

## Women and Sustainable Development: Examining the Role of Women in Accelerating Progress on SDG 13 (Climate Action) in Africa

**Chioma Scholastica Ugwu**

*Department of Political and Administrative Studies,  
University of Port Harcourt, Rivers State, Nigeria*

Article DOI: 10.48028/iiprds/ijarsses.v9.i1.11

### Abstract

This research article explores the critical role women play in accelerating progress on Sustainable Development Goal (SDG) 13: Climate Action, in Africa with particular reference to Nigeria. Due to gendered vulnerabilities stemming from social, economic, and cultural challenges, women are disproportionately impacted by climate change. Despite these obstacles, women play a critical role as change agents in the fight against climate change through policy campaigns, community involvement, and sustainable practices. The study's goal is to examine how African women, especially those in Nigeria, contribute to the advancement of SDG 13, consider obstacles that prevent them from fully participating, and offer practical ways to increase their impact. Guided by Ecofeminism and Gender and Development (GAD) theoretical frameworks, the study underscores how gender and environmental justice are intertwined, drawing the connections between the exploitation of nature and the subjugation of women, as well as the significance of including gender views in development planning. The method of data collection was secondary involving the review of over 30 relevant literatures on the subject via textbooks, journal articles, and other internet materials. Findings show that although women and women-led initiatives in Africa, particularly Nigeria, are essential to grassroots mobilization and climate action, they encounter structural obstacles like cultural limitations, a lack of political and financial resources, poor access to education, and networking opportunities which hinder their ability to advance climate action and attain expected sustainability. The study suggests capacity-building programs to improve women's leadership roles, gender-responsive climate policy, and more funding for women-led projects and education. Positioning women as key players in tackling Nigeria's climate crisis is essential, as it would promote inclusive climate resilience, and in achieving sustainable development.

**Keywords:** *Women, Women-led initiatives, Climate governance, Sustainable Development Goal 13 (SDG 13) (Climate Action), Women in climate leadership in Nigeria*

*Corresponding Author:* Chioma Scholastica Ugwu

## **Background to the Study**

Globally, women play a key role in promoting sustainable development and accelerating the achievement of Sustainable Development Goal (SDG) 13, which is centered on climate action. According to the UN, this calls for international cooperation to safeguard the planet from the climate crisis. It demands immediate action to combat climate change and its effects, including lowering greenhouse gas emissions, increasing resilience, and adapting to its negative effects. In many African nations, women are frequently in charge of managing natural resources like energy and water. They are directly impacted by the negative effects of climate change, including unpredictable rainfall, droughts, flooding, food insecurity, and desertification. These issues negatively affect the socio-economic lives of the people, and the environment (Adewuyi & Ezeamaka, 2023). Women contribute positively to adaptation and mitigation efforts as main caregivers, farmers, and community organizers with local knowledge and distinct experiences. For instance, women in agriculture, who make up a sizable share of the labor force in Africa, play a critical role in advancing water management strategies, soil conservation, and sustainable agricultural methods.

Numerous women-led projects in Africa have advanced the SDGs, particularly SDG13, in several ways, such as through community education, forestry, renewable energy, the adoption of smart agriculture, alleviation of rural poverty, sustainability and environmental preservation, and more. Wangari Maathai, the first African woman to win the Nobel Peace Prize, was a prominent player in African climate activism. To combat poverty, environmental damage, and deforestation in Kenya, she established the Green Belt Movement in 1977. Her project empowers rural women to actively participate in protecting their natural resources while promoting climate education, environmental conservation, and tree planting (Chikwendu, 2008; Muthuki et al., 2013). Wangari's efforts to combat climate change went beyond Kenya. Her initiative helped other African nations like Ethiopia, Somalia, and Sudan (Chikwendu, 2008). Additionally, Women's Initiatives for Sustainable Environment (WISE) (Uganda), a women's group, has been very successful in enabling women and young people to take on leadership roles in Uganda. The initiative raises awareness of sustainable behaviors while offering training in clean energy technology including solar cooking and biogas systems. More than 1500 farmers in Northern Uganda have benefited from its effective tree-growing efforts (Fairtree.org, 2023).

Nigerian women especially those living in rural areas are frequently perceived as victims of climate change because they depend on agriculture, water resources, and ecosystems for their livelihoods, but they are also powerful change agents. Through the use of renewable energy, community-based climate adaptation techniques, and sustainable farming practices, Nigerian women have shown their inventiveness and resilience in tackling climate concerns (Onoh et al., 2023). Women frequently have a deep understanding of regional ecosystems, farming methods, and natural resources, especially those living in rural areas (Robert et al., 2022). They are in a position to lead environmental conservation initiatives that support environmental sustainability because of this knowledge as well as their responsibilities as caregivers and home managers. Despite these vital roles, systemic gender inequality, as well as limited access to financial resources, education, and land rights, frequently result in women's contributions to

climate change being undervalued, underfunded, and improperly utilized. Women are underrepresented in political and decision-making arenas in Africa, as well as in many other nations, particularly in Nigeria (Ferdous & Uddin, 2021; Goryunova & Madsen, 2024; Okunade et al., 2023; Ugwu & Okoye, 2022). Effective responses to climate change are hampered by gender inequality, a significant issue that restricts women's influence in framing climate policies.

Efforts to combat climate change in Nigeria have historically been controlled by men, while women have had limited opportunities to be involved in high-level policy discussions. Nonetheless, it is becoming increasingly clear that including women's viewpoints in climate action not only advances gender equality but also improves the efficacy of environmental programs and policies. Nigeria can guarantee that its climate policies are more inclusive, equitable, and successful in meeting the demands of all citizens by giving women more leadership positions. Access to funds and resources is a major obstacle to promoting women's leadership in climate action. Financial limitations prevent many women-led climate initiatives from expanding their operations or reaching larger populations (Lau et al., 2021). The lack of technical know-how and the scarcity of networks and platforms that help female leaders in climate governance exacerbate these financial obstacles. As a result, even while women can bring about significant change, their ability to carry out large-scale climate projects is still limited.

International organizations like the United Nations Framework Convention on Climate Change (UNFCCC) have called for the participation of women in climate change decision-making processes in acknowledgment of the need for greater gender equality in climate governance. The significance of gender equality and women's empowerment in climate action is specifically emphasized in the Paris Agreement. Nigeria's national policies, such as the Nationally Determined Contributions (NDCs) under the Paris Agreement, acknowledge the significance of women in climate action through international initiatives and accords.

The execution of those laws hasn't yet produced fruitful outcomes, however, in terms of fostering an atmosphere that empowers female leaders to guarantee that women actively participate in determining the nation's climate destiny. Notwithstanding this drawback, the study re-examines how African women, especially those in Nigeria, support the achievement of SDG 13 (Climate Action). It further identifies obstacles to their full engagement and suggests practical ways to increase their contributions. The study's findings would also highlight how crucial it is for women to be included in climate governance and the possibility that they could fully contribute to the achievement of SDG 13. The relationship between gender, environmental sustainability, and development can be better understood by including Ecofeminism and Gender and Development theoretical viewpoints in the study of sustainable development. These frameworks underscore the vital role of gender equality in attaining sustainable development and provide a lens through which the connection between women's roles and their contributions to climate action can be better understood.

### **The Study's Theoretical Lens**

Gender and Development (GAD) theory and ecofeminism emphasize the relationship between gender, environmental sustainability, and societal development, and serve as this study's theoretical framework. These frameworks highlight the significance of gender equality in attaining sustainable development and offer a prism through which to view the connection between women's roles and their contributions to climate action. Scholars including Karen Warren, Maria Mies, Vandana Shiva, Ynestra King, Susan Griffin, Charlene Spretnak, Mary Daly, Rachel Carson, and Françoise d'Eaubonne have all contributed to the notion of ecofeminism. According to the theory, women's marginalization and environmental exploitation are related. It contends that both problems are caused by patriarchal and hierarchical structures that place power and profit ahead of sustainability and equity (Roy, 2024). According to ecofeminism, women have special knowledge and abilities that are essential for environmental preservation because of their closer connection to nature through caregiving, managing resources, and commitment to agriculture. To achieve sustainable development, ecofeminism promotes the inclusion of women's viewpoints and voices at all levels of decision-making (Roy, 2024).

Complimenting Ecofeminism, Gender, and Development (GAD) theory emphasizes the systemic injustices that prevent women from taking part in the development processes. Jane Parpart, Patricia Connelly, Eudine Barriteau, Caroline Moser, and Barbara Bailey are prominent proponents of the theory; several of them were affiliated with the "Summer Institute on Gender and Development" and made substantial contributions to the creation of the GAD framework. By showing how traditional gender norms and power disparities impact resource distribution, labor division, and agency among various gender groups within households and communities, the theory emphasizes the intersectionality of gender with social, economic, and political processes (Parpart et al., 2000). The necessity of gender-responsive policies and the inclusion of women's viewpoints in decision-making are emphasized by this notion.

Ecofeminism sheds light on how indigenous customs and women's lived experiences might influence climate change mitigation and sustainable development plans in Nigeria. GAD's dimension demonstrates how women can be empowered to play transformative roles in climate governance by tackling systemic hurdles such as unequal access to resources, education, and leadership opportunities. Additionally, GAD emphasizes how crucial it is to include men as allies in advancing sustainable practices and gender justice. These theoretical frameworks highlight how women have a dual role in climate action as both are agents of change and victims of climate change. Because they depend on natural resources for their livelihoods and are more susceptible to climate-related calamities, women are disproportionately impacted by climate change. Nonetheless, they are positioned as key players in tackling climate concerns due to their traditional understanding of resource management and adaptation techniques. Nigeria should use the potential of women by empowering them via policy reforms, financial inclusion, political access, and education to drive progress on SDG 13. These theories also emphasize how systematic gender inequality is and how addressing larger socioeconomic and political institutional structures are necessary

to empower women in climate action. For example, GAD theory promotes inclusive institutional frameworks that acknowledge and magnify women's contributions, while ecofeminism criticizes the exclusion of women from climate governance. These frameworks are very apt in this study because, they offer a thorough grasp of how gender-responsive climate policies can foster connections between gender equality and environmental sustainability. The general aim is to promote the achievement of SDG 13 climate action.

### **African Women's Contribution to Climate Action**

By involving men and women in their communities and states to raise awareness, educate local populations, and encourage sustainable practices, women have been leading grassroots mobilization efforts in climate action both globally and on the African continent (Fahm & Memud, 2024; Offor & Chukwuma, 2023). In rural areas, where communities are more susceptible to the consequences of climate change, this is especially important. Women have significant knowledge about local environmental conditions and behaviors, particularly in rural and agricultural regions. One of the main forces behind the adoption of successful climate adaptation plans and the encouragement of environmentally good habits is their leadership in grassroots mobilization. Women have been active in grassroots mobilization in Africa, including Nigeria, to achieve SDG 13 (Climate Action) in a variety of ways, including

### **Education and Awareness Initiatives for the Rural Community**

Raising awareness and educating the rural populace are two of the main ways that African women, including those in Nigeria, support grassroots climate action. Both men and women are the focus of these programs, especially those living in rural areas, where climate change is most prevalent but resources and information are frequently scarce. To increase knowledge of the threats posed by deforestation, desertification, water scarcity, and other climate-related issues, women leaders in these communities leverage local networks (Agbogidi & Ofuoku, 2007). Women have worked to educate the public about the importance of water conservation, trash management, and sustainable land usage through social media, radio shows, and community gatherings. Women are frequently involved in planning training sessions and seminars that impart useful skills for climate resilience to educate rural populations. For instance, efforts to teach farmers sustainable farming methods like crop rotation, soil preservation, and organic farming have been spearheaded by women (Agbogidi & Ofuoku, 2007; Raimi et al., 2019). In particular, Jennifer Uchendu, a young Nigerian, uses innovative techniques to make sustainability interesting for young Nigerians through her group, Susty Vibes, which promotes eco-feminism and climate justice. Through workshops, events, and online campaigns, Susty Vibes encourages youth to act. The Eco-Anxiety Africa Project addresses the effects of climate change on mental health. The Green Belt Movement in Kenya has been successful in enabling rural women to actively participate in environmental sustainability, while the WISE movement in Uganda has also been involved in raising awareness of sustainable practices (Chikwendu, 2008). In addition to educating the public about sustainable farming methods, all of these programs raise awareness of the need for mitigation and adaptation measures to lessen the effects of climate change.

### **Implementing Climate Adaptation Techniques**

Promoting climate adaptation solutions is another crucial function of women in grassroots mobilization. According to Akinbami et al. (2019), women leaders play a vital role in creating and putting into practice plans that assist communities in adjusting to the problems posed by climate change. For example, women have led initiatives aimed at conserving water and developing irrigation systems in regions that are vulnerable to drought. Women have spearheaded initiatives to build community-led early warning systems and reasonably priced flood barriers in areas susceptible to flooding. The risk of urban dwellers is increased in several areas of Nigeria, including Lagos, Anambra, Rivers, and Bayelsa states, where flooding occurs frequently. In these regions, women have led initiatives aimed at flood adaptation and mitigation.

To deal with the 2012 flood disaster, for example, women in the states of Rivers and Bayelsa in Nigeria employed traditional adaptation techniques, such as planting trees and crops that would withstand flooding, utilizing traditional storage methods, constructing temporary platforms and bridges, and utilizing indigenous weather warning systems (Osuji et al., 2018). Local council women leaders have led flood control efforts, through infrastructure development and community education. Organizing waste management programs to unclog drainage systems and avoid obstructions that because flooding is one remarkable project engaged by women in their local communities. Through the introduction of eco-friendly garbage disposal methods in collaboration with environmental organizations, women leaders greatly decreased the likelihood of flooding in low-income areas. These community-based projects are frequently customized to meet the needs of nearby areas, guaranteeing that they are both realistic and efficient in tackling the adverse effects of climate change.

### **Adopting eco-Friendly Methods**

Another important effort carried out by women's leadership in grassroots mobilization is the adoption of eco-friendly practices to promote environmental sustainability. Through programs that support the use of renewable energy, waste reduction, and tree planting, women in both rural and urban regions have actively supported environmental sustainability (Allen et al., 2019; Ojolowo & Adeoye, 2024; Oloko et al., 2017). In 1977, the Green Belt Movement was launched in Kenya to combat poverty, environmental deterioration, and deforestation. In Kenya and some other African nations like Ethiopia, Sudan, and Somalia, this program encouraged climate education, environmental preservation, and tree planting (Chikwendu, 2008). Women have pushed for recycling and the usage of biodegradable items in some areas to cut down on waste and pollution. In addition to helping the environment, the emphasis on eco-friendly methods lowers living expenses, especially in low-income communities.

### **Women-led Cooperatives**

Through agricultural cooperatives, African women participate in grassroots activism centered on sustainable practices. Farmers get together through these cooperatives, which are frequently run by women, to exchange information, gain access to markets, and obtain funds for climate adaptation initiatives (Begum et al., 2024; Nwosu et al., 2014; Waheed et al., 2023). Climate-smart agriculture, which uses drought-resistant crops and water-efficient irrigation

methods, is one of the improvements brought about by women-led cooperatives (Ifeanyi-Obi et al., 2023; Onoh et al., 2023). Additionally, these cooperatives serve as forums for women to advocate for legislation that promotes rural development and sustainable farming, thereby addressing climate change. Women improve their financial stability and advance the larger climate change agenda by teaming together behind these cooperatives.

### **Reduction of Disaster Risk**

Women are essential to disaster risk reduction initiatives in addition to their dedication to mitigating the effects of climate change (Delica-Willison & Sevilla-Alvarez, 2022). Women are frequently the first to respond to natural disasters since they are the primary caregivers and household administrators. In anticipation of climate-related disasters like floods and other connected challenges, women leaders have arranged disaster preparedness trainings for local populations (Agbogidi & Ofuoku, 2007; Osuji et al., 2018; Story et al., 2020). By doing this, women lessen the effects of climate-related disasters on people who are already at risk, making their communities more equipped to handle the increasing threats posed by climate change.

### **Support for Renewable Energy in urban and Rural Communities**

In both rural and urban settings, African women have been instrumental in advancing the use of renewable energy. Across Nigeria, some female entrepreneurs have started programs aimed at educating communities about clean cookstoves and solar-powered lamps. Over 2 million Nigerian women are members of the Rural Women for Energy Security (RUWES) a sisterhood, which is a noteworthy example of a woman-led group that participated in a renewable energy project in Nigeria. To provide reasonably priced clean energy solutions across the nation, the organization trained women in the production and upkeep of solar systems and clean cookstoves. The primary goals of RUWES, according to its founder Bahijjahtu Abubakar, Head of the Renewable Energy Programme, Sustainable Development Goals, and Gender at the Nigerian Ministry of Environment, are to reduce emissions of short-lived climate pollutants, ensure life safety, and provide affordable, sustainable clean energy access for everyone, particularly the rural poor (Climate and Clean Air Coalition [CCAC], 2017). Training in renewable energy technology including solar cooking and biogas systems has been offered in Uganda under a program called WISE (Fairtree.org, 2023). By limiting exposure to dangerous smoke from conventional cooking methods, such programs not only lessen reliance on fossil fuels but also enhance health outcomes.

### **Promotion of Climate Policies that Incorporate Women**

Women have also been instrumental in advocating for gendered climate engagement through legislation in Africa. Despite their historical underrepresentation in politics, women's views have been amplified in policy talks, thanks to their leadership in local communities. Local climate change policies have been pushed for by women leaders, who have called for increased funding for disaster preparedness, sustainable infrastructure, and education. Women leaders have been outspoken supporters of gender-responsive climate policy at the federal level. Samia Suluhu Hassan, Tanzania's first female president, is a prime example, having advocated for climate justice since taking office in 2021. She is now the international face of African countries, promoting the release of climate change funds to help low-income nations meet the

ambitious goals of sustainable development (Inter-Parliamentary Union [IPU], 2025). Furthermore, as part of the Paris Agreement, Nigerian women in parliament have advocated for the inclusion of gender issues in the nation's Nationally Determined Contributions (NDCs). To ensure that climate initiatives are inclusive and equitable, their efforts have brought attention to the significance of empowering women as important stakeholders in climate governance.

The aforementioned examples of women's roles in climate action highlight the transformative influence of Nigerian women in spearheading climate resilience initiatives. They have applied creative ways to solve climate challenges and advance sustainable development by utilizing their distinct viewpoints and leadership abilities. However, because of certain political, social, cultural, and economic obstacles, their efforts and contributions to climate action are still insufficient to hasten the fulfillment of the SDGs, particularly SDG 13. Promoting women into leadership roles and continuing to support women-led projects through finance, capacity building, and policy changes that give gender equality in climate action top priority is crucial if women are to achieve remarkable success in this area.

### **Obstacles to Nigerian Women's Climate Leadership**

Many obstacles prevent Nigerian women in climate leadership roles from effectively advancing climate action. These obstacles include but are not limited to, cultural and political as well as limited access to networks and resources. Below is a discussion of these issues:

#### **Political limitations**

Nigerian women are faced with harsh political limitations on climate leadership, which inhibits their ability to influence environmental policy and climate action decisions. The strongly ingrained patriarchal political structure is a significant obstacle, preventing women from holding leadership positions in a variety of fields, including climate governance (Adebayo et al., 2020). It is challenging for women to obtain representation in entities that make policies relating to climate change since political institutions, party systems, and electoral procedures favor male-dominated leadership (Ugwu & Okoye, 2022). Furthermore, despite women's critical role in environmental conservation and adaptation strategies, cultural and religious norms limit their influence in shaping climate policies by reinforcing gender stereotypes that view them as unfit for leadership roles (Ferdous & Uddin, 2021; Goryunova & Madsen, 2024; Okunade et al., 2023).

The absence of institutional and financial support for women seeking leadership roles in climate governance is another significant barrier. In Nigeria, women frequently face barriers to obtaining party endorsements, political mentorship, and campaign funding all of which are essential for winning elected or appointed positions. Women are underrepresented in important decision-making organizations because political parties, which are the entry point to leadership, rarely place a high priority on their inclusion (Ugwu & Okoye, 2022). This lack of institutional support also applies to ministries and agencies that deal with climate change, where women are frequently excluded from key positions. Because of this, gender-sensitive strategies that acknowledge the disproportionate impact of environmental degradation on women are not incorporated into policies tackling climate change.



Women's involvement in climate leadership is further hampered by Nigeria's inadequate legal and legislative framework governing gender representation. Despite the existence of policies like the National Gender Policy, its implementation is still unsatisfactory because of political opposition and a lack of accountability. The National Assembly has fiercely opposed attempts to enact gender-inclusive legislation, such as those calling for a minimum quota for women in leadership and political roles. The political marginalization of women in climate leadership will continue in the absence of intentional legislative reforms and enforcement mechanisms, which will hinder Nigeria's ability to fully utilize different views in effectively addressing climate concerns.

### **Cultural limitations**

Due to cultural norms that frequently place women in inferior roles within society, women's engagement in climate leadership in Nigeria is severely hampered (Oluwaleye et al., 2024). Women are discouraged from actively participating in decision-making, particularly climate governance because many Nigerian communities maintain patriarchal attitudes that define leadership as a field dominated by men. Women's participation in public issues, such as environmental policy and climate leadership, is sometimes restricted due to the expectation that they concentrate on household duties. In addition to lowering women's visibility in leadership roles, this deeply rooted cultural attitude also reduces their contributions to sustainability and climate resilience initiatives.

Women's access to economic resources and education is also governed by cultural norms, which further limits their capacity to take on leadership roles in climate governance (Yewande & Olawunmi, 2023). Girls face barriers to higher education in many rural and semi-urban settings, especially in STEM fields - science, technology, engineering, and mathematics and environmental studies, which are essential for climate leadership and expertise (Agboola, 2021; Ajai & Azuaga, 2022). Women who have limited access to education are less knowledgeable and confident when discussing complicated climate concerns, which feeds into the myth that they lack the qualifications for leadership roles. Because they lack the financial independence necessary to compete for powerful positions in climate policy and governance, women's economic reliance on male figures also inhibits them from pursuing leadership chances.

The absence of women from conventional leadership institutions, which are crucial to grassroots climate governance, is another important cultural barrier. Despite their extensive understanding of ecological sustainability, women are frequently marginalized when traditional rulers and male elders make important choices regarding land use, resource management, and environmental conservation in many Nigerian communities. Due to cultural biases that favor male voices in decision-making, women's contributions are underappreciated even when they spearhead climate adaptation initiatives in their communities. Targeted lobbying, community education, and legislative changes that support gender-inclusive leadership in climate governance are necessary to break down these cultural barriers.

### **Limited Resources and Network Challenges**

One major barrier to women's involvement in climate leadership in Nigeria is their limited access to finance, resources, and professional networks (Onoh et al., 2023). Financial obstacles frequently prevent women who want to be leaders in climate governance from running for office, starting groups that address climate change, or carrying out neighborhood-based environmental projects. Since financial institutions and donors frequently give preference to well-established, male-led organizations, women leaders have a harder time obtaining the financial and technical resources required to carry out large-scale climate projects than their male counterparts (Amusan et al., 2021).

In addition to financial limitations, Nigerian women face barriers to professional networks and mentorship opportunities in the field of climate governance. Because men frequently hold the majority of leadership positions in environmental management and climate policy, it can be difficult for women to become more visible and build relationships with influential decision-makers. Due to institutionalized exclusion and societal restrictions, women are unable to attend many climate-related conferences, policy discussions, and high-level negotiations. The lack of solid networks makes it harder for women to access chances for collaboration, capacity-building initiatives, and knowledge-sharing platforms which are essential for developing climate leadership.

Another major challenge for women's climate leadership is the lack of gender-inclusive resource distribution rules, which prohibit women from taking full part in climate leadership (Okunade et al., 2023). Women-led climate projects are frequently underfunded and ignored as a result of government programs, climate adaptation money, and international donor initiatives failing to emphasize gender-sensitive approaches. Despite their crucial role in environmental sustainability, this exclusion reduces women's capacity to support efforts to build climate resilience. Targeted financial inclusion tactics, capacity-building initiatives, and institutional changes that give women access to capital, mentorship, and professional networks in climate governance are necessary to remove these obstacles.

### **Conclusion**

Women have a key role in helping Africa (Nigeria) move closer to Sustainable Development Goal 13 (Climate Action). Their ability to effect significant change is demonstrated by their leadership and grassroots mobilization initiatives in sustainable agriculture, renewable energy, and community-driven reforestation. Nigerian women continue to contribute significantly to climate action despite major institutional, cultural, and political obstacles. To fully realize their potential and effectively solve climate concerns, women must be empowered through education, financing, and inclusive legislation. Nigeria can attain a more sustainable and equitable future by encouraging women to lead and incorporating gender-sensitive measures into climate governance. To increase the impact of women's efforts, it is essential to fortify partnerships and establish supportive environments. In addition to being a matter of equity, women's leadership in climate action is strategically necessary to achieve sustainable development.

## **Recommendations**

Notwithstanding the obstacle's women face in climate leadership, there are numerous potentials to strengthen women's leadership skills in climate action, which would improve their capability to successfully contribute to Nigeria's achievement of SDG 13 (Climate Action). These include to:

1. **Boost women's involvement in climate governance:** Inclusive institutional frameworks and policy changes are necessary to promote gender equality in climate leadership. Women can have an impact on climate governance through policies that encourage their involvement in decision-making, such as gender quotas in leadership roles and political office. This will improve inclusive policymaking and provide doors for the number of women-led climate action organizations in the country to increase.
2. **Increase access to education and training:** Women's ability to assume leadership roles in climate action depends on encouraging their participation in STEM fields and offering them specialized training in climate change adaptation, mitigation, and leadership to increase their capacity for effective action. Through financial support and technical aid, international organizations and development partners can be extremely helpful in advancing these initiatives.
3. **Encourage women-led climate initiatives:** It's critical to encourage women-led climate action efforts. This can be accomplished by providing funding and resources to women-led initiatives that emphasize community-based climate adaptation plans, sustainable agriculture, forestry, and renewable energy. This calls for financial support in the form of grants, loans, and sponsorship of climate change projects at the national and international levels.
4. **Raise awareness and combat gender stereotypes:** Achieving SDG 13 requires ongoing lobbying and awareness initiatives to alter cultural views of women's responsibilities in society and to highlight their leadership and environmental sustainability contributions.
5. **Boost networks and partnerships:** Giving women a place to work together, exchange stories, and get resources might help them speak more loudly as a group when it comes to climate action. In order to increase efforts and exchange best practices in climate action, partnerships between the public and corporate sectors, non-governmental organizations, and women-led groups can help achieve this.

## References

- Adebayo, A., Oseji, A., & Kalejaiye, T. G. (2020). Gender equality and leadership challenges in Nigeria. *Sapientia Foundation Journal of Education, Sciences and Gender Studies*, 2(3). DOI: 10.2139/ssrn.3825028
- Adewuyi, T. O., & Ezeamaka, C. K. (2023). Ecological disasters, climate change, and rural violence in Nigeria, *Rural Violence in Contemporary Nigeria*, 87-108.
- Agbogidi, O., & Ofuoku, A. (2007). Promoting environmental protection in Nigeria through environmental education: The role of women. *Journal of Environmental Extension*, 6, 17-24. DOI: 10.4314/jext.v6i1.2756
- Agboola, O. S. (2021). Women and STEM Education in Nigeria: Progress, Shortcomings, Challenges, and Way Forward. In *Overcoming Challenges and Barriers for Women in Business and Education: Socioeconomic Issues and Strategies for the Future* (pp. 211-225). IGI Global.
- Ajai, J. T., & Azuaga, C. I. (2022). Gender equality in science, technology, engineering and mathematics in Taraba state, Nigeria, *Jurnal Varidika*, 34(2), 116-128.
- Akinbami, C., Olawoye, J., Adesina, F., & Nelson, V. (2019). Exploring potential climate-related entrepreneurship opportunities and challenges for rural Nigerian women, *Journal of Global Entrepreneurship Research*, 9, 1-28. DOI: 10.1186/s40497-018-0141-3
- Allen, E., Lyons, H., & Stephens, J. C. (2019). Women's leadership in renewable transformation, energy justice and energy democracy: Redistributing power, *Energy Research & Social Science*, 57, 101233. DOI: 10.1016/j.erss.2019.101233
- Amusan, L., Akokuwebe, M., & Odularu, G. (2021). Women development in agriculture as agency for fostering innovative agricultural financing in Nigeria, *African Journal of Food, Agriculture, Nutrition and Development*, 21(7), 18279-18299.
- Begum, M., Marium, B., & Masud, M. A. I. (2024). Green cooperatives and the empowerment of Rural Women Entrepreneurs: Insights from Sunamganj, Bangladesh, *Asian Research Journal of Agriculture* 17(4), 299-315
- Chikwendu, E. (2008). Wangari Maathai: Nobel laureate, environmentalist, and engagement with the Kenya state, In *Gendering Global Transformations* (pp. 41-56). Routledge.
- Delica-Willison, Z., & Sevilla-Alvarez, A. (2022). Women at the Forefront of Civil Society Advocacy in Disaster Risk Reduction Governance, In *Oxford Research Encyclopedia of Natural Hazard Science*.
- Fahm, A. O., & Memud, S. Y. (2024). Examining the contributions of muslim women in achieving sustainable development goals in Nigeria, *Discover Global Society*, 2(1), 1-15.

- FairTree.Org (2025). *Fighting deforestation with Wise Women Uganda*, <https://fairtree.org/wisewomenuganda>
- Ferdous, J., & Uddin, N. (2021). Women in decision-making positions: Developments and stumbling blocks, In *Gender Equality* (pp. 1168-1180). Springer.
- Goryunova, E., & Madsen, S. R. (2024). The current status of women leaders worldwide. In *Handbook of research on gender and leadership* (pp. 2-22). Edward Elgar Publishing.
- Ifeanyi-Obi, C. C., Akwiwu, U. N., Uche, C., Abuta, C. A., & Onwusika, A. I. (2023). Effects of capacity building on rural women involvement in Climate Smart Agriculture initiatives in Rivers state, Nigeria. *Annals of Science and Technology*, 8(1), 40-45.
- Lau, J. D., Kleiber, D., Lawless, S., & Cohen, P. J. (2021). Gender equality in climate policy and practice hindered by assumptions. *Nature Climate Change*, 11(3), 186-192.
- Muthuki, J. M., Doyle, T., & MacGregor, S. (2013). *Ecological activism in highlighting gendered relations: Wangari Maathai's Green Belt Movement in Kenya*, [https://www.researchgate.net/publication/277229140\\_Rethinking\\_ecofeminism\\_Wangari\\_Maathai\\_and\\_the\\_Green\\_Belt\\_Movement\\_in\\_Kenya](https://www.researchgate.net/publication/277229140_Rethinking_ecofeminism_Wangari_Maathai_and_the_Green_Belt_Movement_in_Kenya)
- Nwosu, I., Okon, D., & Onuoha, O. (2014). Analysis of contributions of women cooperative societies to agricultural development in Okigwe local government area, Imo State, Nigeria, *International Journal of Agricultural and Rural Development*, 17(1), 1613-1618.
- Offor, U. I., & Chukwuma, O. M. (2023). Women as Change Agent for Sustainable Development in the 21st Century in Nigeria, *International Journal of Research and Innovation in Social Science*, 7(11), 807-815.
- Ojolowo, S., & Adeoye, D. (2024). Exploring Gender involvement in solid waste management in Ibadan, Nigeria: Roles, Challenges, and opportunities for sustainable development, *Journal of Architecture and Civil Engineering*, 9, 96-110. <https://doi.org/10.35629/8193-090996110>
- Okunade, B. A., Adediran, F. E., Balogun, O. D., Maduka, C. P., Adegoke, A. A., & Daraojimba, R. E. (2023). Gender policies and women's empowerment in Nigeria: an analytical review of progress and barriers, *International Journal of Applied Research in Social Sciences*, 5(10), 543-565.
- Oloko, M., Mamman, M., & Ekpo, R. (2017). Underscoring the role of Nigerian rural women in environmental protection: Lessons from Makarfi in Kaduna State, Nigeria. *African Journal of Environmental Science and Technology*, 11(5), 213-218.

- Oluwaleye, J., Ojogbede, O., & Feyisara, O. (2024). Women's representation in governance in the Nigerian Fourth republic: Issues and challenges, *European Modern Studies Journal*. [https://doi.org/10.59573/emsj.8\(2\):280-294](https://doi.org/10.59573/emsj.8(2):280-294).
- Onoh, U. C., Erezi, E., & Clement, B. (2023). Analyzing the Role of women in climate resilience Building and sustainable farming practices in Nigeria. *Iiard International Journal of Geography and Environmental Management* 9(4), 65-87.
- Osuji, E. R., Okodudu, S., & Joab-Peterside, S. (2018). Traditional local adaptation strategies of women to the 2012 flooding in communities in Rivers and Bayelsa States, Nigeria, *International Journal of Advanced Research*, 6(1), 1282-1292.
- Parpart, J., Connelly, P., & Barriteau, E. (2000). *Theoretical perspectives on gender and development*, [http://lst-iiiep.unesco.org/cgi-bin/wwwi32.exe/\[in=epidoc1.in\]/?t2000=011808/\(100\)](http://lst-iiiep.unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=011808/(100)).
- Raimi, M. O., Suleiman, R. M., Odipe, O. E., Tolulope, S. J., Modupe, O., Olalekan, A. S., & Christianah, M. B. (2019). Women role in environmental conservation and development in Nigeria, *Ecol Conserv Sci*, 1(2), 001 - 015.
- Robert, E. A., Ebu, V. T., & Ekpoto, D. (2022). Indigenous Knowledge of Rural Women in Forest Resources Utilization and Conservation in Agoi-Ibami and Agoi-Ekpo, Yakurr Local Government Area, Cross River State, Nigeria, *Riscuri și Catastrofe*, 31(2), 55-80.
- Roy, S. (2024). The Benefits of Ecofeminism: A Guide to Sustainable Development. In *Diversity, Equity and Inclusion* (pp. 520-532). Routledge.
- Story, W. T., Tura, H., Rubin, J., Engidawork, B., Ahmed, A., Jundi, F., Iddosa, T., & Abrha, T. H. (2020). Social capital and disaster preparedness in Oromia, Ethiopia: An evaluation of the “Women Empowered” approach, *Social Science & Medicine*, 257, 111907.
- Ugwu, C. S., & Okoye, C. A. (2022). Political parties and women candidacy: Gender analysis of the 2019 general elections in Nigeria, *Afro Eurasian Studies*, 9(3), 165-181.
- Waheed, K. O., Abiola, D. T., Daudu, A. K., & Siyanbola, I. F. (2023). Women Farmers empowerment: The role of cooperative societies in Kwara State, Nigeria, *Al-Qadisiyah Journal for Agriculture Sciences*, 13(2), 136-151.
- Yewande, T., & Olawunmi, A. (2023). Exploring the impact of cultural beliefs and practices on women's education in northern Nigeria, *Journal of Education Review Provision*, 3(1), 1-10.