

Interlinkage Between Women And Environment : Pathways To Sustainable Development

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Abstract

The interlinkage between women and the environment represents a reciprocal relationship that is critical to advancing sustainable development. Environmental challenges- including climate change, biodiversity loss, deforestation, and resource depletion- disproportionately impact women due to gendered divisions of labor, socio-economic inequalities, and unequal access to resources. At the same time, women are central actors in fostering ecological resilience through sustainable land use, biodiversity conservation, renewable energy adoption, and community-based environmental stewardship. Drawing on ecofeminist perspectives, this article examines the gender- environment interlinkage as both a site of vulnerability and a pathway for transformation. It illustrates that women-led initiatives contribute to afforestation, sustainable agriculture, and the protection of terrestrial ecosystems thereby advancing SDG15 (Life on Land) alongside other environment-related goals. Moreover, women's participation in decision-making enhances climate adaptation strategies, supports equitable resource management, and strengthens community resilience. Despite these contributions, policy blind spots, intersectional inequalities, and limited institutional support continue to constrain women's transformative potential. The article argues that integrating gender-sensitive policies, inclusive governance structures, and capacity-building measures is essential for aligning gender equality (SDG 5) with environmental goals, including clean water and sanitation (SDG 6), affordable and clean energy (SDG 7), responsible consumption and production (SDG 12), climate action (SDG 13), and life on land (SDG 15). By reframing women not as passive victims but as empowered agents of change, societies can unlock synergies between gender justice and ecological sustainability. The study concludes that embedding women's empowerment into environmental governance is not only a moral imperative but also a strategic pathway toward achieving a just, resilient, and sustainable future.

Keywords: Women and Environment, Gender-Environment Interlinkage, Sustainable Development Goals (SDGs), Ecofeminism, SDG 15, Climate Change and Gender.

INTRODUCTION

The intersection between gender and environmental sustainability has emerged as a critical theme in contemporary scenario women and environment share a reciprocal relationship where in environmental degradation disproportionately affect women, while women's empowerment significantly contributes to ecological resilience and sustainable development of environment in the framework of gender equality.

The impact of women's empowerment on Environmental and its relation with the sustainable Development Goals is exponential, as their contributions are essential in all domains relevant to our society and economy and environment. In contemporary society we are facing a moral imperative to redesign, reshape and recalibrate our approach towards women's empowerment and gender equality. Equality of gender is not only a fundamental human right but a necessary foundation for a peaceful, prosperous and sustainable world. Women construct approximately half of the world's population. Empowering women and girls need looking at the gender with gender neutral perspective. It requires concerted efforts from entire society. It is a crucial step towards acceleration of sustainable development. This theme is applicable to environmental sustainability.

Women's empowerment is a means of emancipation of women and their harmonious co-existence with men in society. It enables their ability to contribute in development of not only society but also environment at all levels maintaining their self dignity and rights and influence in decision making. Women's empowerment provides women with social justice and equality and improves on her ability to contribute at all levels in all round development of society and environment.



Source : <https://sustainabledevelopment.un.org/index.html>

The inequality

Amartya Sen 1999 view on inequality, particularly concerning women, highlights the intersection of gender, poverty, and social injustice. He emphasizes that traditional measures of inequality, like income, fail to capture the complexities women face. Sen argues that women are often deprived of basic capabilities- such as education, health, and economic participation-which limits their opportunities and choices. He advocates for addressing these capability gaps to ensure gender equality, stressing that improving women's freedom and opportunities is central to reducing inequality and fostering broader social and economic progress.

Claudia Goldin 2023 explores gender occupational inequality, focusing on the persistent wage gap and the underrepresentation of women in certain high-paying, high-status professions. Goldin highlights how historical factors, such as social norms and institutional barriers, have shaped women's career choices and progression. She examines how the gender gap has narrowed in many fields but remains entrenched in others, especially in leadership roles.

Objective of the Study

1. To understand the relationship between women and nature.
2. To analyse how gender inequality influences environmental sustainability.
3. To highlight how women, despite facing ecological burdens, are uniquely positioned to contribute to sustainable practice and environmental resilience.
4. To assess the extent to which women are disproportionately affected by environmental challenges such as water scarcity, pollution and climate induced displacement.
5. How gender equality and women empowerment (SDG-5) can lead to fulfilment of SDG goals particularly SDG 15.

REVIEW OF LITERATURE

Vandana Shiva's (1989) *Staying Alive : Women, Ecology and Development* explores the deep connection between women and nature, critiquing capitalist and colonialist exploitation. She highlights women's roles in ecological sustainability and argues for ecofeminism as a path to environmental justice.

Carolyn Merchant's *The Death of Nature* (1980) explores how the scientific revolution reshaped perceptions of nature, shifting from an organic, feminine entity to a mechanistic, exploitable resource. She critiques patriarchal and capitalist influences on ecological degradation, advocating ecofeminist perspectives.

Bina Agarwal's (1992) *The Gender and Environment Debate : Lessons for India* critiques ecofeminism, emphasizing gendered resource access and power dynamics. She advocates for intersectional, community-based environmental policies, highlighting women's crucial role in sustainable resource management, particularly in India's rural contexts.

Sherry Ortner's essay *"Is Female to Male as Nature is to Culture ?"* (1974) explores the universal subordination of women, arguing that women's association with nature, due to biological functions, leads to their cultural devaluation.

Adams and Gruen (2021) discussed ecofeminism as a theoretical approach to intertwining feminist thinking and environmental issues with an emphasis on inter-connected forms of oppression of women, animals and the planet. Their work pointed out the historical disempowerment of women because of patriarchal structures that also damaged the environment. Through the analysis of ecofeminism, they showed how important it is to introspect the complex nature of the relationship between social and ecological injustices to find most effective solutions to create sustainability in solving them both.

Balabantaray (2023) discussed the roles women have played in leading sustainable environmental movements using an ecofeminist approach to explaining how these women have managed to mobilize the community and lead to the realization of sustainable ecological practices. The research findings showed that women played an important role in conserving the environment particularly in grassroots and local government circles; their ways to doing this were innovative and their efforts were cooperative.

Ergas, McKinney, and Bell (2021) explained environmental concerns through intersection, whereby several types of social inequality, such as gender; class; and caste are linked with environmental vulnerability. Their studies indicated that the environment was deteriorating such that women who especially belonged to the marginalized communities suffered most.

Justin and Menon (2022) conducted a case study that focused on Mayilamma who was a tribal eco warrior and the Jharkhand Save the Forest movement in India. They report that women are deeply rooted in cultural, social, and economic landscapes by the means of their environmental activism.

Women and Environment

The Interdependence : Women and men, in all their diversities, interact with the environment differently, the connection between gender and environment are complex and multidimensional. Therefore the liberation of women and nature is seen as intimately linked women play significant role in environment sustainability. Women play an essential role in management of natural resource, including soil, water, forest and energy. In developing areas of the world women are primary users of natural resources and responsible for gathering food, fuel and fodder. Shouldering the responsibility leads them to learn more about responsibility towards soil, plant, trees which promotes a culture of respectful use and preservation of natural resources and environment. Women give greater priority to protection, improvement, maintenance of environment for future.

Gender and Perception of the Environment

The environmental degradation caused by men had dominance over women, while women's large investment is in environmental sustainability. Recent environmental movements led by women have shown that women are more sensitive to earth and its problems. They have created special value system of environment. Both nature and women have been considered as subordinate entities by men which conveys close affiliation between them. Women have the knowledge to use nature sustainably.

Links of SDG-5 with other SDGs

The 17 SDGs or global goals are interlinked and addressed multidimensionally. SDG-5 although is a stand alone goal, other SDGs and targets can not be achieved without progress of SDG-5. The link between SDG-5 and other SDGs are extensive.

Decent work and regular income for women directly contribute to poverty reduction (SDG-1) and also support better education (SDG-4) that is equality and quality education educated family and better socio-economic status. Zero hunger, food security and nutrition and women's contribution in this field (SDG-2) are closely linked with SDG-5. Eliminating all forms of violence against women and girls (Target 5.2) is critical to healthy lives and well being for people of all ages SDG-3 and SDG-6. Therefore we can say that gender equality and women empowerment is cross cutting theme for achievement of all SDGs.

SDGs and Environment : Analysis of the Role of Women Empowerment

The SDGs are closely interlinked goals that also focus on sustainable protection of environment at all levels. They are determined to protect the planet from degradation, including through sustainable

consumption and production, sustainably managing its natural resources and taking urgent action on climate changes. SDGs with environment theme are SDGs 8.4, SDG-11, SDG-12, SDG-13, SDG-14, SDG-15.

SDG-15 : Protect restore and promote sustainable use of terrestrial ecosystem, sustainable manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss is directly related to environmental safeguard.

SDG-5 : Which focuses on gender equality and women's empowerment is a significant contributor in all the SDGs related to environment.

The nature and women both have been subjected to subjugation and oppression by the hands of patriarchal society. Over exploitation rather than sustained utilization of resources like land, water and fuel have resulted in degradation of resources. Women have direct contact with natural resources eg. fodder, fuel, forest, water and land specially in developing countries. Specially in rural areas. being the supplier of water, fuel supplies, medicinal plants at home, women are more sensitive to rampant deforestation, land degradation and soil depletion, difficult access to land and forest. It makes their access difficult further, resulting in their deprivation. They are also very close to nature and therefore major contributors in environmental rehabilitation and conservation with high ecological consciousness (Movements eg. Chipko 1973, Appiko (1983) Silent-Valley 1976, Narmada Bachao Andolan (1989), Navdanya Movement (1984), Amrita Devi, Gaura Dev, Sunita Narayan, Medha Patkar, Vandana Shiva, Green Belt Movement, Rachel Carson, Wangari Maathai, May Boeve, Marina Silva).

Empowered women are essential for any measure aimed at environmental protection and sustainable development. Gender equality and women's empowerment (SDG-5) contributes towards sustainable and balanced environment. SDG-15 is key to food and water security (SDG 2 and 6), health and well being (SDG-3) and provision of affordable energy (SDG-7). Empowerment women can be agent of change, leading biodiversity protection, conservation and sustainable farming efforts.

Economic and Social Development and Women's Empowerment

Women who make up half of world's population their empowerment benefits the society enormously in its social and economic development. Nevertheless they continue to be overrepresented among world's most vulnerable group. Women's empowerment in access to resources and power is a must. Gender equality is a goal in its own right but also a key factor for sustainable economic growth and social development. By providing same opportunities to women and men, including full participation (SDG 5.5)in decision making in all kinds of activities, increasing visibility of women. value unpaid care and promoting domestic responsibilities, (SDG 5.4) , equal right to economic resources, property ownership and financial services (SDG 5.7) promotion of women empowerment through technology (SDG-5.8) we touch all the SDGs related to sustained economic and social development goals. A sustainable path of development can be achieved. Not only economic and social growth but it's benefits should also distributed equitably for sustainable development. Economic empowerment and education depends on digital literacy and access to smart phones. Which will give them safety and save time and resources fulfilling SDG-8, SDG-9 and SDG-1.

Hindrances

1. There is gender gap for mean nominal monthly earning of employees in agriculture, forestry and fishing (Source : UN women calculation using data from ILOSTAT Database).
2. Women have limited access to land and other assets (Source : UN women 2021).
3. Proportion of women and men have 68% women and 75% men in bank and finance in Asia pacific region in 2017 (Source : UN women by data from World Bank Global Findex Database, World Population Prospect 2020).
4. Women of 18-49 have less access to basic water service by level of rainfall (Source : UN women calculate based on DHS Data from DHS Geocavariates 2015).
5. Air Pollution due to unclean cooking fuel has gendered consequence (Source : Global SDG Database and WHO Global Health Observatory).

6. Internet is key source of early warning of various hazards but women are less likely to have access (Source : UN women 2020 unlocking the lockdown).
7. Women are rarely in charge of making decision in energy/high emission sector (Source : Pacific Power Authority 2018).
8. Women remain severely under represented in Environmental decision making proportion of Asia-Pacific countries with women ministers for environment and fisheries 18% of countries in Asia and Pacific have women minister for environment and only 6% have women minister for fisheries. This shows less women that too under represented in environmental decision making and environment conservation strategies (Source : IUGN 2020).

Suggestions :

In order make women empowered to increase her participation in SDGs.

- We have to be more gender responsive.
- Increase visibility of women.
- Incorporate here in paid work.
- Make her digitally educated.
- Law of property inheritance should be improved and better implemented.
- Increase her participation in leadership and decision making.
- Engage women in trade investment.
- Easy financing to women led projects.
- Identify her climate vulnerability and ensure climate adaptation plans. Empower them to join work force.

Critical Analysis

While the existing literature emphasizes the constructive role of women in promoting ecological sustainability, a deeper critical reflection reveals certain limitations. Ecofeminist arguments, particularly those of Vandana Shiva and Carolyn Merchant, often portray women as being inherently closer to nature. This perspective has been powerful in underlining women's environmental contributions, yet it also carries the risk of essentializing women's identities, reducing them primarily to caregivers of the environment. Such representations, while well-intentioned, may unintentionally reinforce traditional stereotypes instead of advancing women's diverse roles in political, scientific, and technological spheres. Furthermore, women's empowerment, though vital, cannot by itself resolve the wider problem of environmental degradation. Broader structural and systemic forces- such as capitalist modes of production, industrial exploitation of resources, and global economic inequalities- continue to drive ecological crises. Without addressing these underlying power structures women's participation may remain confined to grassroots action without influencing broader policy transformations.

It is also important to recognize that gender inequality intersects with class, caste, ethnicity, and geography, shaping how women experience environmental challenges differently. These differences highlight that a universal, one-size-fits-all approach to policy is insufficient; strategies must be sensitive to women's diverse realities.

CONCLUSION

The intersection of gender and environmental sustainability reveals that women are not merely passive victims of ecological crises but potential agents of transformative change. However, existing approaches often over-romanticize women's relationship with nature, framing them primarily as caregivers rather than acknowledging their diverse and dynamic roles in science, policy, and technology. True empowerment must therefore move beyond symbolic recognition and address the structural barriers- patriarchal norms, unequal access to resources, and systemic economic exploitation- that continue to marginalize women in decision-making.

Women's empowerment is essential, but it cannot be viewed in isolation. Sustainable development requires an integrated framework that combines gender equality with broader political, economic and

ecological reforms. When women are provided equal access to resources, property right, education, and leadership opportunities, they can act as agents of biodiversity protection, climate adaptation, and ecological resilience.

In this sense, gender equality (SDG-5) is not only a human rights imperative but also a precondition for achieving all other Sustainable Development goals. A sustainable future depends not only on technological or economic solutions but also on dismantling social inequalities that undermine collective resilience. Thus, empowering women is both a matter of justice and a practical strategy for securing the planet's ecological and social survival.

Having expertise, knowledge and perspective of women been overlooked for years, women are now demanding their voices to be heard. Women are integral to all 17 SDGs, they are also effected by each of the 17 SDGs. The result is still far from full achievement. A gender perspective of (SDG-5) women who are marginalised, though they are front line workers women can be agent of change, biodiversity protection and sustainably developed society.

The positive effects can be magnified by empowering women, making her aware about her rights so that she takes it on her own rather than having given it to her from outside, giving her equality in all aspects. It can be rightly said that women are not passive victims of all crisis. Our very existence depends on sustainable developments in all facts which may depend on empowerment of women.

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