PLACING WOMEN AT THE CENTRE OF A COORDINATED AFRICAN CLIMATE CHANGE AGENDA: A FOCUS ON THE REPUBLIC OF THE SUDAN AND THE DEMOCRATIC REPUBLIC OF THE CONGO

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Abstract

Climate change disproportionately impacts women and girls. Their vulnerability to the effects of climate change is particularly evident in volatile regions like the Republic of Sudan and the Democratic Republic of the Congo (DRC). Like times of conflict where societal norms crumble leaving women and girls vulnerable: climate change exacerbates existing inequalities, with women bearing the brunt of its consequences. especially in sub-Saharan Africa. Women, who are frequently responsible for agricultural activities and household care work, face a myriad of climate change related challenges including food and nutritional insecurity, increased malaria transmission, malnutrition, displacement, reduced agricultural productivity, lack of access to clean water and lack of access to clean cooking technologies. This article delves into the contexts of Sudan and the DRC to highlight the critical need for a coordinated African climate change agenda. It highlights the need for genderfocused approaches that advance the capacities of women and leverage their conventional societal roles in analysing the relationship between women and nature, particularly rural women. This article thus proposes placing women and girls at the centre of the continent's climate change agenda as a catalyst to realise its collective goals. It concludes by analysing the gender-focused climate approaches contained in the 'Africa Leaders Nairobi Declaration on Climate Change and Call to Action' (Nairobi Declaration). The Nairobi Declaration provides a guiding beacon for mainstreaming gender-specific climate policies and actions. Such approaches entail integrating gender considerations into all policy development, implementation, and evaluation stages, ensuring that women's voices and priorities are heard and addressed.

Keyword: Women, Climate Change, Democratic, Agenda

Introduction

Climate change is not gender-neutral; it affects women and men differently. The human impacts of natural disasters, like climate change, are not entirely determined by nature but by economic, cultural, and social

relations. Often, women are more adversely affected by natural disasters than men. Already, climatic shocks, including yearly droughts, floods, rising temperatures and persistent air pollution, have caused far-reaching repercussions such as malnutrition

and displacement, affecting women. girls, and children particularly. sub-Saharan Africa, even minor shifts in temperature and precipitation disease patterns can disrupt dynamics transmission and crop vields. significantly affecting household health and income. Women. who are frequently responsible for agricultural activities and household care work, are particularly vulnerable to these changes. Limited access to resources, such as land ownership, further exacerbates their vulnerability.

Rising temperatures and changing rainfall patterns also increase malaria transmission in sub-Saharan Africa. particularly in countries like Nigeria, the Democratic Republic of the Congo, Uganda, Mozambique, Angola, and Burkina Faso. Malaria infections during pregnancy lead to significant health risks for both mothers and children, including low birth weight and higher mortality rates. To further contextualise the effects of the climate change crisis on women, according to the National Drought Management Authority's October 2022 Report, 4.35 million people in Kenya needed humanitarian assistance due climate-related disasters. including 942,000 children and 134,000 pregnant/lactating women who were acutely malnourished and needed treatment.

The impacts of climate change are not uniform across geographic regions, socio-economic groups, or genders. Women are often disproportionately affected by natural disasters due to gender norms that shape their roles. rights, and opportunities. For African women, two themes predominate: gender and poverty. Due to prevalent poverty on the African continent. African women will be more affected by climate change than men in Africa and more than women in the Global North, Further, (African) women in lower social ranks will be significantly more affected by natural disasters than women in higher social ranks. Simply put, women in Africa are extremely vulnerable to climate change. highlight the vulnerability caused by climate change and disproportionate impacts on African women, this article uses the Republic of Sudan, specifically Darfur, and the Democratic Republic of the Congo (DRC) as case studies. Furthermore. climate change exacerbates gender inequality, indicating a rise in rates of gender-based violence during natural disasters, pandemics, and conflicts. interconnected These challenges underscore the urgent need for gendersensitive and context-specific climate approaches to change adaptation and mitigation efforts to address (African) women's complex vulnerabilities and ensure equitable outcomes for all.

It is necessary first to understand the disproportionate impacts of climate change on women, particularly African women. This is done in the introduction section of the article. The second section highlights the exclusion of women generally in climate change discussions, including in international environmental law frameworks such as

the United Nations Climate Change Convention (UNFCCC). The third section deals with the Sudan case study, highlighting the intersection of gender and climate change in the Darfur region, including how the role of women in society has contributed to and victimised them in climate change. Section emphasises three including importance of women in climate change policy. bringing to the fore their traditional roles as primary caregivers and critical actors in managing water and land resources

The fourth section discusses (un)iust energy transition in context of DRC. The fifth section discusses gender-focused the commitments in the 'Africa Leaders Nairobi Declaration on Climate Change and Call to Action' (Nairobi Declaration), including recognising the effects of food and nutritional insecurity, lack of access to water, and inadequate access to clean cooking technologies as a gender-focused climate change policy. Section six presents the conclusion.

Women and Decision-Making in the Context of Climate Change

Women have historically been excluded from climate change conversations in the Global North and the Global South. During International Women's Day Celebrations in 2023, the United Nations Framework Convention on Climate Change (UNFCCC) called on the world to recognise women's vital role tackling climate change. Half the

world's population comprises women and girls, yet they are often left out of the climate change conversation. Regrettably, the UNFCCC framework equally fails to adequately recognise the role of climate change in escalating gender-based violence against women, offer guidance on safeguarding reproductive rights amidst climate change, or acknowledge the gender-specific health impacts resulting from climate change.

Maguire highlights the slow progress in integrating gender considerations into the UNFCCC, attributing this partly to the initial omission of 'gender' and 'women' in the 1992 UNFCCC Convention. Historically, the UNFCCC framework focused on increasing the representation women within the Conference of the Parties (COP) delegations to address gender issues. While enhancing gender representation at the COP is essential, it tends to disproportionately benefit women already in positions of power – further compounding the differential impacts of climate change on women of higher social ranks vis à vis women of lower social ranks

In contrast to the UNFCCC, a notable shift with the Paris occurred Agreement. where the preamble explicitly highlights women's role in global climate action. The Paris Agreement emphasises the importance respecting, promoting, considering various human rights obligations, including gender equality and women empowerment, alongside other key considerations such as indigenous rights, local communities. and intergenerational equity. The Paris Agreement's acknowledgement of the intersectionality between gender and climate change signifies a growing recognition of the importance addressing gender disparities in climate policy and climate action. By gender integrating equality and women's empowerment into foundational principles of the Paris Agreement, there is a more explicit mandate for incorporating gender across climate-related perspectives initiatives and decision-making processes at the international level. This intersectionality between gender and climate is further echoed in the Nairobi Declaration discussed section five of this article

Women in Africa play the roles of caregivers, comforters, peacemakers, and homemakers Women are significant custodians ofresources, and the lives of rural women are profoundly affected by seasonal changes. They provide the bulk of labour in agriculture and are prominent resource managers, especially in rural Africa. Furthermore. women are overwhelmingly responsible for subsistence food production. procurement of water, fuel and animal husbandry involving small animals. In many African societies, it is women who collect forest resources, including food, firewood, fibre timber, animal fodder, etc.; they are equally critical in controlling water pollution in relation to household use and agriculture and fisheries. This makes them critical and among the most vulnerable to climate

change, as demonstrated in the DRC and Darfur case studies below.

Justifying a gender-focused climate change Agenda in Darfur

Agricultural practices and the role of women

In Darfur, unsustainable agricultural practices are a significant contributor to environmental degradation. The region's agricultural activities and cultivation depend heavily on rainfall and land fertility, which makes it vulnerable to climate change and natural disasters (Darfur experiences devastatingly long periods of droughts, a decline in rainfall in the 1970s and 80s, and a devastating famine in 1984-1985).

Present-day rainfall in Darfur varies from practically nil in the north to more than 800mm per autumn in the south. Despite this high rainfall variability and persistent droughts, 80-90 per cent of livelihoods in Darfur depend on rainfed agriculture and livestock. Crop farming is the main activity for the majority of the Darfurian population. In North Darfur, there are two types of farming systems: first is the farming systems practised in the clay soils located along alluvial and seasonal valleys (wadis); and secondly and most widespread, the rainfed cultivation by small holder farmers small-holder farmers mostly of bulrush millet and secondary cash crops, including ground nuts and sesame on the goz (sandy) soils.

Ninety per cent of people working in

millet fields are women and millet is the main source of nutrition for families, especially in the northern belt. To prepare the crop, women grind the millet into flour and use it for preparing a wide range of foods. Millet is a staple, and communities depend on it for their daily meals and nutrition. The most deprived families in Darfur eat once a day, and toward the end of the dry season, food portions diminish gradually. Annual fluctuations precipitation and the high variability of the rainfall distribution pattern in each rainy season make the crop situation difficult. In dry years, women must cultivate even larger areas to secure adequate amounts ofsubsistence millet. This leads to intensified desertification in drought years when nature regeneration is impaired.

The removal of vegetation from goz soils has intensified soil erosion and deteriorated soil fertility, resulting in low land productivity and crop yields. Farmers are forced to cultivate larger areas that extend into rangeland and ecologically vulnerable areas, this increases environmental degradation and tensions between pastoralist and farming communities. Women suffer much more than men do from environmental degradation. However, thev actively contribute to this degradation through desperate attempts to keep their families living. Ultimately, this makes them both agents and victims of the Sahelian desertification.

Water scarcity and women in Darfur

Changing climate and resultant water insecurity is a significant cause of women's vulnerability in Darfur. Like other Sahelian countries (Mali, Chad, and Niger), shrinking patterns in rainfall are exacerbating resource competition. As of 2011, 400 Liters of water were used by 20 people in Traditionally, women are responsible for searching for water. often having to go far and wide for it. Due to the degradation of the region's vegetation cover in higher catchment water courses of hydrological systems of these courses have also changed in varied ways. This has led to changes in the surface runoff and the recharge of the shallow acquirer lavers. The absence vegetation causes less seepage, more evaporation, quicker runoff, more soil erosion, and enhanced sedimentation. These processes have led to the damming up of lower courses and diverting direction.

cytomorphological changes substantially impact both surface and ground-water supply in the forelands. Some water reservoirs (hafir, rahad) are receiving less water than before. and thus, they dry up too early in the dry season. This forces women to travel longer distances to fetch water from farther wells. Moreover, the loss of the vegetation cover enhances soil erosion and the silting up of the dug water reservoirs (hafir). This means that they hold less water than they did before. The evaporation ratio in shallow hafirs has increased drastically. In the cases where women depend on the wells in the Wadis and the mountains' forelands, a drastic sinking of the ground-water table and drying up of some wells has been observed. This means less water for the family and more work for women. Drawing full water buckets from greater depths of up to 50 meters is not an easy task, not to mention dangerous.

Effect of women on deforestation

Darfur covers an area of more than 400,000sakm of the western region of Sudan. The region comprises a range of ecosystems, northern deserts, and southern deciduous woodlands. Darfur's biological importance is due to its range of ecosystems. Darfur's natural vegetation is arguably the biodiversity component that experienced the most change over the last two hundred years. Increased cultivation, more intensive use of timber. firewood and charcoal increased livestock, and reduced and erratic rainfall are the main drivers of the change.

Forests in Darfur suffer from years of exploitation. From 2001 to 2002, South Darfur lost 987ha of tree cover (the equivalent of a 2.0% decrease in tree cover) since 2000 and had 277 kt of CO2 emissions. Since ninety per cent of households rely on wood and charcoal, wood biomass reliance has contributed to mass deforestation. Firewood is expensive and produces health-impacting smoke when burnt. Women, as the primary caregivers, do most of the cooking. As a result, they are the most predisposed to the effects of increased deforestation in Darfur.

Women's leadership in Darfur

Darfurian communities are traditionally male-dominated. Women in Darfur are customarily subordinate to men; by law the word of a man is equivalent that of two women. Women do not traditionally participate in public discussions or assume leadership positions.

Traditional female leaders, Sheikas, are assigned to represent women's issues and concerns. However, their positions are validated by male leaders, such as Omdas. The sheikas historically involved decision-making, do not participate in and attend only when meetings. invited. Sheikas are still expected to carry out their caregiver (providing food and water), this make fully taking up leadership roles is a challenge. Another form of Darfurian traditional female leadership is the Hakkama, traditional singers in Darfur who play the role of arbiter. The Hakamma use songs to shame and comment on the community's political and social concerns. However, their traditional prominence in society is fading or politicized due to the mass conflict and displacement.

Findings

Darfur demonstrates the impacts of climate change on women and its role in deepening marginalization and gendered roles. A gender-focused approach to tackle climate change impacts would enhance communities' health and well-being, reduce poverty, and provide access to affordable and clean cooking technologies.

Reinforcing and enhancing traditional women's leadership roles would foster responsive leadership and public participation. Furthermore. using traditional communication roles like Hakamma could improve awareness about climate change and nromote gender equality education. Women, too, can institute practices that offset environmental stress and degradation and should not sidelined in climate he change conversations.

The Unjust Energy Transition: Resource exploitation and the rights of women in the Democratic Republic of the Congo

Energy Transition minerals and women in DRC

The Democratic Republic of Congo (DRC) is a mineral-rich country that is critical to the energy transition. Despite its natural resource wealth and contributions to the green transition. the country still grapples with extreme poverty. Seventy-three per cent of the population in DRC lives in extreme poverty and earns less than USD1.90 a day. Additionally, less than 10 per cent of the country has access to electricity. Inversely, DRC is the largest producer and exporter of cobalt. In 2021, it accounted for 71 per cent of the world's cobalt, an essential mineral in the green economy and battery technology innovation. Cobalt is critical electronic devices like smartphones, laptops, and electric cars.

Cobalt mining is divided into two groups: large-scale mining (LSM) and

artisanal small-scale mining (ASM). LSM is estimated to make up 70 per and ASM makes up remaining 20-30 per cent of DRC cobalt production. Around 16 per cent of the DRC population works in Artisanal Small-Scale Mining (ASM). Women's work in ASM is often linked to the processing of minerals and the carrying out of heavy and potentially dangerous manual tasks. They also make a small living by selling food. beverages, and other supplies as well as cleaning. This makes the ASM sector an accessible entry point to paid work for women. While it creates opportunities for informal employment for women, it unfortunately places them at considerable risk for sexual Geographical violence. and georeferenced data in Eastern DRC shows that women living Artisanal Small-Scale Mining (ASM) activities are more likely to experience sexual violence

Such risk is prolific to ASM sites controlled by armed fighters and groups, where women working in the mining sector are often recruited into the sex industry. Sex for money is prevalent in the mining sectors in artisanal mining towns in Eastern DRC. Women involved transactional sex are at risk of rape and other forms of sexual violence. For women in DRC, working in artisanal mining towns has been found to possibly increase women's risk of experiencing intimate partner violence (IPV) and other forms of sexual violence perpetrated by men in society.

The global energy transition and crises in DRC disproportionately impacts women. Regrettably, human rights violations against women are directly linked to the exploitation of resources. DRC is labelled the 'rape capital of the world; rape has been used strategically by armed actors to gain access to land and valuable resources, specifically in Eastern DRC. Rape is used to depreciate the value of a woman; it reduces them to objects limiting their ability to participate in society or take up opportunities actively.

Water Safety and Women in the DRC

The lack of sustainable practices for artisanal and industrial mining has altered the natural landscape sections of the DRC. For instance, Kolwezi. the largest and important copper and cobalt mining centre in the world, has experienced deforestation, high levels ofenvironmental degradation. pollution. Studies have shown that water safety is a critical issue in DRC. Notably, water samples from mining areas have been found to contain arsenic, cadmium and lead. The water has also been found to have extremely high levels of manganese, cobalt, nickel, copper, zinc, and uranium traces. This was specifically noticeable in samples collected next to where effluents from the Likasi hydrometallurgic industry been had discharged.

Concentrations of cobalt were highly present in drinking water samples collected at village sites near industrial effluents as well as in uncooked food items (Maize flour, washed vegetables and meat), sweet potato leaves, cereals, and fish samples. Exposure to high concentrations of cobalt has been linked to plausible lung, thyroid, blood, and heart damage. Its presence in water and food, along with traces of other harmful materials, has raised concerns over the long-term impact on the health of miners, the local population, and women.

A case study found that women with paying jobs outside the home and fathers who had mining-related jobs were associated with higher risks of babies being born with visible congenital disabilities. Other studies in Lubumbashi linked pre-eclampsia cases with blood lead levels in parturient women, although the source of the lead contamination is unknown.

Women's participation in forest management

Forests in DRC are also increasingly encroached upon as small-holder farmers move into the forest to escape conflict and insecurity. In DRC, 73 per cent of farmers are women, and they produce 80 per cent of food crops for household consumption. Women also use forest resources for household needs, such as providing firewood and food. Deforestation and degradation in DRC is driven in part by small-scale, slash-and-burn agricultural practices and charcoal production. Deforestation is additionally attributed to cocoa plantations and coffee, from colonial times and the expansion of urban areas.

According to the Food and Agriculture Organization (FAO), the DRC hosts the second-largest contiguous forest area. As a result, it is Africa's largest recipient of the Reducing Emission Deforestation and Degradation (REDD+). A report on the implementation ofREDD+ programming in the DRC cited the lack of participation of women in forest governance as a hindrance to effective conservation, reforestation, and agroforestry activities. This is despite the vast and differentiated knowledge about forests held women.

exclusion This is reflective gendered cultural beliefs in DRC. Traditionally, women can only access land ownership indirectly through their husbands or other male members of their family. Women bear a heavier workload than men in terms of time spent walking the fields or the fringes of the forest, tending the crops, collecting firewood, and other tasks. However, men's activities are much more highly valued. This workload prevents the participation of women in forest management. Additionally, the forest management meetings take place during traditional clan meetings where women are underrepresented and not expected to speak participate actively despite being the primary cultivators of land.

Governance and women in DRC

Despite DRC's role in the just energy transition agenda, women in DRC are experiencing a regression in their human rights and well-being. Their

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ability to take up governance and leadership roles is contentious. Like in other African societies, women are viewed as the primary caregivers and nurturers in DRC. However, in DRC. they are also viewed as passive victims of war. This has led to women not actively participating in peacebuilding negotiations. formal contributions of women in regions like South Kivu are relegated to informal settings in the local communities and the family. Interestingly, the DRC resolution adopted UN guarantee women's role in peacemaking.

Findings

The climate crisis and the energy transition have taken centre stage globally. Mineral-rich DRC is strategic to fast-tracking the energy transition through minerals such as cobalt, a critical mineral in the energy transition. However, the world cannot achieve a just energy transition without addressing the gender inequalities, such as sexual violence and political exclusion that plagues women in DRC. The continued exploitation of DRCs minerals requires a rights-based just transition approach. A holistic focus on the energy transition will impact other UN Sustainable Development Goals (SDGs) that promote decent work and economic growth, education, well-being. good health and responsible consumption and production, and poverty eradication.

Africa's Climate Change Agenda Between September 4th and 6th, 2023,

Kenya, for the Africa Climate Summit to deliberate on climate solutions specific to the African region in preparation for COP 28. The summit concluded with signing the Africa Leaders Nairobi Declaration on Climate Change and Call to Action (the "Nairobi Declaration").

The preamble of the Nairobi Declaration notably reaffirms the findings of scientists and researchers. who have confirmed that Africa is experiencing warming faster than the rest of the world. It underscores the urgent need for action, as unabated climate change is projected to have increasingly adverse impacts African economies and societies. ultimately impeding economic growth and overall well-being. The preamble also recognizes that climate change is humanity's greatest challenge and poses the most significant threat to all life on Earth.

Like the Paris Agreement, the Nairobi acknowledges Declaration intersectionality between gender and climate change, albeit more in-depth and context-specific. The Declaration recognises the impacts of climate change on agricultural productivity, access to clean water, access to clean cooking technologies, and food and nutritional insecurity. Subsequently, it entrenches (gender) responsive commitments as part of Africa's Climate Change Agenda, discussed below.

Article 45 of the Nairobi Declaration highlights the commitment to enhance an inclusive approach to addressing climate change. This inclusive approach involves children, vouth, living with women persons disabilities, indigenous people, and communities facing climate vulnerabilities. By prioritising the participation and perspectives of these diverse groups, efforts to address climate change can he more comprehensive. effective. and equitable.

Climate change affects agricultural productivity. impacting women unequally as primary caregivers. Article 31 of the Nairobi Declaration highlights a commitment to intensify efforts to increase agricultural vields through sustainable practices. By emphasising sustainable agricultural practices. Declaration the acknowledges the importance adopting climate-resilient approaches that can help mitigate the gendered impacts of climate change agriculture and food security. The Declaration's emphasis on addressing food production, availability, access, and nutrition at the household level reflects an understanding of the interconnected nature ofclimate change, gender, and food insecurity.

The preamble to the Nairobi Declaration emphasises that approximately 970 people in Africa lack access to clean cooking facilities. In Article 26 of the Nairobi Declaration. Africa commits promote clean cooking technologies and initiatives. This commitment is framed within the context of achieving a just energy transition and advancing gender equality. particularly African rural women, youth, and children. By prioritising adopting clean cooking technologies. Africa aims to address energy access challenges while empowering vulnerable such populations. women in rural areas

The concerns raised in the Nairobi Declaration regarding clean cooking align with the challenges faced by women in Sub-Saharan Africa dedicate Women and girls who extensive time to cooking gathering fuels bear a disproportionate burden from using open fires or inefficient stoves for cooking. The reliance traditional cooking on methods poses significant health risks. particularly to women and children exposed to indoor air pollution. Addressing this issue is paramount, as providing women with access to modern energy solutions represents a crucial vet often overlooked strategy for empowering women and promoting gender equality. transitioning to cleaner and more efficient cooking technologies, such as clean cookstoves, women and girls can reduce their exposure to harmful pollutants, alleviate the chore of fuel collection, and free up time for income-generating education. activities, and other pursuits.

Moreover, the Nairobi Declaration notes that the increasing frequency of extreme weather events and alterations in water cycle patterns are exacerbating difficulties in accessing safe drinking water. As a result, around 400 million people in Africa lack access to clean drinking water and approximately 700 million lack access to adequate sanitation facilities. Article 43 of the Nairobi Declaration commits to supporting the implementation of Water the Africa Investment Programme (AIP). The AIP aims to bridge the water investment gap in Africa by mobilising US\$30 billion by 2030. By prioritising investments in water infrastructure and management. the AIP seeks to enhance access to clean water and sanitation facilities. thereby contributing to sustainable development and the overall wellbeing of people across particularly women who are traditionally with tasked the community role of fetching water.

reflected in the Nairobi As Declaration, Africa's climate change agenda attempts to acknowledge and address the multifaceted and unequal impacts of climate change agricultural productivity, access to clean water, access to clean cooking technologies and food and nutritional insecurity. By recognising the unequal impacts of climate vulnerability across various dimensions the Nairobi Declaration evidence nuances gender-responsive strategies, particularly for women.

Conclusion

Gender plays a critical role in shaping climate policy due to its influence on social and cultural dynamics, which affect gender power dynamics and within roles households communities. Across many societies. social and cultural norms often restrict women and girls' capacity to respond to and adapt to climate change effectively. In patriarchal societies particularly, women frequently face exclusion and marginalisation decision-making processes, hindering meaningfully their ability to climate-responsive participate in planning, policymaking, and action on international, regional and national fronts

Feminist critiques of climate policy advocate for reforms that extend beyond solely considering how women experience and respond to climate Instead. change. they emphasise ensuring that marginalised groups' values, knowledge, and preferences shape international climate law. This perspective addresses systemic inequalities and challenges entrenched in power dynamics, aiming for a more inclusive and equitable approach to formulating and implementing climate policy.

DRC and Sudan demonstrate the crosscutting nature of climate change impacts on women. The devastating impacts of climate variability and environmental degradation contribute continental to major issues: displacement. food insecurity. disrupted access to essential resources water and clean cooking technologies, and limited reproductive and healthcare services. These challenges need to be addressed in a

manner responsive to women's actual needs.

The Nairobi Declaration's recognition of the effects of food and nutritional insecurity, lack of access to water, and inadequate access to clean cooking technologies present the critical importance of adopting holistic and gender-sensitive approaches to climate adaptation and mitigation efforts. This acknowledgment highlights interconnected nature of climate change impacts and the need for comprehensive strategies that address different groups' specific needs and vulnerabilities, particularly women and marginalised communities.

The Nairobi Declaration provides a guiding beacon for mainstreaming gender-specific climate policies and actions in international climate law by emphasising the importance of gendersensitive approaches. Such approaches entail integrating gender considerations into all policy development, implementation, and evaluation stages, ensuring women's voices and priorities are heard and addressed. As Ellen Johnson Sirleaf, Liberia's former president, emphasised, "Women's leadership and decision-makers must come from the people affected by those policies. It should be women at the bottom who policies." dictate those perspective underlines the significance of ensuring that women from diverse backgrounds and those most impacted by climate change have a voice in policymaking processes, particularly at the grassroots level in Africa.

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