



Feminist Political Ecology and the Gendered Impacts of Climate Change

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Abstract

Climate change is not only an environmental crisis but also a crisis of inequality and power. Existing social, political, cultural and economic structures mean that it has differential effects, particularly on women in the Global South. The paper takes a Feminist Political Ecology (FPE) approach to understanding how unequal power relations affect women's experiences of climate change and how gender transformative governance can help generate fairer responses to climate change. Analysing international climate policies, feminist scholarship, and case studies from Nepal, India, West Africa, and Brazil, the research focuses on international climate policies and concepts such as the Belem Gender Action Plan and the DAWN network's focus on ecological and economic justice. Results indicate that climate change exacerbates women's unpaid care work, role in agriculture, and resource insecurity, and restricts women's access to land, credit, technology and decision making. Agriculture has become more feminised by the male out-migration, where more work is being done by women but without rights or recognition. Women also provide important ecological knowledge and bolster their communities' resilience as they lead agroecological and food sovereignty movements. However, participation-centred climate policy tends to focus on the individual without taking into account underlying structural inequalities that are tied to patriarchy, capitalism and colonialism. In order to fill this void, the paper suggests the framework of Transformative Ecological Justice, which is rooted in the recognition of women's knowledge and care work, the redistribution of resources and opportunities, and representation of women in governance. It makes the case that climate resilience and gender justice are not mutually exclusive and suggests a combination of an intersectional, rights based and women-led climate policy, especially in a climate-sensitive context such as Nepal, where migration and gender inequality are also intertwined.

Keywords: Feminist political ecology; climate change; gender justice; patriarchy

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Introduction

Climate change is both an ecological threat and a structural crisis of global inequality and power imbalance. The critical perspective of Feminist Political Ecology (FPE) is essential to understanding how environmental change is created as a result of unequal power relations within gender, class, caste, ethnic, colonial histories and political institutions (Rocheleau et al., 1996; Elmhirst, 2011). FPE does not just see climate change as an environmental issue; it is a social justice issue as well because the unequal access to resources, opportunities and decision making shapes who has the highest climate risks.

Women are deeply involved in agriculture, natural resource management and domestic affairs globally in the Global South. They farm, harvest water, fuelwood, maintain biodiversity, save indigenous seeds, and ensure the well-being of their households. However, they often do not have secure land rights and access to agricultural credit, climate finance, extension services or any significant role in environmental governance. Climate change is leading to more scarce water resources, falling agricultural yields and environmental degradation, burdening women with even more workloads, and limiting their access to resources and decision-making power. In FPE, women are thus challenged as passive recipients and as naturally caring environmental stewards, who are dominant climate discourses. These two views reinforce stereotypical notions of women as lacking in agency, political identity, and leadership in climate governance (Sultana, 2014; Resurreccion, 2013).

An important aspect of FPE is the value placed on women's ecological knowledge and unpaid care work. Rural women have a vast knowledge of biodiversity conservation, seed preservation, water management, soil fertility and the adaptation to climate and adaptation, acquired from daily experience. However, the emphasis of the policies on climate change is usually on technical knowledge and neglects local and gender-based knowledge. Likewise, climate change lengthens the time spent and the number of people needed to gather water, grow food, harvest fuel and take care of their families, but these are all critical tasks that are largely not accounted for in the economy and not factored into climate policy. FPE's believes that sustainability in the environment is not a standalone issue but is linked to sustainability of care.

This paper introduces FPE in their dialogue with three complementary perspectives. First, the Development Alternatives with Women for a New Era (DAWN) framework places ecological sustainability, gender equality, economic justice and democratic participation in the same boat, and climate change in the context of broader processes of neoliberal development and global inequality (DAWN, n.d.). Second, women-led agroecological movements around the globe in Asia, Africa and Latin America show how agroecology can increase biodiversity, food sovereignty, seed sovereignty, and women's collective leadership as it fights corporate control of agriculture. Third, the

Belem Gender Action Plan, agreed to at COP30, represents an important global commitment to gender sensitivity in climate governance that needs to be complemented by a strong focus on implementation, as there is significant policy and implementation gap (UNFCCC, 2025).

The paper calls for change from vulnerability to climate justice, urging meaningful actions in the face of climate change. Women are not beneficiaries of adaptation programmes – they are rights holders, knowledge producers, decision makers and climate resilience leaders. This means institutions and power dynamics that influence access to resources, participation and environmental governance need to be changed to achieve climate justice. In Nepal, the male labour migration has significantly contributed to the feminisation of agriculture without providing women with equal rights to land, agricultural services, local decision-making institutions, climate information and finance (Leder et al., 2019). There are also overlapping inequalities, including caste, ethnicity, class, disability, age and geographical marginalisation, which influence women's lives. These trends are also observed in the Global South, where women play a significant role in farm production but hold a small share of farm land, and have restricted access to credit, insurance, extension and climate finance (FAO, 2023). These inequalities do not result from climate change, but are exacerbated by it (IPCC, 2022).

The analysis is informed by a number of key concepts. Agroecology is an interconnection between biodiversity and local ecological knowledge within farming systems. Farmers' rights to save, exchange and independently control their seeds are recognised through seed sovereignty. Care work refers to the labour which is performed without payment and is vital to the functioning of households and communities, while intersectionality emphasises the unequal climate vulnerability of different groups because of the interplay between gender and caste, class, ethnicity, disability, age, and geography. These ideas complement a climate justice lens which requires equitable access to resources, meaningful participation and structural inequality change.

Although there is global focus on climate change, the policy process remains focused on technological innovation, carbon markets, and climate financing and is largely ignoring gender (MacGregor, 2010). This paper fills that void by putting gendered power relations, intersectional inequalities and feminist perspectives on ecological justice in the middle of climate analysis. It engages with feminist scholarship, global policy and empirical evidence to construct an integrated framework that connects FPE, DAWN and women-led agroecology for influencing gender transformative and socially just climate governance in Nepal and across the Global South.

Literature Review

Climate change has been traditionally seen as a technical and environmental problem, with a focus on technologies, carbon markets and financial solutions for global climate governance. Feminist academics question this technocratic approach, and rightly so—in it they expose the unequal effects of climate change and resource control over by patriarchy, colonialism, capitalism and caste (MacGregor, 2010; Sultana, 2014). This review combines the international climate policy literature, Feminist Political Ecology (FPE) and empirical evidence, to conclude that a structural transformation is necessary to achieve this climate justice, and that technical adaptation is not enough.

Although gender has been slowly integrated into international climate governance over the last 30 years, the movement has been largely brought about by feminist advocacy. Commitments on women's participation, climate finance, recognition of unpaid care work and women environmental defenders' protection have been reinforced in Milestones like Beijing Platform for Action (1995), Lima Work Programme on Gender (2014) and Belem Gender Action Plan (2026-2034) (UN Women, 2025; UNFCCC, 2025). As noted by feminist scholars, however, these efforts are only partly about the integration of women into existing governance mechanisms rather than the dismantling of the inequities in these structures that affect land ownership, control of resources, and political power (MacGregor, 2010). Although implementation is still limited by inequitable access to climate finance, which is still skewed toward large institutions and groups over grassroots women's organisations (Resurreccion, 2013; FAO, 2023).

FPE offers an analytical approach to comprehending these gaps. It is a feminist and political ecology framework that rejects the idea that access to land and forests, water and seeds, and to decision-making is determined by ecology, but rather by complex relationships between intersecting systems of gender, class, caste, ethnicity, age and colonial histories (Rocheleau et al., 1996; Elmhirst, 2011). FPE goes beyond the concept of ecological modernisation, which focuses on technological solutions, and places environmental injustice at the heart of patriarchal government, extractive capitalism and political economies. FPE does not focus on technological solutions, as ecological modernisation does, but sees environmental injustice at the centre of patriarchal government, extractive capitalism and unequal political economies (Sultana 2021). FPE builds on Agarwal's (1992) materialist critique of ecofeminism and outlines how women's knowledge of the environment is gained in terms of their lives, work and property rights rather than any 'natural' relationship to the environment. The perspective of the DAWN Gender, Ecological and Economic Justice framework complements this view by connecting local struggles with neoliberal development, debt and extractive economies, which highlights that ecological justice demands more fundamental economic and democratic change (DAWN, n.d.).

These theoretical frameworks are supported by empirical evidence from Asia, Africa and Latin America. Collective action, indigenous knowledge and agroecological practices, as exemplified by the women-led movements of agroecology Deccan Development Society (India), Nous Sommes la Solution (West Africa) and La Via Campesina (Brazil), are able to contribute to biodiversity, food sovereignty and community resilience, while questioning the patriarchal and corporate control of agriculture (Altieri & Nicholls, 2017; Sibanda, 2025). Women's meaningful involvement in community forestry, irrigation management and agriculture also yields positive results in strengthening environmental governance and local resilience, as revealed from research in Nepal and in the Eastern region of India (Agarwal, 2010; Leder et al., 2019). However, unequal land ownership, low access to credit and agricultural services, climate information, and unpaid care duties remain a challenge to women's leadership (Rao et al., 2019; FAO, 2023).

The overall picture of the literature suggests that there are significant policy-policy disconnects and policy-practice disconnects. International conventions are increasingly acknowledging gender equality, but they seldom question the patriarchy and the economic systems that perpetuate climate injustice. FPE thus asserts that social justice and climate resilience are inseparable. Rethinking land, access to finance, knowledge and decision-making and acknowledging women's ecological knowledge and unpaid caring work is necessary for meaningful climate governance. To realize climate justice will not only require enhanced policy implementation but it will require a shift in political and economic systems which are still generating gendered inequality (Sultana, 2021).

Objectives and Methodology

The general objective of the study was to analyze the differential impact of climate change on women from the Global South, and to then look at ways of achieving a gender transformative and socially just response that can tackle such differential impacts. The study draws from Feminist Political Ecology (FPE) which considers the crisis of climate change as a crisis of power, justice and unequal access to resources and decision making (Rocheleau et al., 1996; Sultana, 2021). The specific objectives were to critically analyse contemporary global climate policy, particularly the Belem Gender Action Plan (2026–2034), through an FPE lens (UNFCCC, 2025); second, to examine women-led agroecology movements across the Global South as examples of gender-transformative climate action (Altieri & Nicholls, 2017); and third, to develop an integrated conceptual framework connecting FPE, the DAWN framework of Gender, Ecological and Economic Justice, and feminist approaches to agroecology (DAWN, n.d.).

This paper used qualitative, feminist-informed literature review based entirely on secondary sources, synthesising existing scholarship, policy documents, and empirical

evidence. The methodological approach prioritises scholarship centring the experiences of rural, Indigenous, Dalit, and other historically marginalised women (Agarwal, 1992; Nightingale, 2006). The study draws upon three complementary categories: international policy documents, including UNFCCC decisions and the Belem Plan; peer-reviewed academic literature on FPE, climate justice, and intersectionality; and empirical case studies from India, West Africa, Brazil, and Nepal (Leder et al., 2019; Rao et al., 2019; Sibanda, 2025). A thematic qualitative approach identified recurring patterns including gendered access to land, unpaid care work, ecological knowledge, intersectional inequalities, and the gap between policy commitments and implementation (MacGregor, 2010; FAO, 2023). While this secondary review cannot capture the full diversity of lived experiences, it offers a comprehensive comparative understanding of structural patterns across contexts, aligning with feminist research objectives to understand unequal power relations and contribute to transformative environmental governance.

Findings and Discussion

The review identifies a number of interconnected themes that reveal how climate change is shaped by gendered power relations rather than environmental change alone. This section documents the main findings and discusses what this means in the context of Feminist Political Ecology, focusing on the impacts of unequal access to resources, decision-making and recognition on experiences of climate change for women. The conversation moves from the growing burdens on women, to women's ecological knowledge and leadership within agroecological movements, and ultimately to the disconnect between international climate action and local experiences.

Women Carry Heavier and Growing Burdens

The first key result is that climate change worsens the gender inequalities that already exist. Women are already doing most of the agricultural work across the Global south and are responsible for most of the domestic and care work which goes unpaid. From the Feminist Political Ecology (FPE) viewpoint, these unequal roles are based on social norms that allocate productive and reproductive labour in unequal ways between women and men (Rocheleau et al., 1996; Nightingale, 2006). These inequalities grow more exaggerated as stress on the environment rises. Women have the responsibility to cultivate crops, take care of livestock, process food, store seed, collect water and fuel wood and to take care of children, older people and other members of the family. Male labour migration has also contributed to increasing the feminisation of agriculture, with women bearing the burden of running agricultural enterprise and household livelihoods without the opportunity to enjoy same gender parity in land ownership or decision-making authority or access to institutional support. Overall, evidence indicates that women do a lot more agricultural and non-farm non-wage care work than men, which is

not due to their lack of capability, but due to structural inequities in access to time, resources and power (Rao et al., 2019).

Climate change exacerbates these pressures through greater time and energy demands on daily activities. Women are faced with the challenge of increased distances to access water, fuelwood and fodder and reduced food availability due to water scarcity, deforestation, and decreasing agricultural productivity. Women still tend to focus on the nutritional needs of other family members rather than on their own nutritional needs (FAO, 2023). These responsibilities grow causing time poverty, less opportunities for education, jobs, community, and leadership, higher physical and health risks (Sultana, 2021).

Nepal is a particularly interesting country in which the participation of women in agriculture, local finance and natural resource management as a result of male labour migration, has not led to an increase in their access to land, agricultural services, climate information, credit or to local governance (Leder et al., 2019). It is not just gender but unequal access to rights, resources and decision making that socially produces women's climate vulnerability, FPE argues (2014, Sultana). These inequalities must be tackled through gender transformative policies that value and acknowledge unpaid care work, promote women's land and resource rights, and re-distribute environmental burden and decision-making power.

Unequal Control over Resources Limits Women's Climate Resilience

The second big result relates to women's inequitable access to productive factors. Despite their key role in agriculture and natural resource management, women typically do not have the same rights as men with respect to access to land, credit, agricultural technologies, extension services or climate information. The inequalities are due to the institutional practices and patriarchal property systems and not due to their capacity (Agarwal, 1992; Rao et al., 2019).

Security, economic independence, political power and productive asset: this is how land is seen from an FPE perspective. Although women are the main actors in food production, they are constrained when it comes to accessing agricultural loans, agricultural cooperatives, government subsidies, and climate adaptation programmes, without secure land rights (Agarwal, 2010). Poor tenure also makes it difficult to invest in the long term, like soil management, tree planting, water management, and other climate-resilient practices, and restricts access to irrigation, crop insurance, agricultural education and training, and drought-resistant seeds (FAO, 2023).

FPE understands such restrictions as results of gendered power dynamics, included in laws, inheritance practices, financial institutions and social norms which favor the ownership and authority of men (Sultana, 2014). On the other hand, there is evidence that secure land rights lead to greater investment in sustainable land management, boost

women's bargaining power, improve access to agricultural services and contribute to greater participation in local institutions (Agarwal, 2010). Land tenure is, in fact, a key determinant of women's rights to agency, environmental stewardship, and climate resilience. It is essential to tackle the unequal systems of ownership and governance embedded in the climate policy, in order to redistribute rights, resources and decision making power in addition to environmental responsibilities.

Women's Ecological Knowledge: An Invisible Resource for Climate Action

The third key result is the lack of parity in the recognition of knowledge in climate governance. Women globally in the Global South have a fairly wide knowledge of the environment gained from their day-to-day management of land, water, forests, seeds, animals, and their livelihoods. This is “situated knowledge” acquired through practical, everyday life rather than through scientific training, and encompasses knowledge of conserving biodiversity, adapting to change in environmental conditions, managing water, managing soil fertility, and choosing climate-tolerant seeds (Rocheleau et al., 1996; Nightingale, 2006). FPE (Feminist Political Ecology) believes that knowledge is produced through power. Practical knowledge of rural women and Indigenous peoples and smallholder farmers is undervalued in climate governance, which often emphasizes scientific and technical expertise (Sultana, 2021). Climate adaptation programmes are often created in a top-down fashion where women are either limited or symbolic in their participation, and their experiences are not always taken into consideration when designing programmes or evaluating their success. (Resurreccion, 2013; Najjar et al., 2023).

There is therefore justice in recognising women's ecological knowledge and it is a necessary prerequisite for effective climate action. Meaningful participation enhances locally appropriate adaptation, community ownership, and long-term resilience through the process of women becoming knowledge producers, innovators and decision-makers, instead of passive beneficiaries (Harcourt & Nelson, 2015). FPE, however, challenges the essentialist ideas that women are closer to nature. In agreement with Agarwal (1992), women's ecological knowledge is seen as a result of their social roles, daily work, and commitment to natural resource management over a longer period, rather than being intrinsic to the environment.

Unpaid Care Work: The Foundation of Climate Resilience

The fourth major finding highlights the central role of unpaid care work in sustaining households and climate resilience. In addition to farming, women carry out the bulk of unpaid labour that is indispensable for daily life such as cooking, cleaning, fetching water and fuel wood, preparing meals, and looking after children, elderly and sick members of their families. This work is a foundation of household wellbeing and of the economy as a whole, but is largely understated in climate policy and economic planning

(MacGregor, 2010; DAWN, n.d.). FPE sees care work as an integral part of environmental governance as it relies on the natural resources. Women increasingly use more time to acquire water, forests and food, and to deal with illness, displacement and livelihood insecurity as climate change damages water resources, forests and food resources (Sultana, 2021). These growing responsibilities reduce opportunities for education, paid work, and participation in community decision-making.

Many climate adaptation programmes unintentionally reinforce these inequalities by expecting women to participate in training, community groups, and livelihood initiatives without recognising their existing workload. Genuine empowerment therefore requires more than increasing women's participation; it requires recognising, reducing, and redistributing unpaid care work through measures such as labour-saving technologies, improved water and energy access, childcare support, and more equitable sharing of household responsibilities (Resurreccion, 2013). Valuing unpaid care work is essential for achieving both climate resilience and gender justice (MacGregor, 2010).

Intersectionality: Understanding Multiple and Overlapping Forms of Climate Inequality

The fifth major finding demonstrates that climate vulnerability is shaped by intersecting systems of inequality rather than gender alone. Access to land, education, climate finance, political participation, and adaptation opportunities is influenced by caste, class, ethnicity, indigeneity, age, disability, and geographical location. FPE therefore understands climate vulnerability as the product of interacting social, economic, and political structures rather than a consequence of gender in isolation (Sultana, 2021; Nightingale, 2006). Women experiencing multiple forms of marginalisation often face the greatest barriers to climate resilience. For example, Dalit and Indigenous women may encounter overlapping disadvantages related to poverty, insecure land tenure, discrimination, limited public services, and exclusion from decision-making institutions (Agarwal, 2010; Sultana, 2021). Intersectionality highlights that women are not a homogeneous group and that climate policies must account for these diverse experiences (Elmhirst, 2011).

The situation is especially stark in Nepal where climate risks are compounded by caste, ethnicity, poverty and geographical isolation. Women in remote mountain districts and traditionally disadvantaged groups may lack access to land, climate services, community forestry organisations, water user committees and local government bodies for climate adaptation (Leder et al., 2019). Thus, gender-sensitive policies are not enough. The pursuit of climate justice must be intersectional, focussing on the most structurally marginalised communities first, and offer everyone a fair opportunity to access resources, services and decision-making (Sultana, 2021).

Women-Led Agroecology Shows a Way Forward

The sixth finding showed that agroecology as a women led approach is a viable way to achieve climate justice. Feminist research has demonstrated that increased access to productive inputs, knowledge, and decision-making power for women can enhance both ecological resilience and community resilience (Altieri & Nicholls, 2017). This potential is demonstrated in examples from India, West Africa and Brazil. The Deccan Development Society works to promote the preservation of the indigenous seeds, growing various crops, and building the food security of Dalit women using agroecological practices adapted to their local conditions. Likewise, Nous Sommes la Solution in West Africa works to advance seed sovereignty and food sovereignty, and women in Brazil's MST and La Via Campesina bring feminist organising and collective farming together to heal the ecosystems and to dismantle patriarchy's control over land and agriculture (Altieri & Nicholls 2017; Sibanda 2025). Across these cases, three common outcomes emerge. Women-led agroecology strengthens resilience by diversifying crops and reducing dependence on external inputs, improves biodiversity and household food security through locally adapted farming systems, and enhances women's leadership, collective action, and participation in environmental governance (Altieri & Nicholls, 2017). Seed sovereignty is a key part of this change. Women's saving, exchange and management of indigenous seeds helps conserve biodiversity, conserve local knowledge, decrease reliance on commercial seed systems and increase the control of communities over food production (DAWN, n.d.). These movements also show the idea of empowerment as a process of collective action. Women's shared learning, support and action contributes to reinforcing social networks, enhancing their social influence in households and communities and changing inequitable social relations (Harcourt, 2023).

Policy Promises Outrun the Money

The seventh finding focuses on the continuing disconnect between commitments and actions at the international level. Women's leadership, and gender-responsive climate action, is increasingly acknowledged in global climate frameworks, but funding and institutions have not followed. Climate funds are not equitably distributed – although the Belem Gender Action Plan recommends more leadership for women and more direct access to climate finance, only a small proportion of climate finance funds reach grassroots women's organisations (UNFCCC, 2025; FAO, 2023). FPE looks at this financing shortfall in a different way; it is a structural rather than administrative deficit. Climate finance remains more supportive of government, larger international organisations, and technically-oriented projects, with a more limited amount of funding available for locally-led projects (Resurreccion, 2013). DAWN also maintains that the unequal political and economic structures—such as patriarchal institutions, extractive development models, unequal land ownership and unpaid care work—that influence access to resources and decision-making can only be addressed if climate justice is to be

realised (DAWN, n.d.). Consequently, women's local knowledge and community based adaptation measures have been undervalued although they have been seen to contribute to adaptation to the climate.

From Vulnerability to Leadership

The final finding collates the main point of this review. Women remain a vulnerable group in the main stream climate policy and need to be protected. However, the feminist Political Ecology (FP) critiques this, stating that vulnerabilities are not innate to women, but are socially constructed through unequal gender relations, discriminatory institutions and unequal access to resources (Sultana, 2014; MacGregor, 2010). The evidence reviewed in this paper demonstrates that women are not only affected by climate change but are also farmers, seed custodians, caregivers, innovators, and community leaders whose knowledge is essential for sustainable climate adaptation (Harcourt, 2023; Sultana, 2014). Recognising women as rights holders and knowledge producers' shifts climate policy from protection towards empowerment and structural transformation. Long-term climate resilience therefore depends not only on reducing climate risks but also on transforming the unequal systems that shape access to land, resources, finance, knowledge, and political power (MacGregor, 2010; Sultana, 2021).

Reading the Findings Together

Taken together, the findings present a coherent picture of how climate change, agriculture, and gender inequality are deeply interconnected through unequal systems of power. Rather than reflecting isolated challenges, the evidence demonstrates that women's experiences of climate change are shaped by long-standing social, economic, political, and environmental inequalities. Across many contexts, women perform much of the work that sustains households, agriculture, biodiversity, and community wellbeing, yet they continue to have limited control over the resources, institutions, and decisions that shape their lives (Rocheleau et al., 1996; Sultana, 2021).

A feminist analysis further shows that this inequality extends beyond productive labour to include the unequal distribution of unpaid care work. In addition to growing crops and working with natural resources, women also take care of their children, elders, sick members of the family, and communities during times of environmental stress and disaster. This reproductive and care labour is vital for the livelihoods and climate-resilience of the households but is highly invisible in the policies, economic planning and development programmes (MacGregor, 2010; DAWN, n.d.).

The results also show that there is no universal gender inequality. A feminist intersectional lens insists on the fact that climate vulnerability is influenced by several and multiple intersecting discriminations. These women have a higher risk of being marginalised due to their caste, class, ethnicity, indigeneity, disability, geographical isolation, age and migration status and are less likely to have access to land, education,

financial services, disaster assistance and climate adaptation support (Nightingale 2006; Elmhirst 2011). Though the structures are problematic, there is also ample evidence for hope. The literature that was reviewed does not inspire the image of women as passive groups but rather shows innovative and sustainable ways in which women are responding to climate change. Women's engagement in agroecological practices is another example of how sustainable agriculture and gender equality can go hand in hand (Altieri & Nicholls, 2017; Harcourt, 2023). The lessons learned from these experiences illustrate how the secure rights of women to land and natural resources, access to knowledge, opportunities for collective action and meaningful participation in decision-making can enhance food security and conserve biodiversity, while strengthening farming systems.

In recent years, international policy developments have shown increasing awareness in the world of climate governance of the need for gender equality (UNFCCC, 2025). But the evidence examined in this paper shows a consistent message that policy commitments are not enough. The biggest divide isn't between policy goals, but between those in power, who have the resources and who have the money. Climate finance, secure land tenure, agricultural services and land use decision-making must be directly delivered to the women at the grass-roots level (Resurreccion, 2013; FAO, 2023). This is where the theoretical learning of the Feminist Political Ecology and the DAWN framework aligns best with the evidence. The vulnerability of women to the effects of climate change is a result of unequal power relations between men and women which impacts their access to land, resources, knowledge, labour and political influence (Rocheleau et al., 1996). DAWN takes this one step further by claiming that achieving lasting climate justice will also involve changing the broader political and economic systems that create inequality (DAWN, n.d.). Both frameworks thus situate climate action as a social transformation project, based on gender equality, human rights and environmental justice.

The evidence overall points to a paradigm shift in climate policy and practice – from “vulnerable beneficiaries” to “rights-holders, knowledge producers, environmental stewards, and leaders of climate resilience” (Sultana, 2014; Harcourt, 2023). Such a change involves more than resource distribution, it involves power redistribution. It requires strengthening institutions, policies and social norms which still constrain women's agency.

Theorization

This paper combines theoretical reflections on Feminist Political Ecology (FPE) with those of DAWN's feminist justice framework and the hands-on experience of women's agroecological movements. These views complement and complete one another, in terms of the way in which climate-resilience and gender-justice can be sought at the same time (Rocheleau et al., 1996; DAWN, n.d.; Altieri & Nicholls, 2017). FPE offers

the analytical basis, in providing an explanation of the environmental problems as a result of the unequal power relationship rather than the ecological process. It shows that access to land, water, forests, seeds, climate finance and decision-making is far from gender neutral and it depends on the interaction of gender, caste, class, ethnicity, age, migration status, disability and geographical location (Rocheleau et al., 1996; Sultana, 2021). The DAWN framework reinforces this analysis by incorporating a feminist political economy lens that questions the economic structures that drive climate injustice, such as extractive development models, neoliberal economic policies, corporate control of natural resources, patriarchal institutions and inequitable unpaid care work (DAWN, n.d.). Women-led agroecology offers practical evidence of how these theories are put into practice. In various settings, women agroecological organizations have proven that sustainable agriculture, gender equality, and community resilience can reinforce each other, contributing to the protection of biodiversity, conservation of indigenous seeds, better soil fertility, increased food sovereignty and women's leadership and decision-making (Altieri & Nicholls, 2017; Sibanda, 2025).

Transformative Ecological Justice is more than incremental change; it is about transformative social change that seeks to transform the social power dynamic, acknowledges other knowledges, and promotes gender equity in addition to ecological justice. The framework proposes three folds of justice to be sought in gender-transformative climate policy. Firstly, through recognition, to acknowledge the value of women's knowledge, indigenous ecological practices, unpaid care work, cultural identity and the intrinsic rights of nature, which is a challenge to the exclusion of women's experiences from climate science and environmental governance (Plumwood, 1993). Second, by promoting equitable access to land ownership, climate finance, agricultural technologies, education, markets, productive resources and social protection, equalizing the structural inequalities that hinder women's capacity to effectively respond to climate change (Agarwal, 2010). Third, representation through ensuring meaningful participation in climate governance, environmental decision-making of women, including those traditionally marginalised due to caste, ethnicity, poverty, disability, age, migration status and geographical isolation (Sultana, 2021).

The concept of intersectionality is embodied throughout this framework, as women are vulnerable to the impacts of climate change in distinct ways, depending on how multiple forms of social inequality interact (Nightingale, 2006; Elmhirst, 2011). The framework presents a practical criterion to assess climate policies by posing three key questions: Does the policy acknowledge women's knowledge, unpaid care work and environmental stewardship? Does it transform land, climate finance, productive resources and technologies, and economic opportunities in a manner that diminishes structural inequalities? Are there voices and leadership representing women, particularly women in multiple marginalisations, in meaningful decision-making processes? Climate policy can work towards gender justice and ecological transformation only if these three dimensions are combined (MacGregor, 2010).

The integrated framework holds special significance for countries like Nepal, where the three issues of climate change, labour migration and gender inequality are becoming intertwined. The increasing role of male labour migration has left women leading the agricultural and natural resource management, household economies and climate adaptation in the rural sector. As their duties grow, however, they often lack secure land ownership, equal inheritance rights, direct access to climate finance, agricultural extension services and political leverage over local resource governance (Leder et al., 2019). A Transformative Ecological Justice approach would focus on ensuring that women have land rights, increased access to flexible climate finance, women-led cooperatives and agroecological networks, unpaid care work is acknowledged in development planning, and women environmental defenders are better protected and women's leadership is ensured in local governments and natural resource institutions. These include measures that see rural women not only as recipients of development programmes but as rights-holders, environmental guardians, producers of knowledge and leaders of climate resilience (Sultana, 2014; Harcourt, 2023). Finally, sustainable climate resiliency is not just about adapting to climate change and transformation of unequal power structures between genders, society and nature is necessary.

Conclusion and Policy Implications

Climate change is not an automatic by-product of environmental change that affects men and women differently. Instead, they are created and perpetuated through inequitable power dynamics within resource allocation, opportunity and decision-making. This paper draws on Feminist Political Ecology to show that climate vulnerability is socially constructed through patriarchal norms, unequal economic systems, discriminatory institutions and environmental injustice (Rocheleau et al., 1996; Sultana, 2021). Women in the Global South are responsible for a disproportionate share of the burden of food production, water collection, natural resource management and care work, and are less likely to own land, access climate financing, education, technology and political representation (Rao et al., 2019; FAO, 2023). However, they also have wealth of ecological knowledge, adaptive abilities and collective leadership that is crucial to create climate resilience (Altieri & Nicholls, 2017). A Feminist Political Ecology lens on Reading DAWN's feminist justice framework, women-led agroecological movements and the Belem Gender Action Plan, will highlight three key messages: meaningful climate action means structural transformation, not just technical engineering (DAWN, n.d.; UNFCCC, 2025). Climate policies cannot simply uphold women's resilience to environmental risks, they should aim to change the unequal gender relations, economic structures and governance systems that create those risks.

The analysis leads to a few practical suggestions. To institutionalize Feminist Political Ecology in national and international climate governance, intersectional gender analysis has to be mandated in all National Adaptation Plans, climate financing, and environmental policies (MacGregor, 2010). At least 30 percent of the funds dedicated to

climate adaptation should be channeled to agroecological initiatives and grassroots feminist groups, in accessible, flexible and transparent ways (Resurreccion, 2013). Rather than symbolic representation, governance reforms need to provide women with actual power to make decisions, including historically marginalised women such as Dalit women, Indigenous women, rural women and women living in remote areas. (Leder et al., 2019) It is also important to include unpaid care work in climate policies and ensure a better recognition and value of such work in budgeting processes, and to improve legal protections for women environmental defenders for their leadership, which puts them at risk of discrimination and violence (DAWN, n.d.). Lastly, increased South–South learning exchanges on feminisation of agroecologies would allow for successful agroecological practices and locally created adaptation strategies to be disseminated between countries and regions (Sibanda, 2025).

Finally, Feminist Political Ecology gives a promising approach to reshape the climate action as a project of social, gender and environmental justice (Sultana, 2014). There is no sustainable climate adaptation without gender justice, and gender justice without climate justice. Climate resilience and gender justice are mutually dependent: climate adaptation without gender justice is not sustainable and gender justice without climate adaptation is not sustainable (Agarwal, 2010; Harcourt, 2023). Climate policy should be evaluated not just on the reduction of emissions or the finishing of projects, but on how it redistributes power, on the enhancement of women's rights, and on the importance it gives to local ecological knowledge. Sustainable future hinges not just on the protection of ecosystems, but also on the changing of the unbalanced social structures that influence relations between humans and ecosystems. Realizing the potential of women's knowledge, leadership and lived experiences, makes climate action more inclusive, equitable, resilient and effective. The way forward to a habitable future is not just to adapt to climate change, but to dismantle the climate injustice of the systems that are still governing who is exposed to environmental risks, who is in control of environmental resources, and who has the power to shape a just and sustainable future for people and planet.

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