

GENDER MAINSTREAMING IN CLIMATE CHANGE GOVERNANCE: EQUITY, INCLUSION, AND RESILIENCE FOR MARGINALIZED COMMUNITIESJohn Ndungu Kungu¹ and Thomas Njiru Gichobi²¹kungu@mmarau.ac.ke²gichohbithomas2015@gmail.com<https://doi.org/10.66055/venpsb92>**ABSTRACT**

This paper examines how gender mainstreaming applies to climate change governance, with particular emphasis on how frameworks of social justice, diversity, and sustainability can strengthen outcomes for vulnerable groups, especially women and youth. As global environmental change intensifies, the need to diversify forecasting and decision-making processes grows correspondingly urgent; it is therefore essential that governance frameworks and policy instruments incorporate multiple visions rather than relying on a single dominant perspective. This study explores how gender relations play out within climate institutions and systems, and how these relations intersect with climate risk exposure, adaptive response, and environmental equity more broadly. To illustrate gender-inclusive practice in climate governance, the paper draws on case studies from different regions of the world, evaluating the legislative and policy measures that advance gender equality while also strengthening community resilience. The analysis pays particular attention to the extension of gender quotas into climate adaptation programming as a mechanism for including women and other historically excluded populations in decision-making. Drawing on a synthesis of literature, theoretical analysis, and empirical evidence, the study argues that a gender perspective is not peripheral but foundational to effective climate action. It calls for governance structures, organizations, and processes that deliberately acknowledge the concerns and contributions of populations that have historically been dismissed or disadvantaged. The findings indicate that equitable governance not only advances fairness within affected communities but also produces measurably enhanced adaptive capacity when those communities confront climate disruption.

Keywords: Climate Change, Equity, Gender, Governance, Resilience, Social Justice,

INTRODUCTION

Climate change is widely regarded as among the most pressing global challenges of the twenty-first century, with far-reaching consequences for ecosystems, economies, and societies. Governance frameworks operating at international, national, and local

levels have emerged to address climate-related risks and to coordinate mitigation and adaptation strategies. These frameworks typically combine policy instruments, regulatory mechanisms, and cooperative initiatives designed to reduce greenhouse gas emissions, promote sustainable development, and build resilience to climate impacts (Rao & Lawson, 2022). Yet despite considerable institutional progress, a significant gap

persists in how these frameworks address the differentiated impacts of climate change across demographic groups. Women, youth, and other marginalized communities are frequently among those most severely affected by climate-related events, even as their voices remain underrepresented in the decision-making processes that shape climate policy.

This underrepresentation is not incidental; it reflects structural patterns of exclusion that scholars have long identified in environmental governance more broadly, and it measurably limits the effectiveness of climate action while perpetuating existing inequalities (Resurrección & Elmhirst, 2021). Gender mainstreaming, understood as the systematic integration of gender perspectives into policy formulation and decision-making, has emerged as a central strategy for correcting this imbalance and ensuring that climate governance is both equitable and inclusive. Where governance frameworks account for the differentiated needs, capacities, and contributions of different genders, they tend to be more responsive to on-the-ground realities and, correspondingly, more resilient in the face of climate shocks. Gender mainstreaming in climate governance is therefore best understood not merely as a matter of social

justice, although it is certainly that, but also as a strategic necessity for achieving durable and effective climate outcomes.

The problem this paper addresses can be stated plainly: despite widespread rhetorical recognition of gender mainstreaming as a vital component of effective governance, a substantial gap remains between this recognition and its implementation in practice. Many climate policies and adaptation strategies continue to overlook the distinct vulnerabilities and capacities that arise from gendered social roles, with the result that governance structures often remain skewed toward the interests and assumptions of already-dominant groups (Pearse, 2020). This paper responds to that gap by pursuing four interlocking aims: first, to analyze the intersection of gender and climate change from a theoretical standpoint; second, to examine comparative case studies of gender-inclusive climate governance; third, to assess the policy and legislative reforms needed to institutionalize gender equity in climate decision-making; and fourth, to evaluate the specific role of gender quotas in climate adaptation programming. Taken together, these aims support the paper's central argument: that integrating a gender perspective into climate governance produces more comprehensive, legitimate,

and durable climate action, and that failing to do so leaves entire dimensions of climate vulnerability unaddressed.

The remainder of the paper proceeds as follows. It first outlines the qualitative, desk-based methodology used to synthesize the literature and case evidence. It then develops a theoretical framework drawing on social justice theory, gender theory, sustainability and equity frameworks, and intersectionality, before turning to an assessment of the current state of gender mainstreaming within major international climate governance instruments. Two case studies, from Nepal and Bangladesh, are then examined in depth to illustrate how gender quotas and women-led resilience initiatives operate in practice. The paper closes with an integrated analysis and discussion section that synthesizes theoretical and empirical strands, followed by policy recommendations, a discussion of limitations, and directions for future research.

RESEARCH METHODOLOGY

This study adopts a qualitative, desk-based research design that combines a systematic literature review with comparative case study analysis to examine gender mainstreaming within climate change governance. Rather than collecting primary data, the research draws on a broad range of peer-reviewed

journal articles, policy documents, and institutional reports published in recent years and selected for their relevance to gender, climate risk, and governance frameworks. These sources were reviewed thematically, with particular attention to recurring concepts such as social justice, sustainability, equity, and power relations, which together allowed the study to construct a theoretical foundation grounded in feminist political ecology and gender theory.

To ground these theoretical insights in practice, the study incorporates two illustrative case studies: Nepal's Local Adaptation Plans of Action (LAPAs) and Bangladesh's Climate-Resilient Participatory Afforestation and Reforestation Project (CRPARP). These cases were selected because they demonstrate concrete, documented applications of gender quotas and women-led resilience initiatives within climate adaptation programming, and because together they span two distinct ecological and institutional contexts, mountainous rural Nepal and the cyclone-prone coastal zones of Bangladesh, which permits a degree of comparative generalization. Case material was drawn from existing scholarly accounts and evaluative reports rather than from direct fieldwork and was analyzed to identify

patterns in how women's participation shaped decision-making processes, resource distribution, and community-level adaptive capacity.

Findings from the literature and the two case studies were synthesized through a comparative lens, allowing the study to draw broader conclusions about the mechanisms through which gender-responsive governance strengthens climate resilience. Three analytic questions guided the comparison across cases: (1) what formal mechanism was used to secure women's participation; (2) what forms of local or traditional knowledge women's participation brought into adaptation planning; and (3) what measurable or reported effects followed from that participation, whether in resource allocation, ecological outcomes, or household and community resilience. This approach is limited by its reliance on secondary sources rather than original data collection, and it cannot establish causal claims with the rigor of a controlled study. It does, however, enable a wide-ranging synthesis of evidence across diverse geographic and institutional contexts, and it supports the study's broader argument for institutionalizing gender-inclusive practices in climate policy.

Theoretical Framework

Social Justice and Gender Theory

Social justice theory, as applied to environmental governance, is concerned centrally with the equitable distribution of resources and opportunities across society, and with the empowerment of marginalized persons within it. Applied to climate change specifically, this theory underscores the disproportionate impact that environmental degradation and climate-related disasters have on vulnerable populations, particularly women and youth, whose exposure to risk is shaped as much by social position as by physical circumstance (Nightingale, 2020). Gender theory complements this social justice lens by describing the socially constructed roles that men and women occupy within a given society, and by tracing the implications of these roles for power relationships and access to resources. Applied to climate change, gender theory reveals that women and men experience climate risk differently not because of any innate difference, but because their socially assigned responsibilities, over household water and food provisioning, for instance, place them in different relationships to environmental resources and to the institutions that govern those resources (Terry, 2020).

Read together, social justice theory and

gender theory suggest that climate vulnerability cannot be understood purely as a function of geography or exposure to hazard; it is equally a function of who holds decision-making authority, who controls resources, and whose knowledge is treated as authoritative within a given governance system. This theoretical pairing therefore does more than describe inequality: it identifies the precise institutional lever, decision-making authority, through which that inequality can be either reproduced or corrected. It is this insight that motivates the paper's subsequent focus on gender quotas and formal participation mechanisms, since these instruments intervene directly at the point where authority is allocated.

Sustainability and Equity Frameworks

Sustainability and equity frameworks are integral to climate change governance, particularly in the pursuit of long-term resilience and justice. Sustainability, in this context, refers to governance systems that effectively balance environmental, social, and economic factors over time rather than optimizing for any single dimension in isolation (Mbow et al., 2019). Wangui (2022) argues that a genuinely sustainable framework must incorporate the divergent views of all affected stakeholders, producing

a governance system that is broad-based in addressing matters of concern rather than narrowly technocratic.

Equity frameworks differ from sustainability frameworks in emphasis: whereas sustainability is concerned with balancing competing goods over time, equity is concerned specifically with fairness and justice in the allocation of resources, opportunities, and benefits in the present. Applied to climate change, an equity framework calls for governance approaches that explicitly recognize and address the unequal vulnerabilities and capacities of different groups, ensuring that marginalized populations, including women, indigenous communities, and the poor, have equal access both to decision-making processes and to the material benefits of climate action. The integration of sustainability and equity considerations allows climate governance to move beyond a one-size-fits-all approach toward one that is inclusive, just, and, ultimately, more effective at achieving its stated environmental goals (Arora-Jonsson, 2019).

Intersectionality as an Analytic Bridge

A theoretical framework built solely on gender risks treating "women" as a homogeneous category, obscuring the ways that gender interacts with age, ethnicity,

caste, disability, and socioeconomic status to produce highly differentiated experiences of climate vulnerability. Kaijser and Kronsell (2018) argue that an intersectional lens is necessary precisely because climate change does not affect a generic population of women; it affects women who are also, variously, indigenous, elderly, disabled, landless, or living in conflict-affected regions, and each of these overlapping identities compounds or mitigates climate risk in distinct ways. Intersectionality therefore functions in this paper as an analytic bridge between the social justice and gender theory discussed above and the sustainability and equity frameworks that follow: it insists that any governance mechanism aiming at gender equity must also be sensitive to the compounding effects of other axes of marginalization, or it risks benefiting only the most privileged women within a given category while leaving the most vulnerable further behind. This concern becomes concrete in the case study analysis below, where the effectiveness of gender quotas depends significantly on whether quota design accounts for intersecting disadvantages such as caste and landlessness, and not solely for gender as a singular category.

Gender Mainstreaming in Climate

Change Governance

Gender mainstreaming refers to the systematic integration of gender perspectives into the design, implementation, monitoring, and evaluation of policies, programs, and projects. Lau and Scales (2020) demonstrate that this integration makes a significant positive contribution to climate change governance precisely because it foregrounds the distinct needs, roles, and effects of climate change across genders, rather than assuming that a gender-neutral policy is, by default, gender-fair. Gender mainstreaming, understood this way, is not an add-on to existing governance structures but a method for revealing where those structures have built in assumptions that disadvantage particular groups.

Azhoni and Goyal (2018) further argue that women and marginalized communities can be empowered specifically through governance mechanisms that draw on their distinct forms of knowledge, particularly localized ecological and resource-management knowledge, in the design of adaptation strategies. This is a crucial point of synthesis: gender mainstreaming is not simply a corrective for historical exclusion, though it is that; it is also, independently, a mechanism for improving the technical quality of adaptation planning, since it

channels into governance a body of practical knowledge that is otherwise systematically excluded from formal decision-making. On this reading, gender mainstreaming serves the dual purpose of rectifying historical injustice while simultaneously improving the empirical basis on which adaptation strategies are built, a conclusion that finds strong support in the case studies examined later in this paper.

Current State of Gender Mainstreaming in Global Climate Governance

Despite growing rhetorical recognition of its importance, the implementation of gender mainstreaming in climate change governance remains uneven and, in many jurisdictions, insufficient. International frameworks, most notably the Paris Agreement and the United Nations Framework Convention on Climate Change (UNFCCC), have contributed to increased institutional acknowledgment of the need for gender-responsive approaches. The UNFCCC's Gender Action Plan (GAP), agreed under the Convention, is a particularly significant instrument in this respect, since it aims explicitly to enhance women's participation in climate-related processes and to integrate gender considerations across climate policy and action (Lambrou & Piana, 2019). Building on this momentum, a growing number of countries have adopted

National Adaptation Plans (NAPs) and, in earlier iterations, National Adaptation Programmes of Action (NAPAs) that outline country-specific strategies for incorporating gender into adaptation and mitigation efforts (Keskin & Lafleur, 2020).

This institutional progress, however, has not translated uniformly into changed practice on the ground. Bhattarai and Beilin (2020) show that gender bias and entrenched stereotypes continue to shape how climate institutions operate, often in ways that are difficult to detect through formal policy review alone, since discriminatory practice frequently persists beneath the surface of gender-neutral or even nominally gender-responsive policy language. Addressing these biases matters not only on normative grounds but on practical ones: where marginalized women are excluded from effective decision-making roles, the resulting climate policies and initiatives tend to be less responsive to the realities those women face, undermining the very adaptive outcomes the policies are meant to secure.

A further and closely related obstacle is the persistent lack of political will and sustained commitment to gender equality across many national governments (Kaijser & Kronsell, 2018). This deficit is compounded by an absence of gender expertise and institutional

capacity within climate governance bodies themselves; agencies tasked with implementing gender-responsive climate policy frequently lack staff trained in gender analysis, dedicated budget lines for gender-focused programming, or monitoring systems capable of tracking gender-disaggregated outcomes. The result is a familiar pattern in global governance more broadly: ambitious commitments made at the international level are diluted, underfunded, or simply left unimplemented once they reach the national and subnational institutions responsible for translating policy into practice. Overcoming this implementation gap, rather than securing further rhetorical commitment, is arguably the central challenge now facing gender-responsive climate governance.

Case Studies on Gender-Inclusive Climate Governance

Gender Quotas in Climate Adaptation Programs: Nepal's Local Adaptation Plans of Action

Nepal offers one of the most instructive

examples of gender quotas applied directly within climate adaptation programming. In response to escalating climate vulnerability in rural areas, the Nepali government implemented its Local Adaptation Plans of Action (LAPAs), a policy framework that became genuinely transformational by mandating that at least 33 percent of the membership of local climate adaptation committees be women (Jafry, 2020). This quota did not function merely as a symbolic gesture toward representation; it produced concrete and traceable changes in how adaptation planning proceeded at the community level.

Women who entered these committees were frequently the primary managers of natural resources such as water and forest products in their households, and they brought to committee deliberations a body of invaluable local knowledge and practical experience that had previously gone unrepresented in formal planning processes. Their participation led to more comprehensive and contextually relevant adaptation measures, ones capable of addressing the specific needs and vulnerabilities of different community members rather than a single, generalized profile of "the community" (Chandra & McNamara, 2018). The inclusion of women in these pivotal decision-making bodies also

fostered a more equitable distribution of adaptation resources, helping ensure that the benefits of adaptation efforts reached groups that might otherwise have been overlooked (Huyer, 2018). Beyond these direct planning outcomes, the quota mechanism produced an important secondary effect: it enhanced women's leadership skills and increased their visibility within public decision-making more broadly, generating a form of institutional legitimacy for women's participation that extended beyond the immediate scope of climate adaptation.

What makes the Nepal case analytically significant is not simply that a quota was imposed, but that the quota created the institutional occasion for a transfer of knowledge, from women's household-level resource management experience into formal committee deliberation, that would not otherwise have occurred. The quota, in other words, functioned as a structural intervention that converted an existing but institutionally invisible form of expertise into a formally recognized input to governance. This distinction, between representation as an end in itself and representation as a mechanism for knowledge transfer, is essential for understanding why the Nepal case has proven more durable and more substantively consequential than gender provisions that

specify representation targets without altering the underlying decision-making process.

Community Resilience Programming in Bangladesh: The Climate-Resilient Participatory Afforestation and Reforestation Project

Bangladesh's experience with community resilience programming offers a second, complementary illustration of gender-inclusive climate governance in practice. Research on community resilience programs in the region shows that the integration of women has proven to be a key factor in enhancing the overall resilience of vulnerable communities to climate change (Boyd et al., 2020). The Climate-Resilient Participatory Afforestation and Reforestation Project (CRPARP) exemplifies this pattern: the project involved local women directly in the planning and implementation of reforestation activities along coastal regions that are chronically exposed to cyclones and flooding (Chu & Michael, 2019).

Women who participated in CRPARP were already responsible, in their households and communities, for managing water and food resources and for safeguarding their families during extreme weather events; the project built on this existing responsibility rather than introducing an entirely new role. By

training women in sustainable forestry practices, the project achieved two effects simultaneously: it restored degraded coastal land, providing a direct ecological benefit in the form of storm-buffering vegetation, and it strengthened the community's broader capacity to cope with climate-induced hazards (Eriksen & Brown, 2020). The involvement of women in this project is associated in the literature with a measurable reduction in community vulnerability, since the resulting mangrove and coastal forest restoration protected both livelihoods and physical infrastructure from storm surge and erosion.

Considered alongside the Nepal case, the Bangladesh example demonstrates that gender-inclusive resilience programming can operate effectively even without a formal, legally mandated quota, so long as women's existing household-level responsibilities are recognized and deliberately incorporated into program design. Where Nepal illustrates the value of a hard institutional quota embedded in a governance body, Bangladesh illustrates the value of participatory project design that channels women's practical knowledge into implementation rather than into formal committee representation as such. Read together, the two cases suggest that gender-inclusive climate governance is not reducible

to a single institutional form; it can be pursued through formal representational quotas, through participatory project design, or, ideally, through some combination of the two operating at different levels of the governance system.

Comparative Synthesis of the Two Cases

A direct comparison of the Nepal and Bangladesh cases clarifies both the shared mechanisms and the distinct institutional pathways through which gender-inclusive climate governance produces resilience outcomes. In both cases, women's participation was grounded in pre-existing household and community responsibilities for resource management, rather than being introduced as an abstract representational goal detached from lived experience; this grounding appears to be a necessary condition for the practical, as opposed to merely symbolic, success of gender-inclusive programming. In both cases, too, the resulting adaptation and resilience measures were more contextually specific than measures produced by processes that excluded women, whether that specificity took the form of Nepal's differentiated local adaptation plans or Bangladesh's targeted coastal reforestation strategy.

The cases diverge, however, in their

institutional mechanism. Nepal's LAPAs operated through a formal, quantified quota embedded in the composition of a standing governance body, a mechanism that guarantees representation independent of any single project's design choices and that is, in principle, replicable across sectors beyond climate adaptation. Bangladesh's CRPARP, by contrast, operated through project-level participatory design without a corresponding formal quota at the level of governance institutions; women's inclusion was a feature of how the project was implemented rather than a binding requirement placed on the composition of a decision-making committee. This divergence carries an important policy implication, examined further in the discussion section below: formal quotas offer durability and independence from any single project's goodwill, while participatory project design offers flexibility and can be adopted even where quota legislation is politically unavailable. The strongest governance frameworks, the comparison suggests, will combine both mechanisms rather than relying on either alone.

DATA ANALYSIS AND DISCUSSION

Gendered Climate Vulnerability as a Product of Social Structure

The relationship between gender and climate risk is not incidental but is rooted deeply in existing social inequalities, in which gender roles and power dynamics compound and, in many cases, actively produce the vulnerability of certain populations. In many communities, women bear primary responsibility for securing food, water, and energy for their households. When climate-related events such as droughts or floods disrupt these resources, women face intensified burdens and risks, including exposure to health hazards, reduced economic opportunity, and heightened food insecurity (Dankelman & Li, 2021). This burden is not evenly distributed even among women: it is compounded further by age, ethnicity, and socioeconomic status, which together shape the severity of gendered climate vulnerability in ways a single-axis analysis of gender alone would miss. An elderly, landless woman from a marginalized ethnic group, for instance, confronts a materially different set of constraints and risks than does a younger woman with secure land tenure and social capital, even where both are nominally exposed to the same climate hazard. This is precisely the analytic insight that intersectionality, introduced in the theoretical framework above, is designed to capture, and it is a recurring finding across

the literature synthesized in this paper.

Gender-Inclusive Governance as a Transformative Mechanism

Gender-inclusive governance functions as a transformative influence on vulnerable communities, particularly in enhancing their resilience to climate change, precisely because it changes who has standing to define what counts as an adaptation priority. Where governance structures actively involve women and other marginalized groups in decision-making processes, the resulting policies and actions are demonstrably more likely to address the specific needs and challenges those communities face (Enarson & Pease, 2022). This inclusivity matters for two related but distinct reasons. First, on normative grounds, it advances social justice by extending decision-making authority to populations that have historically been excluded from it. Second, on practical and empirical grounds, it improves the effectiveness of climate adaptation and mitigation efforts, since women's participation ensures that local knowledge and lived experience are incorporated into climate strategies, producing solutions that are more closely attuned to the realities of the community than solutions designed without that input (Denton, 2018).

Gender-inclusive governance, moreover, tends to produce a more equitable distribution of resources overall, helping to ensure that the most vulnerable populations receive the support they need to adapt to climate impacts rather than seeing adaptation resources captured disproportionately by already-advantaged groups. The evidence from Nepal and Bangladesh substantiates this claim directly: in both cases, gender-inclusive approaches produced adaptation and resilience outcomes that were more comprehensive, more equitably distributed, and more durable than outcomes achieved through processes that excluded women's participation (Djouidi & Brockhaus, 2018).

Persistent Barriers to Institutionalizing Gender-Responsive Climate Governance

Notwithstanding the demonstrated benefits of gender-inclusive governance, several structural barriers continue to impede its institutionalization at scale. The first is the implementation gap discussed above: international commitments such as the UNFCCC Gender Action Plan establish normative expectations that are frequently not matched by domestic budget allocations, staffing, or monitoring capacity, leaving gender-responsive provisions under-resourced relative to their stated ambitions.

The second barrier is the persistence of gender bias and stereotype within the very institutions responsible for implementing gender-responsive policy, a form of resistance that formal policy language alone cannot dislodge, since it operates through informal norms, hiring practices, and deliberative culture rather than through any codified rule that a new policy could simply override.

A third barrier, distinct from the first two, concerns the risk that formal representation quotas, of the kind used in Nepal, can be satisfied procedurally without producing substantive influence if quota-holders are not also given genuine deliberative authority, adequate technical support, and protection from retaliation for advocating positions that diverge from dominant local interests. Quotas that specify numerical representation without addressing these enabling conditions risk producing a form of symbolic inclusion that leaves the underlying distribution of power largely unchanged. The Nepal case, discussed above, appears to have avoided this pitfall by tying representation directly to a substantive body of practical knowledge that committees genuinely needed, but this is not guaranteed to hold in other contexts where quotas are introduced without a comparable connection between representation and

expertise. Finally, a fourth barrier is the intersectional unevenness noted earlier: a quota calibrated to gender alone may still fail to reach the most marginalized women, those further disadvantaged by ethnicity, caste, disability, or landlessness, unless quota design and candidate selection processes deliberately account for these compounding factors.

Toward an Integrated Governance Model

Synthesizing the theoretical framework with the comparative case evidence suggests an integrated model for gender-responsive climate governance built on four interacting components. The first component is formal representational security, of the kind Nepal's LAPA quota provides, which guarantees a minimum institutional foothold for women's participation independent of any single administration's discretion. The second component is participatory project design, of the kind Bangladesh's CRPARP demonstrates, which channels women's practical and ecological knowledge into implementation even where formal representation is not codified. The third component is intersectional targeting, ensuring that representation mechanisms reach the most marginalized women rather than the most socially advantaged women

within a broadly defined gender category. The fourth component is sustained institutional capacity, meaning dedicated budget lines, trained personnel, and gender-disaggregated monitoring systems capable of tracking whether formal commitments are translating into substantive outcomes over time.

No single case examined in this paper embodies all four components simultaneously, which is itself an important finding: existing gender-inclusive climate governance initiatives, however successful within their own scope, remain partial rather than comprehensive applications of the theoretical model that social justice theory, gender theory, sustainability and equity frameworks, and intersectionality jointly suggest. This gap between the theoretically ideal governance model and the partial models observed in practice constitutes the central practical challenge that the recommendations below attempt to address.

Policy Implications and Recommendations

Building on the analysis above, this paper offers five interlocking recommendations for policy and practice. First, gender quotas should be institutionalized across all climate-related decision-making bodies, not only

within pilot or donor-funded programs, ensuring that women and other marginalized groups are adequately and consistently represented across the full range of institutions responsible for climate adaptation and mitigation planning. Institutionalization here means embedding quota requirements in binding legal or administrative instruments rather than in voluntary guidance, since voluntary provisions have proven far more susceptible to the implementation gap discussed above. Second, capacity-building programs should be implemented systematically to equip women with the technical, financial, and deliberative skills needed to participate effectively once formal representation has been secured (Yadav & Lal, 2023). Representation without capacity risks producing the symbolic-inclusion problem identified in the discussion above; capacity-building is therefore not a supplementary measure but a necessary complement to quota policy.

Third, governments and international institutions should invest specifically in intersectional monitoring systems capable of disaggregating outcomes not only by gender but by the compounding factors, ethnicity, age, disability, land tenure status, that this paper's theoretical framework identifies as

central to differentiated climate vulnerability. Without such monitoring, quota policies risk benefiting the most socially advantaged women within a broad gender category while leaving the most marginalized women's circumstances largely unchanged.

Fourth, national climate institutions should be provided with dedicated budget lines and staffing for gender expertise, addressing directly the capacity deficit identified as a persistent barrier to implementation. This includes funding for gender-focused technical advisors embedded within adaptation planning agencies, rather than relying on short-term, donor-funded consultancies that lack institutional continuity once a given project cycle ends.

Fifth, policymakers should treat formal representational quotas and participatory project design as complementary rather than substitutable instruments, following the comparative logic established by the Nepal and Bangladesh cases. Where quota legislation is politically achievable, it should be pursued for the durability it offers; where it is not immediately achievable, participatory project design offers a viable interim pathway for incorporating women's practical knowledge into adaptation planning, and can also serve to build the evidentiary and political case for subsequent

quota legislation.

Limitations of the Study

This study's reliance on secondary literature and case material, rather than original fieldwork, constitutes its most significant limitation. The analysis is therefore able to identify patterns and associations documented in the existing scholarly and institutional record, but it cannot establish causal claims with the same confidence that a controlled, primary-data study would allow. A related limitation concerns the selection of only two case studies; while Nepal and Bangladesh were chosen specifically for their contrasting institutional mechanisms and their documented relevance to gender quotas and women-led resilience programming, a broader comparative set, drawing on cases from Sub-Saharan Africa, Latin America, and Small Island Developing States, would allow for a more robust test of the integrated governance model proposed in this paper's discussion section. Finally, because the underlying literature itself varies in methodological rigor, ranging from peer-reviewed empirical studies to institutional evaluation reports, the strength of evidence supporting particular claims is uneven across sources, a limitation inherent to any desk-based literature synthesis of this kind.

Directions for Future Research

Building on the limitations identified above, three directions for future research would meaningfully extend this paper's contribution. First, there is a clear need for longitudinal research tracking the long-term impacts of gender-inclusive governance on climate resilience across diverse cultural contexts, since the cases examined here document short- to medium-term outcomes but leave open questions about durability over longer time horizons and across changing political administrations. Second, future research should test the integrated governance model proposed above, incorporating formal representation, participatory design, intersectional targeting, and sustained institutional capacity, against a broader comparative set of cases to assess whether the four components identified here are in fact jointly necessary for substantive, rather than symbolic, gender-inclusive outcomes. Third, further primary research directly engaging affected communities, rather than relying solely on institutional evaluation reports, would help to verify whether the resilience outcomes attributed to gender-inclusive programming in the secondary literature are consistent with the lived experience of the women and

communities these programs are intended to serve.

CONCLUSION

This paper examined the critical role of gender mainstreaming in climate change governance, emphasizing its importance for achieving equity, inclusion, and resilience in marginalized communities. Drawing on a theoretical framework that integrates social justice theory, gender theory, sustainability and equity frameworks, and intersectionality, the analysis has shown that integrating gender perspectives into climate policy is not merely a moral obligation but a strategic necessity for effective climate action. The comparative case studies of Nepal's Local Adaptation Plans of Action and Bangladesh's Climate-Resilient Participatory Afforestation and Reforestation Project demonstrate concretely that gender-inclusive practices enhance climate adaptation and mitigation efforts, producing communities that are both more resilient and more equitable than those governed through processes that exclude women's participation and knowledge.

At the same time, the analysis has identified persistent barriers, an implementation gap between international commitment and domestic capacity, entrenched institutional

bias, the risk of merely symbolic quota compliance, and the danger that gender-focused interventions calibrated to a single axis of identity will fail to reach the most marginalized women within a broadly defined category. Addressing these barriers requires more than further declarations of intent; it requires the institutionalization of gender quotas across the full range of climate governance bodies, sustained investment in women's capacity to exercise the authority those quotas confer, intersectional monitoring capable of tracking whether the most marginalized are genuinely reached, and dedicated institutional capacity for gender expertise within climate agencies themselves. Pursued together, these measures offer a realistic pathway toward the kind of governance this paper has argued for throughout: one that acknowledges the concerns and value of populations too often dismissed and disadvantaged, and that thereby strengthens, rather than merely supplements, the collective capacity to respond to a changing climate

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