



Social Sciences Spectrum

A Double-Blind, Peer-Reviewed, HEC recognized [Y-category](#) Research Journal

E-ISSN: [3006-0427](#) P-ISSN: [3006-0419](#)

Volume 04, Issue 03, 2025

Web link: <https://sss.org.pk/index.php/sss>



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The Gender-Climate Nexus in Pakistan: Assessing Impacts and Barriers to Sustainable Development

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Article Information [YY-MM-DD]

Received 2025-06-17

Accepted 2025-09-19

Citation (APA):

Tariq, T & Shafi, H. (2025). The gender-climate nexus in Pakistan: Assessing impacts and barriers to sustainable development. *Social Sciences Spectrum*, 4(3), 583-596. <https://doi.org/10.71085/sss.04.03.351>

Abstract

This study examines the impact of the gender-climate nexus on sustainable development in Pakistan, highlighting implementation barriers and effectiveness factors. Grounded in sustainable development theory, it adopts a qualitative descriptive approach, using purposive sampling and semi-structured interviews with key stakeholders including experts from government officials, GIZ Pakistan (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH), National Commission on Status of Women, academia, and the Ministry of Foreign Affairs, supplemented by policy documents such as ccGAP and NCSW publications. Findings reveal that while Pakistan has gender-inclusive climate policies, their impact remains limited due to structural patriarchy, governance gaps, insufficient gender-responsive infrastructure, restricted access to green finance for women, and the marginalization of vulnerable subgroups. The study underscores the critical need for targeted financial instruments, gender-sensitive disaster responses, inclusive governance, and capacity-building to translate policy into practice. By identifying these obstacles and proposing strategic priorities, the research contributes toward realizing sustainable, gender-equitable climate resilience in Pakistan.

Keywords: Gender Climate Nexus, Sustainable Development, Climate Governance, Gender Inclusive Policymaking, Climate Resilience.



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Introduction

In this globalized world, countries around the globe excessively use resources and energy. This has paved the way towards the climate crisis and global warming. The consequence of economic expansion, industrialization and urbanization has contributed to environmental degradation. Climate change has exacerbated Pakistan's environmental and socioeconomic problems, emphasizing the need of addressing them. One solution is sustainable development, which promotes ecologically balanced legislation and procedures while ensuring long-term financial success and social justice. Climate change and sustainable development are closely related, and addressing the complex issues it raises calls for coordinated strategies. International agreements like the Paris Agreement and the Kyoto Protocol show that the whole community understands the need for policies that balance mitigating climate change with economic growth (Soltau, 2006).

However, the advent of 21st century's innovative world is marked with the emergence of green transition. Owing to environmental degradation as one of the prime concerns, SDGs were formulated, with sustainability and economic security as two most important traits (Arora & Mishra, 2019). Sustainable development, which requires nations to maintain a balance among economic, social, and ecological goals, is a worldwide priority. The gender-climate nexus links climate change with gender parity in sustainable development theory. Climate change disproportionately affects women, thus gender-inclusive solutions that enable women to lead adaptation and mitigation activities are needed. The gender-climate nexus promotes social justice, resilience, and sustainable development by integrating gender views into climate policy and supporting equitable involvement in decision-making. This strategy advocates a complete and fair road to sustainability, which is compatible with the ideals of sustainable development, by integrating and benefiting every section of society in the combat against climate change.

This nexus highlights the necessity for gender perspectives in climate policy and actions, thereby, tackling gender inequalities, making green initiatives more inclusive and long-term. In order to assess the progress of Pakistan towards sustainable development, it becomes significant to understand the role of gender-climate nexus along with barriers that impede the implementation. The interconnectedness among social, environmental and economic dimensions makes the nexus holistic in advancing sustainable growth. There are key initiatives being taken in Pakistan; however, the overall implementation remains a challenge. While the commitment being shown by Pakistan towards sustainable development goals is praiseworthy, there exist many challenge the country confronts across all levels. Although the literature depicts the significance of gender-climate nexus, a thorough assessment of obstacles that stagger implementation and the impact of the nexus on advancing sustainable development in Pakistan remains negligible. In order to fill this gap, this study has done qualitative assessment of this nexus along with impacts and barriers and has viewed it through the lens of Sustainable Development Theory

Literature Review

Gender and Climate Nexus for Sustainable Development

Globally, climate change imposes threats that go beyond damaging the earth's ecosystems only. It also staggers our economic stability and social structures. As a result of climate change, existing social inequalities and vulnerabilities are further exploited and worsened. Climate

change casts a disproportionate impact on marginalized communities, and women are particularly exposed to added risks due to gender disparities embedded in our cultures. Millions of people across the globe suffer job losses, poverty, displacement, and migration, with women seeing their rights undermined. To combat this non-traditional security issue, leaders across the globe emphasize the need for climate strategies that are both grounded in human rights and gender-sensitive. The aim of this strategy is to bring gender equality into climate action, ensuring that women's voices are also included in the policymaking processes (Broeckhoven, 2015). Women in regions such as the Andes, Himalayas, and parts of Africa and Asia remain disproportionately exposed to climate-related challenges. This susceptibility is increased by gender disparities in resources, decision-making authority, and education. For example, in mountainous areas, women bear the brunt of climate change by travelling longer distances to collect water and fuel wood, increasing their risk of injury and limiting their time for education and income generating activities. Additionally, cultural barriers and gender norms can prohibit women from accessing emergency shelters or learning lifesaving skills, resulting in greater catastrophe fatality rates (Alfthan et al., 2011). The gender climate nexus is important to recognize because climate policy ought to be inclusive to address the concerns specific to the needs of vulnerable groups.

Gender perspective in climate policy tends to reintroduce traditional preconceptions on a regular basis while associating women with the domestic sphere and portraying them as weak but virtuous characters. While the numbers of women attending debates on climate issues is on the rise, gender considerations remain feeble and are often avoided in the most fundamental issues of climate agendas. While this effort has always existed, the Global Alliance on Gender and Climate Change among many others have been making strides in promoting women's rights in this setting (Fosado Centeno, 2020). Women are underrepresented in decision making, yet are mostly acknowledged for their pro-environment behavior and resilience. In catastrophes, women and children are 14 times more likely to die than men, according to this logic, and we need gender sensitive climate policies geared towards addressing these vulnerabilities and enabling women (Arora Jonsson, 2011). Feminist researchers have found that you cannot achieve climate justice without gender justice because gendered burdens and harms are often written off in climate activities. Feminist climate activists raised the rallying cry "No climate justice without gender justice" to emphasize the disparities in effects on women and marginalized groups. Gender justice entails tackling the systemic disparities and power dynamics that enhance climate vulnerability across communities. Initiatives taken for climate justice can be made equitable, more inclusive, and impactful by integrating feminist approaches into it (Sultana, 2022).

As per research, increasing women's equality plays a key role in improving sustainability, as it provides access to resources and power in decision-making in an equitable manner. Women come with their experiences, and when their viewpoints are added in natural resource management, it leads to eco-friendly outcomes as well. The engagement of women in climate-related activities paves the way for collaborative and sustainable actions, as shown by different case studies and global examples. However, for true sustainability, both men and women must be integrated to ensure different approaches to environmental stewardship (Meinzen-Dick, Kovarik, & Quisumbing, 2014). For example, the recognition and inclusion of the United Nations Framework Convention on Climate Change's Gender Action Plan (GAP) at the World Climate Conference 2017 (COP 23) was a key achievement that reflects the recognition and inclusion of human rights and gender equity within the UN Climate Action Plan. The Gender Action Plan

highlights the significance of bringing about climate policies that are gender-inclusive in national climate action plans. Women's role in earning livelihoods, especially in the Asia-Pacific region, has not been recognized enough, thereby leading to the absence of meaningful action. Thus, greater attempts are needed to bring about greater change (Struck-Garbe, 2018).

Research Methodology

Theoretical Framework

This study is viewed through the lens of Sustainable Development Theory. It focuses on the interconnectedness among the three pillars of sustainability including environmental, social, and economic vitality. This unification among three pillars is essential for advancing sustainable development. This theoretical framework fits well with the assessment of gender-climate nexus and how the synergy among the three dimensions of sustainable development can contribute to build the nexus. Thus, when gender is integrated into climate, environmental protection, social vitality and economic growth collectively strengthen sustainability.

In the first place, the ecological pillar of sustainable development highlights the necessity of conserving ecosystems while responding to climate change via mitigation and adaptation strategies. The nexus between gender and climate change supports sustainable development by advocating for policies that include women at the decision and policy-making level in combating climate issues. This approach brings more inclusivity to green initiatives with wider and effective impacts. Secondly, the economic aspect of sustainable development underscores boosting economic growth while decreasing harm to the environment. In the same way, gender-focused policies under the gender-climate nexus supports collective advancement. It is through this nexus development that women are included in green economies as well, and thus drive sustainable development across various levels. The interplay between finance and gender-climate nexus paves way towards economic prosperity. The third dimension of sustainable development is social equity, and through this nexus, emphasis is laid upon human security and inclusion of gender in climate as well. The gender-climate nexus also helps in assessing the structural obstacles that hinder women participation in environmental and economic domains. Thus, this third pillar warrants that sustainability doesn't encompass efforts that are only economically and environmentally sound, rather socially just as well.

Qualitative Research

This study adopts a qualitative research approach to examine the role of gender climate nexus, in advancing sustainable development in Pakistan. A qualitative framework is essential for this study as it enables an in-depth investigation of the barriers to implementing these initiatives while capturing the perspectives of key stakeholders. This study adopts a descriptive research design, which focuses on understanding and describing existing conditions, behaviors, or experiences without altering variables. Moreover, this design helps in thoroughly navigating the dynamics of gender-climate nexus and its role in advancing sustainable development in Pakistan.

Data Collection

This study involves the use of secondary data sources along with a combination of qualitative methods to collect data on green initiatives for a comprehensive understanding of the context in Pakistan. Primary data were gathered through semi-structured interviews conducted with key experts. This in-depth exploratory method was chosen for its structured yet flexible nature,

allowing me, as the interviewer, to probe further into emerging themes as they arose during the interviews. This approach also enabled participants to share detailed insights based on their knowledge and experience.

This study comprised of experts and professionals working on sustainable development and gender-climate initiatives at multifarious levels across Pakistan as its population, mainly working in organizations such as GIZ, government offices, National Commission on the Status of Women and academia. Sample was purposively selected from this population on the basis of expertise and accordance with themes of the study.

Sampling Technique: Purposive Sampling

Purposive sampling is a non-random technique of sampling which is used to select sample participants on the basis of their expertise and particular relevance to the study's objective; hence, it was used as the sampling technique for this study as well. It was used because it helped to get insights from participants with direct engagement in the gender-climate nexus and sustainable development. The expertise and knowledge of the experts aligned well with the qualitative nature of this study, thereby helping to gather specialized data with detailed and relevant information. The experience, professional background, and direct involvement were selected as criteria for the selection of the sample to ensure that the collected data was context-specific.

Below is the table that gives an overview of the interview sample.

Table 1: Sample Overview

Interviewee Code	Position	Organization	Mode of Interview	Audio Recording
IP7	Gender Equality Advisor	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Online	Yes
IP8	Technical Expert, Gender & Climate Change	National Commission on the Status of Women	In-person	Yes
IP9	Deputy Secretary for Climate Change	Ministry of Climate Change and Environmental Coordination	In-person	Yes
IP11	Academician	School of Social Sciences (S3H), NUST	In-person	Yes
IP12	Official of Government of Pakistan	Ministry of Foreign Affairs, Government of Pakistan	Online	Yes

Data Analysis

Thematic analysis was applied to analyze the qualitatively gathered data that was obtained from interviews, backed by government databases as secondary sources. Main themes relevant to policy efficacy, institutional barriers, collaborative stakeholders' engagement, and the gendered aspect of climate action were identified by analyzing and reviewing the responses gathered from interviews. Coding, categorization, and theme refinement were the main steps involved in thematic analysis and helped identify recurring patterns and insights. Thematic analysis helps in the systematic categorization of data and hence was chosen as the data analysis method for its effectiveness in helping to find and illustrate patterns, specifically in accordance with governance and national gender-climate policies. This helped in keeping the analysis empirically grounded whilst engaging with the core objectives of the study (Maguire, 2017).

Data Protection and Confidentiality

Data security was ensured by saving audio recordings and transcripts of data in a password-protected drive link. Access was granted only to the researcher and supervisor from the Department of Peace and Conflict Studies, Center for International Peace and Stability (CIPS). However, transcripts were provided to the interviewees/respondents upon their request for review. This helped to ensure the privacy protection of respondents and preserved the ethical considerations of the research process.

Ethical Considerations

Various key steps were taken to ensure that ethical standards are met to maintain anonymity and confidentiality of respondents of the study. An informed consent was obtained from each participant along with an information sheet clearly depicting the significance and objectives of the research. The consent form clearly outlined voluntary involvement and ethical considerations as well. It was assured to participants that their responses would be confidential and used solely for research purposes. No personal information was collected during interviews. In addition to this, the data collected was secured, stored, and access authority was only given to the researcher and supervisor. The consent form and information sheet were shared before the interview via WhatsApp and email to help participants go through the study's objectives and rights before participating. Those who didn't give written consent provided verbal consent before the start of the interview.

Findings and Analysis

This section depicts the main findings of the study. It demonstrates how climate change affects women and marginalized groups and why their voices must be included in climate planning and decision-making. The section also highlights where Pakistan currently stands with respect to gender-responsive climate action, and what's still missing in terms of financial support, education, policy implementation, etc. It also identifies key barriers that are impeding the progression of gender-climate nexus in Pakistan. Through this analysis, the chapter helps build a clearer understanding of where these efforts are making a difference and where critical gaps still remain.

Gender Climate Nexus for Sustainable Development

The gender-climate nexus analyzes the interconnection of inequalities based on gender, climate change, the degradation of the environment, disaster displacement as well as resource scarcity

which disproportionately affect women and marginalized communities. However, in Pakistan, gender considerations in climate governance are largely nascent and are inconsistently used, sometimes ignored in the broader scope of climate policies. In this sub section, the participation of gender inclusive climate initiatives has been examined with insights drawn from representatives of from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the National Commission on the Status of Women (NCSW), the Ministry of Climate Change (MoCC), and the Ministry of Foreign Affairs, Pakistan. This sub section lays the critical foundation for global and national framework, financial accessibility, and governance mechanisms regarding gender on climate adaptation and mitigations.

Conceptualizing the Gender-Climate Nexus

The gender-climate nexus refers to the interconnectedness of gender equality and climate action, recognizing that women and marginalized groups face heightened vulnerabilities. Despite this, gender-sensitive approaches in climate policies remain insufficiently integrated into Pakistan's governance structures.

"Many believe gender only pertains to women, but it extends beyond that. Gender includes women, marginalized communities, individuals with disabilities, and minority groups."

Similarly, another expert reinforced the need for a more comprehensive approach, stating:

"Women make up 50% of the population, so equip them, include them, and become better at planning mitigation, adaptation, and planning. Thus, there is no confusion in this nexus."

Global institutions, including the UNFCCC and the Paris Agreement, highlight the necessity of gender-responsive climate strategies. However, as per IP 8 from NCSW, Pakistan's Nationally Determined Contributions (NDCs) in 2021 acknowledged gender considerations but failed to outline clear mechanisms for implementation, leaving gender mainstreaming largely symbolic rather than actionable.

Global and Local Trends in Gender-Climate Integration

The integration of gender perspectives into climate action has gained momentum globally, with international frameworks emphasizing the need for inclusive policies that address the disproportionate impact of climate change on women and marginalized communities. While many countries, including Pakistan, have acknowledged the importance of gender-sensitive climate governance, the level of implementation varies significantly. At the global level, commitments such as the UNFCCC Gender Action Plan and the Sustainable Development Goals (SDGs) highlight the necessity of mainstreaming gender considerations into climate adaptation and mitigation strategies. Nevertheless, the translation of these commitments into actionable policies at the national level depends on a large part, at the governance structure, financial mechanisms and the institutional capacity. Though Pakistan has taken small steps in gender inclusive climate policy, challenges persist, in resource allocation, representation in decision making, and financial accessibility remain obstacles in implementing them fully.

International Commitments to Gender-Inclusive Climate Action

Globally, gender-sensitive climate action is recognized as a fundamental pillar of sustainable development. The Sustainable Development Goals (SDGs), particularly SDG 5 (Gender Equality) and SDG 13 (Climate Action), emphasize the integration of gender perspectives into climate adaptation strategies. However, despite such commitments, women remain severely underrepresented in key decision-making spaces.

“At COP 29 this year, there were only a handful of female leaders, which underscores the need for greater female participation in climate decision-making.”

At the national level, Pakistan has introduced several policies aimed at integrating gender into climate planning, such as the National Climate Change Policy (2021) and the National Adaptation Plan (2023). However, as per IP 7 from GIZ, their implementation remains inconsistent due to limited institutional support.

"Pakistan has strong policy frameworks, but implementation depends on political stability, international pressures, and funding. If the current momentum continues without disruption, Pakistan will achieve notable progress."

Pakistan's Efforts in Gender-Climate Integration

Pakistan has made incremental progress in integrating gender into climate policies. The 2021 Nationally Determined Contributions (NDCs) acknowledge the role of gender in climate adaptation and mitigation. Pakistan's commitment to gender-responsive climate action faces political, economic, and structural constraints. However, institutional mechanisms remain weak, and women's leadership in climate action is still minimal.

“While the Ministry of Climate Change and the Ministry of Planning and Development have proactive policies and provincial action plans, at the implementation level, we still face resistance.”

Financial Inclusion for Women in Climate Action

Expanding financial inclusion for women is an essential step toward ensuring gender-responsive climate policies and fostering sustainable economic growth. Women play a critical role in resource management, agriculture, and renewable energy, yet financial institutions in Pakistan have been slow to recognize and support women-led initiatives in climate action. The limited representation of women in green finance, climate investment, and policy decision-making continues to restrict their contributions to climate adaptation and resilience-building.

An official from the Foreign Office of Pakistan emphasized that international funding opportunities for women-led climate projects exist, and when effectively utilized, they can serve as powerful tools for economic and environmental transformation.

"If a women-led project comes from Pakistan, they do get funding. International financing in this domain can be tapped into."

Women-led initiatives have demonstrated notable success in fostering community resilience, particularly in climate-vulnerable regions, yet access to financial support remains a crucial factor in scaling these efforts. Research has shown that countries investing in gender-inclusive

financing for sustainability projects achieve better long-term environmental and economic outcomes, underscoring the need for Pakistan to integrate similar strategies into its national framework.

One good example of women's empowerment through financial inclusion is depicted by the Benazir Income Support Program (BISP), which contributes to uplifting socio-economic strength. By directing financial assistance toward women, BISP created long-term behavioral shifts in financial accessibility, resource distribution, and household decision-making. A policymaker from the Foreign Office noted how the program led to greater financial independence for women, reinforcing the idea that when economic resources are placed in the hands of women, communities benefit as a whole.

"When money was given in the name of women, people made ID cards, even if unwillingly, but they did from Sindh to KPK. Even if 30,000 goes to men, women empowerment came in the lower strata. Thus, lower-tier needs are different, middle-tier different, and leadership different."

This success highlights the need for Pakistan to implement gender-responsive financial mechanisms that prioritize investments in women's climate action initiatives. Policymakers and financial institutions must work together to develop low-interest green loans, promote microfinance programs tailored to women in climate-sensitive industries, and incentivize private sector engagement in genderinclusive sustainability projects.

A respondent from GIZ emphasized that shifting financial investment models to prioritize gender is a critical step in bridging the existing financial gap and ensuring women's participation in the climate economy.

"Women need targeted financial instruments that consider their unique socio-economic constraints, allowing them to access capital without facing prohibitive bureaucratic barriers."

"At GIZ, we support village banks run by women and youth to provide climate-resilient financing. However, these efforts need scaling at a national level."

Additionally, expanding on public-private partnerships to expand access to climate finance can further empower women-led sustainability initiatives. Encouraging banks and multilateral organizations to introduce flexible lending policies for female entrepreneurs in renewable energy, agriculture, and climate technology will enable Pakistan to bridge the gap between financial support and climate resilience. Expanding financial literacy programs tailored to women in rural areas will also ensure that climate finance reaches those most affected by environmental challenges.

The Role of Research and Awareness in Strengthening the Gender-Climate Nexus

Strengthening academic and research institutions' engagement in gender-sensitive climate policy is essential for bridging the gender-climate knowledge gap. The National Gender Data Portal provides valuable gender-climate indicators, allowing policymakers to make data-driven decisions that enhance women's inclusion in climate adaptation and mitigation frameworks.

“Indeed, gender perspectives can be incorporated into climate research and policymaking in universities. It is through the National Gender Data Portal that we have developed the gender climate indicators that universities can access.”

Initiatives such as financing and sponsoring women studying environmental sciences, funding female entrepreneurs, providing cash transfers to female led businesses that actively include women in these entities can significantly increase women’s participation in climate governance and the resilience of the economy. Key challenges include encouraging private sector engagement in long term gender inclusive projects and ensuring that women and women led projects are financed.

“Climate education should transcend the need for women to merely be aware on climate adaptation to include knowledge of specific practical skill building and leadership and technical expertise in climate adaptation.”

Barriers Undermining Gender-Inclusive Climate Resilience in Pakistan

Structural Patriarchy as a Systemic Obstacle

A foundational barrier to gender-responsive climate action in Pakistan remains the entrenchment of patriarchal structures that restrict women’s leadership and visibility in climate decision-making. As the Technical Expert, Gender & Climate Change, National Commission on the Status of Women stated:

“I completely agree that patriarchal systems pose significant challenges for women’s engagement in climate action.”

This was backed by the Gender Equality Advisor, GIZ (IP7), who noted that societal misconceptions contribute to resistance in integrating gender perspectives:

“Many believe gender only pertains to women, but it extends beyond that... There is a misconception that gender discussions only revolve around women’s issues, and that makes it difficult to integrate gender perspectives into climate action.”

These persistent gender norms reinforce unequal participation and obstruct inclusive policy implementation.

Governance Gaps in Gender-Sensitive Climate Planning

Despite positive developments in policy, both respondents identified governance level gaps that hinder operational progress. The Technical Expert, NCSW explained:

“There are multiple governance challenges that need to be addressed, including drought resilience programs, gender sensitive disaster displacement strategies, and gender responsive climate budgeting.”

Similarly, the Gender Equality Advisor, GIZ highlighted that even when gender units exist within ministries, policy translation into practice remains uneven:

“Institutional structures are evolving, but barriers remain at the implementation level...While advocacy is strong, implementation is slow.”

Inadequate Protection for Women During Climate Disasters

Both experts underscored the gendered impacts of climate-induced disasters. The

Technical Expert, NCSW and GIZ Advisor illustrated how reproductive health is sidelined even in humanitarian responses whilst pointing to the aftermath of the 2022 floods. Such gaps in emergency planning directly affect women’s survival, health, and dignity, impeding broader development goals.

“During the 2022 floods, over 640,000 people were displaced, including 440,000 women, many of whom were pregnant. Gender-based violence also surged in the aftermath.”

“Many participants could not understand why reproductive health during climate disasters should be a priority. Imagine a pregnant woman in labor during a flood with no access to medical facilities.”

Marginalization of Vulnerable Subgroups of Women

The respondents underscored the exclusion of highly vulnerable populations from climate-related policy and programmatic attention. The Technical Expert at the National Commission on the Status of Women (IP8) stressed the urgency of addressing intersectional gaps:

“Disability inclusion, representation of minority women, and gender-sensitive disaster management need urgent attention.”

Similarly, the Gender Equality Advisor from GIZ clarified that gender, in its proper framing, extends far beyond the category of women alone:

“Gender includes women, girls, marginalized communities, elderly people, individuals with disabilities, and minority groups.”

Underdeveloped Gender-Responsive Infrastructure and Services

Inadequate infrastructure and essential services were identified as major barriers to climate resilience for women, especially in rural contexts. The NCSW Technical Expert pointed out the neglect of gender in public services:

“One critical aspect is ensuring gender-responsive public transport and renewable energy projects in rural areas, where women play a significant role in agriculture.” “Gender-sensitive emergency shelter designs, access to reproductive health services through mobile clinics, and training programs for women in camp management should be prioritized.”

Backing this, the GIZ Gender Advisor drew attention to the agriculture sector, where structural exclusions prevent women from accessing climate-smart tools:

“Women lack access to financial resources and technology,” she noted, adding that enabling their participation in climate resilient

agriculture can enhance food security and nutrition (SDG2).”

Limited Inclusion in Policymaking

Respondents highlighted that the absence of women and gender-diverse groups in decision-making roles weakens the effectiveness of climate-related policies and actions in Pakistan. The Gender Advisor at GIZ emphasized that without diverse representation, the inclusivity and practicality of climate policies suffer.

“Women’s leadership in climate action remains limited, we need to enhance women’s participation and leadership in climate-related policies and actions.”

“Women’s absence in decision-making results in ineffective policies. When women are included, cross-sector collaboration improves, aligning with multiple SDGs”

In Pakistan’s climate governance, gender continues to be narrowly associated with women alone, rather than understood as a broader framework encompassing all marginalized groups including transgender persons, persons with disabilities, and the elderly. While policies like the Climate Change Gender Action Plan (CCGAP 2022) acknowledge gender inclusion, practical implementation remains weak and symbolic. Although some scholarship incentives exist for female university students in climate-related fields, these efforts are scattered and lack institutional pathways to link academic knowledge with real-world climate planning. Structural patriarchy, social norms, and male-dominated institutions still dominate decision-making spaces, leaving women and vulnerable communities out of meaningful climate action. In rural areas, where climate impacts are severe, gender-specific awareness campaigns are rare, poorly coordinated, and lack follow-up. Field-level engagement is often superficial, with limited strategic effort to include gender perspectives in areas like green transition and disaster preparedness. Therefore, gender in Pakistan’s climate agenda continues to focus less on developing systems that transform and more on ticking boxes, and the dream of an inclusive, gender responsive climate resilience is still a long way off.

Conclusion

This study signifies the role of gender-climate nexus in advancing sustainable development in Pakistan. Viewed through sustainable development theory, the study focuses on the social, economic, and environmental aspects of green initiatives. The integration of gender perspectives into climate action has gained momentum. While Pakistan has acknowledged the importance of gender-sensitive climate governance, the level of implementation varies significantly. Though, Pakistan has introduced several policies aimed at integrating gender into climate planning, such as the National Climate Change Policy (2021) and the National Adaptation Plan (2023).

However, their implementation remains inconsistent due to limited institutional support. Financial institutions in Pakistan have been slow to recognize and support women-led initiatives in climate action. The limited representation of women in green finance, climate investment, and policy decision-making continues to restrict their contributions to climate adaptation and resilience-building. Thus, the study shows while nexus is important for mitigating the effects of climate change in Pakistan, and community engagement is a key factor for success in green initiatives, real progress towards sustainable development cannot be made unless Pakistan

overhauls its internal systems, invests in capacity-building for professionals, and ensures that this nexus becomes a national priority led by experts. Without making it a clear and serious goal of government work, Pakistan will continue to move in a direction where even talented experts cannot fix a flawed system, and true development remains a feeble hope.

Conflict of Interest

The authors showed no conflict of interest.

Funding

The authors did not mention any funding for this research.

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