017, 2019c) highlights the need for gender-responsive climate policies that empower women as key agents of change. A gender-responsive NAP includes gender analysis and data collection to understand differential climate impacts, promotes

women's leadership in decision-making, ensures equitable budgeting and financing, strengthens women's adaptive capacity through training, and establishes monitoring mechanisms for accountability.

Despite global commitments, challenges persist in translating policy frameworks into action. Many adaptation policies lack full gender integration due to limited institutional capacity and awareness, inadequate financial support, socio-cultural barriers restricting women's participation, and insufficient sex-disaggregated data. A gender-responsive approach to adaptation planning enhances resilience, social equity, and policy effectiveness. Governments must take proactive steps to ensure NAPs are inclusive and participatory, recognizing women not only as vulnerable groups but also as key contributors to climate adaptation. By addressing barriers and leveraging women's expertise, countries can create more sustainable and effective adaptation strategies that benefit entire communities.

While these findings demonstrate progress, significant gaps remain in ensuring adaptation actions to yield equitable benefits and advance gender equality. Key areas for improvement include fostering meaningful participation and leadership of women in national climate policies and actions. Additionally, NAP processes should incorporate gender- and age-disaggregated data, alongside the best available scientific knowledge, to enhance gender-responsive adaptation efforts (UNFCCC, 2024b). Addressing these gaps is crucial for ensuring that climate adaptation strategies effectively promote gender equality and social inclusion.

2.3 Regional Perspectives on Gender and Climate Adaptation

Countries in Africa besides Nigeria and Sierra Leone have included gender equality in their plans to adapt to climate change. Kenya's National Climate Change Action Plan (NCCAP) has adaptations for women to give them more power in efforts to adapt to climate change. The Climate Change Act (2016) also supports practices that include all genders and helps women become leaders (WRI, 2023). In Uganda, the National Climate Change Policy (NCCP) aims to provide climate funding and training chances for women as its main goal (UNDP, 2023). South Africa's National Climate Change Adaptation Strategy (NCCAS) is working to address how climate change affects different genders. It does this through strategies that consider gender and projects led by women for water resources and farming that lasts (ACBF, 2023). "Malawi's National Resilience Strategy (NRS) also has gender considerations, tackling structural inequalities that make women more climate vulnerable, focusing on improving access to land, credit and technology" (Babugura, 2019). West African nations like Ghana and Senegal have also embedded gender equity into their climate adaptation frameworks. Ghana's NCCP prioritizes gender inclusion, while Senegal's National Adaptation Plan recognizes women 's critical role in building climate resilience, with community-led programs empowering women in sustainable resource management and disaster risk reduction (IISD, 2022).

Important challenges still abound. Africa faces great climate risks that threaten socio-economic stability. The agricultural sector, which employs many, is vulnerable to extreme weather events like drought and irregular rainfall. Such impacts, combined with increased evaporation and changing precipitation patterns aggravate water scarcity for agricultural use and drinking water (FAO, 2011). These challenges are further compounded by a low adaptive capacity, poor infrastructure, and economic constraints in West Africa. "Women are disproportionately affected by climate change as they constitute the majority of the agricultural workforce but face systemic barriers to accessing resources, technology and decision-making power" (Fatma, 2002; Terry, 2009). This unequal access means they are more vulnerable to climate change impacts. But women have important adaptive capacities based on their traditional

ecological knowledge and resource management skills. Gender-inclusive adaptation strategies need to address both the vulnerabilities and tap into these strengths. Community-led adaptation in Senegal is an example where women are empowered to promote sustainable resource management and disaster risk reduction by recognising and building on what they already know and do.

Focusing on Nigeria and Sierra Leone is relevant due to their climate vulnerability and efforts to integrate gender into adaptation planning (Republic of Sierra Leone, 2015; Federal Ministry of Environment Nigeria, 2011). Both countries face climate risks like flooding, desertification, and coastal erosion, exacerbating existing inequalities. Nigeria has frameworks like the National Adaptation Strategy and Plan of Action on Climate Change (NASPA-CCN) (Federal Ministry of Environment Nigeria, 2011), while Sierra Leone's Initial National Adaptation Plan (iNAP) emphasizes gender-responsive actions (Republic of Sierra Leone, 2015). These case studies offer insights into gender integration in NAPs for West Africa and beyond.

2.4 The Case of Nigeria

As of 2025, Nigeria's population is estimated to be approximately **237**.5 million, with women comprising about 49.44% of the total population (Worldometer, 2025; Trading Economics, 2025). The literacy rate for adult women aged 15 and older was 59.4% as of 2021, compared to 74.4% for men (World Bank, 2023). In terms of school enrollment, girls make up 48% of students in primary education; however, their participation declines at secondary and tertiary levels due to socio-cultural barriers that hinder female educational attainment (World Bank, 2023).

Women's economic participation in Nigeria remains significant, although disparities persist. In 2023, approximately 52.2% of women aged 15 and older were actively participating in the labor force, compared to 65.9% of men (World Bank, 2023). A substantial proportion of women, estimated at **70%**, are engaged in agriculture, while others are employed in the services and trade sectors (World Bank, 2023). Despite this, women continue to face challenges in securing formal employment, accessing credit, and advancing in professional careers.

Women's political representation in Nigeria remains low despite ongoing efforts to promote gender inclusion in governance. As of 2023, women occupied 3.7% of Senate seats, holding **4** out of 109 positions, while in the House of Representatives, they secured 13 out of 360 seats, accounting for 3.6% representation (Inter-Parliamentary Union, 2023). Collectively, women make up only 4.47% of Nigeria's National Assembly, reflecting a decline in female political participation compared to previous years (Inter-Parliamentary Union, 2023). Similarly, in the federal cabinet, women continue to be underrepresented in key ministerial positions.

In terms of health, maternal mortality remains a significant concern, although some progress has been made. Nigeria's maternal mortality ratio declined from 1,148 deaths per 100,000 live births in 2000 to 1,047 deaths per 100,000 live births in 2020 (World Bank, 2023). However, despite these improvements, many women, particularly in rural areas, continue to face barriers to accessing quality healthcare services, including limited medical infrastructure, financial constraints, and socio-cultural restrictions (World Bank, 2023).

2.4.1 Status of National Adaptation Plans (NAPs) in Nigeria

Nigeria has taken steps to integrate climate change adaptation into its national development planning through the National Adaptation Plan (NAP) process. In 2020, the Federal Ministry of Environment introduced the *Nigeria National Adaptation Plan Framework*, which aims to guide the systematic integration of climate adaptation measures into national and sectoral policies and strategies (Federal Ministry of Environment, 2020). The framework outlines priorities for strengthening institutional capacity, improving climate-resilient infrastructure, and promoting sustainable resource management. However, challenges remain in ensuring gender-responsive adaptation planning, as women's roles in climate resilience initiatives are often overlooked in national policy implementation.

2.4.2 Core Objectives of the NAP Framework:

- 1. *Integration:* Incorporate climate adaptation into existing and future policies, programs, and activities at national and sub-national levels.
- 2. *Capacity Building*: Enhance institutional and technical capacities for effective adaptation planning and implementation.
- 3. *Stakeholder Engagement:* Promote inclusive participation of all stakeholders, including vulnerable communities, in the adaptation planning process.
- 4. napglobalnetwork.org
- 5. *Resource Mobilization*: Identify and access financial resources to support adaptation initiatives.
- 6. *Monitoring and Evaluation:* Establish mechanisms to track progress and assess the effectiveness of adaptation actions.

In December 2021, Nigeria launched a project titled "Strengthening Nigeria's Capacity to Advance the National Adaptation Plan Process," funded by the Green Climate Fund (GCF). This three-year initiative aims to bolster the government's ability to plan and budget for climate resilience actions.

2.4.3 Progress in Women's Involvement in Climate Adaptation in Nigeria

The National Action Plan on Gender and Climate Change for Nigeria integrates gender considerations into climate policies and actions. It aims to increase women's participation in policy-making and implement gender-responsive adaptation initiatives to enhance resilience (Federal Ministry of Environment Nigeria, 2020). Similarly, the Capacity Building in Climate-Smart Agriculture initiative provides rural women, particularly those engaged in agriculture, with training on climate-smart farming techniques, soil conservation, and pest control to strengthen their capacity to adapt to climate change impacts (Brown University, 2023).

The Lokiaka Community Development Center's Mangrove Restoration project, led by environmental activist Martha Agbani, focuses on restoring mangrove ecosystems in the Niger Delta while empowering local women farmers through environmental conservation and climate resilience activities (Wikipedia contributors, 2024a). Likewise, Climate Action Africa's initiatives, founded by Grace Oluchi Mbah, support women's involvement in climate-related tech innovation and environmental education. Notable programs include *Climate Action Africa Labs (CAA Labs)*, which fosters the development of climate-tech startups, and *Climate Stories 4 Kids*, an initiative that educates young people on climate change (Wikipedia contributors, 2024b).

To ensure the inclusion of gender perspectives in climate adaptation, frameworks such as the National Gender Strategic Plan and the Gender Equality and Women's Empowerment Policy support the

Medium-Term National Development Plan by mainstreaming gender considerations across all sectors. Institutional collaborations between government ministries, civil society organizations, and community groups further promote inclusive participation in the development and implementation of National Adaptation Plans (NAPs).

Despite progress, challenges remain. Cultural norms continue to limit women's participation in climaterelated decision-making, while limited funding restricts the implementation of gender-responsive adaptation initiatives. Capacity constraints highlight the need for training programs that equip women with relevant skills and knowledge. Additionally, data gaps, particularly the lack of sex-disaggregated data, hinder the development of targeted adaptation strategies.

Nonetheless, key achievements have been made. The integration of gender considerations into national climate policies, including the Initial National Adaptation Plan (iNAP) and the National Gender Strategic Plan, represents a significant step toward inclusive adaptation planning. Growing awareness of women's roles in climate adaptation has led to increased efforts to involve them in policy development. At the community level, women-led initiatives have actively contributed to local adaptation projects, strengthening resilience at the grassroots level.

Though significant strides have been made in integrating women into climate adaptation efforts in Nigeria, ongoing challenges necessitate sustained efforts to ensure equitable participation and benefit-sharing in adaptation initiatives.

2.5 The Case of Sierra Leone

Sierra Leone's population is estimated at approximately 8,819,794, with women constituting about 50.8% of the population (Worldometer, 2025). The literacy rate for adult women (15 years and older) was approximately 39.8% as of 2018, compared to 51.6% for men (World Bank, 2020). In terms of secondary education completion, only 9.5% of women over the age of 25 had completed secondary education as of 2012 (World Bank, 2012). Regarding economic participation, women accounted for approximately 65.7% of the labor force in 2012 (World Bank, 2012). As of 2013, women held 12.4% of parliamentary seats (World Bank, 2013). The maternal mortality ratio was approximately 443 deaths per 100,000 live births as of 2020 (World Bank, 2020). Sierra Leone has made notable progress in integrating gender considerations into its climate adaptation policies. The Initial National Adaptation Plan (iNAP) outlines strategies to reduce vulnerability to climate change by building adaptive capacity and resilience, explicitly acknowledging the role of women and the importance of gender-responsive actions (Government of Sierra Leone, 2021). These gender strategies are incorporated into national development planning frameworks, including the National Gender Strategic Plan and the Gender Equality and Women's Empowerment Policy, which support the Medium-Term National Development Plan (Government of Sierra Leone, 2015). Female involvement in national policy development has shown continuous improvement through NAP development in Sierra Leone. The institutional arrangements involve cooperation among multiple stakeholders, including government ministries, civil society organizations, and community groups, to ensure inclusive participation. However, NAP implementation encounters various challenges, such as limited funding, minimal capacity, and persistent cultural norms that restrict women's participation in climate adaptation programs (UNFCCC, 2021).

2.5.1 Status of National Adaptation Plans (NAPs) in Sierra Leone

Sierra Leone has made significant strides in integrating climate adaptation into its national policies. The Initial National Adaptation Plan (iNAP) was developed to outline strategies for reducing vulnerability to climate change by building adaptive capacity and resilience. The iNAP explicitly acknowledges the role of women and emphasizes the importance of gender-responsive actions in adaptation efforts.

2.5.2 Core Objectives of the iNAP

- 1. Reducing Vulnerability: Implement strategies to minimize the adverse impacts of climate change on vulnerable populations, particularly women.
- 2. Building Adaptive Capacity: Enhance the ability of communities and institutions to adapt to climate variability and change.
- 3. Gender Integration: Ensure that adaptation actions are gender-responsive, recognizing the unique contributions and needs of women in climate adaptation.
- 4. Stakeholder Engagement: Promote inclusive participation of all stakeholders, including women, in the adaptation planning and implementation process.
- 5. Resource Mobilization: Identify and secure financial resources to support adaptation initiatives, with attention to gender-responsive budgeting.

Progress in Women's Involvement in Climate Adaptation in Sierra Leone

In July 2024, Sierra Leone's Environment Protection Agency (EPA-SL) released an animated book titled *My Environment and I, Vol. 1*. This initiative seeks to educate children about climate change through engaging storytelling, covering topics such as the beauty of Earth, weather patterns, causes and impacts of climate change, and practical steps for environmental protection (EPA-SL, 2024).

In February 2023, Save the Children organized a two-day workshop at Tacugama Chimpanzee Sanctuary, bringing together children from different regions of Sierra Leone. The workshop focused on developing climate change messages and songs, using forest games to enhance understanding. Participants also learned about the ecological significance of chimpanzees, empowering them to act as climate ambassadors in their communities (Save the Children, 2023).

Further research on children's awareness of climate change was conducted by Save the Children in June 2022, involving 52 children from four coastal communities in southern Sierra Leone. The study assessed children's understanding of climate hazards and community-specific environmental challenges, revealing a strong awareness of the connections between climate, livelihoods, and health (Save the Children, 2022).

A series of animations features firsthand accounts from Sierra Leoneans who have experienced the effects of climate change. One animation, narrated by UN climate negotiator Gabriel Kpaka, highlights the loss and damage caused by climate change in Freetown. These visual narratives provide children with relatable insights into the realities of environmental challenges in their country (Kpaka, 2024).

The National Gender Strategic Plan and the Gender Equality and Women's Empowerment Policy support the Medium-Term National Development Plan by mainstreaming gender considerations across all sectors, including climate adaptation. Institutional collaborations between government ministries, civil society organizations, and community groups ensure inclusive participation in the development and implementation of National Adaptation Plans (NAPs) (Government of Sierra Leone, 2021).

Despite these efforts, several challenges persist. Cultural norms continue to restrict women's participation in decision-making processes related to climate adaptation. Limited funding remains a major obstacle, hindering the implementation of gender-responsive adaptation initiatives. Capacity constraints highlight the need for skill-building programs to equip women with the knowledge and tools necessary for effective engagement in adaptation planning. Additionally, data gaps, particularly the lack of sex-disaggregated data, impede the development of targeted adaptation strategies that address the specific needs of women (Government of Sierra Leone, 2015).

Nonetheless, progress has been made. The integration of gender considerations into national climate policies, such as the Initial National Adaptation Plan (iNAP) and the National Gender Strategic Plan, marks a significant step toward inclusive adaptation planning. Increased awareness of the critical role women play in climate adaptation has led to greater efforts to involve them in policy development and implementation. At the community level, women-led initiatives have played an active role in local adaptation projects, strengthening climate resilience at the grassroots level (Government of Sierra Leone, 2015; 2021).

3 CONCLUSION

While Nigeria and Sierra Leone have made notable progress in integrating gender considerations into its climate adaptation policies, ongoing challenges necessitate sustained efforts to ensure equitable participation and benefit-sharing in adaptation initiatives.

To further enrich this research, qualitative methods such as key informant interviews, focus group discussions, and stakeholder consultations will be employed. These engagements will capture diverse perspectives from policymakers, civil society organizations, local communities, and women's groups to assess the effectiveness of gender integration in Nigeria's and Sierra Leone's National Adaptation Plans (NAPs). By incorporating firsthand experiences and insights, the study aims to uncover implementation gaps, barriers, and opportunities for strengthening gender-responsive adaptation efforts. This participatory approach ensures that recommendations are grounded in lived realities, fostering more inclusive and actionable climate adaptation policies.

4 REFERENCES

4.1 Academic and Policy Publications

- Babugura, A. (2019). Gender and climate change adaptation in Africa. African Journal of Environmental Studies, 12(2), 45-62.
- Dazé, A., & Hunter, C. (2024). Advancing gender-responsive national adaptation plan (NAP) processes: State of play and promising examples (NAP Global Network synthesis report). International Institute for Sustainable Development. Retrieved from <u>https://napglobalnetwork.org/</u>
- Federal Ministry of Environment. (2020). Nigeria National Adaptation Plan Framework. Government of Nigeria. Retrieved from <u>https://nigerianstat.gov.ng/pdfuploads/NLFS_Q2_2024.pdf</u>
- Federal Ministry of Environment Nigeria. (2011). National Adaptation Strategy and Plan of Action on Climate Change for Nigeria (NASPA-CCN). Government of Nigeria.
- Gebert, R. (2015). Policy, Laws and Regulations and the UNFCCC Cancun Safeguards: Frameworks and Gaps in the Lao PDR.
- Government of Sierra Leone. (2015). National Gender Strategic Plan. Freetown, Sierra Leone.
- Government of Sierra Leone. (2021). Initial National Adaptation Plan (iNAP). Freetown, Sierra Leone. Retrieved from <u>https://www.preventionweb.net/publication/sierra-leone-national-adaptation-plan-2021</u>

IISD. (2022). Gender-responsive adaptation planning in West Africa: Lessons from Ghana and Senegal. Retrieved from <u>https://www.iisd.org</u>

Inter-Parliamentary Union. (2023). Women in National Parliaments. Retrieved from <u>https://www.ipu.org</u> IPCC. (2021). Climate Change 2021: The Physical Science Basis. Cambridge University Press.

- Least Developed Countries Expert Group. (2015). Strengthening gender considerations in adaptation planning and implementation in the least developed countries. UNFCCC: Bonn, Germany.
- LEG. (2023). 2023 Progress Report on National Adaptation Plans. United Nations Framework Convention on Climate Change.
- NAP Global Network. (2023). Gender considerations in National Adaptation Plans. Retrieved from https://napglobalnetwork.org
- NAP Global Network & UNFCCC. (2019). Toolkit for a gender-responsive process to formulate and implement National Adaptation Plans (NAPs). Dazé, A., & Church, C. (lead authors). International Institute for Sustainable Development. Retrieved from http://napglobalnetwork.org/resource/toolkit-for-genderresponsive-national-adaptation-plans/

Republic of Sierra Leone. (2015). Initial National Adaptation Plan (iNAP). Government of Sierra Leone.

Terry, G. (2009). No climate justice without gender justice: An overview of the issues. *Gender & Development*, *17*(1), 5-18.

4.2 Climate Change Reports and United Nations Publications

- UN Climate Change News. (2023, December 13). *A record number of countries submit national adaptation plans in 2023*. United Nations Framework Convention on Climate Change.
- UNDP. (2023). *Gender and climate adaptation: Bridging gaps in national policies*. United Nations Development Programme.
- UNFCCC. (2021). *Gender Action Plan*. United Nations Framework Convention on Climate Change. Retrieved from https://unfccc.int/sites/default/files/resource/cp2019 L03E.pdf
- UNFCCC. (2023a). *First Global Stocktake Synthesis Report on Adaptation Progress*. United Nations Framework Convention on Climate Change.
- UNFCCC. (2023b). *Decision 2/CMA.5: Global goal on adaptation (FCCC/PA/CMA/2023/16/Add.1)*. Retrieved from https://unfccc.int/sites/default/files/resource/cma2023_16a01_adv_.pdf
- UNFCCC. (2024). *NAP 3.0 Initiative: Accelerating Adaptation Ambition and Financing*. United Nations Framework Convention on Climate Change.
- United Nations. (1948). Universal Declaration of Human Rights. Retrieved from <u>https://www.un.org/en/about-us/universal-declaration-of-human-rights</u>
- United Nations. (1979). Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Retrieved from <u>https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women</u>
- United Nations. (2015). *Sustainable Development Goals*. Retrieved from <u>https://sdgs.un.org/goals</u> United Nations Framework Convention on Climate Change (UNFCCC). (2017). *The Gender Action Plan*.
- Retrieved from https://unfccc.int/topics/gender/the-big-picture/introduction-to-gender-and-climate-change
- United Nations Framework Convention on Climate Change (UNFCCC). (2019). *Enhanced Lima Work Programme on Gender and its Gender Action Plan.* Retrieved from <u>https://unfccc.int/topics/gender/events-meetings/gender-action-plan</u>

4.3 Demographic and Economic Data Sources

- Trading Economics. (2025). *Nigeria Population, female (% of total)*. Retrieved from https://tradingeconomics.com/nigeria/population-female-percent-of-total-wb-data.html
- World Bank. (2012). *World Development Indicators: Education*. Retrieved from <u>https://databank.worldbank.org/source/education-statistics-%5E-all-indicators</u>

World Bank. (2013). *World Development Indicators: Gender Statistics*. Retrieved from https://databank.worldbank.org/source/gender-statistics

World Bank. (2020). World Development Indicators: Health. Retrieved from https://databank.worldbank.org/source/health-nutrition-and-population-statistics

World Bank. (2023). *Gender Data Portal: Nigeria*. Retrieved from https://genderdata.worldbank.org/en/economies/nigeria

Worldometer. (2025a). *Nigeria Population (2025)*. Retrieved from <u>https://www.worldometers.info/world-population/nigeria-population/</u>

Worldometer. (2025b). *Sierra Leone Population (2025)*. Retrieved from <u>https://www.worldometers.info/world-population/sierra-leone-population/</u>

4.4 Climate Change Education and Media Publications

EPA-SL. (2024). My Environment and I, Vol. 1. Environment Protection Agency Sierra Leone.

Save the Children. (2022). *Children's perspectives on climate change in coastal Sierra Leone*. Save the Children Sierra Leone.

Save the Children. (2023). *Children's workshop on climate change at Tacugama Chimpanzee Sanctuary*. Save the Children Sierra Leone.

Kpaka, G. (2024). Animated stories on climate impact in Sierra Leone. United Nations Climate Initiative.