

Gender Dynamics and Sustainable Development in Melghat: A Comparative Analysis of Livelihoods and Environmental Governance

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Abstract

This study looks into the role of gender in sustainable development by focusing on women's empowerment in Melghat, India's environmental management system. Inspired by Amartya Sen's concept of "Development as Freedom" and Bina Agarwal's insights in "Gender and Green Governance," this research assesses the impact of enhancing women's abilities and participation in environmental decisions. It aims to uncover how these efforts can lessen gender inequalities and foster sustainable growth. The study analyzes primary and secondary data to identify socio-economic and cultural obstacles hindering women's involvement in environmental governance. It also discusses how these barriers affect sustainable practices in Melghat. The paper calls for comprehensive policies that consider the overlapping issues of gender, caste, and economic involvement. It suggests practical strategies to significantly boost women's empowerment and ensure active engagement in developing fair and sustainable environmental policies.

Keywords: *Gender Perspectives, Environmental Governance, Sustainable Development, Capabilities Approach, Community Forestry*

Introduction

Sustainable development aims to balance economic growth with social inclusion and environmental protection, ensuring that present needs are met without compromising the ability of future generations. This is especially important in regions like Melghat in Maharashtra, India, which boasts rich biodiversity but faces complex socio-economic challenges.

In such areas, the intersection of gender and sustainable development presents unique challenges and opportunities. Women, often central to

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resource management and agriculture, encounter barriers that limit their decision-making roles and access to resources. This gender disparity not only impedes sustainable development but also perpetuates socio-economic inequalities.

This research is inspired by seminal works such as Bina Agarwal's "Gender and Green Governance" and Amartya Sen's "Development as Freedom." Agarwal (2010) underscores the crucial role women play in environmental sustainability and advocates for governance systems that recognize their contributions. Similarly, Sen (1999) describes development as a process that expands the actual freedoms people enjoy, focusing on enhancing capabilities and removing barriers, particularly for women. The Melghat region, known for its ecological sensitivity and the indigenous dependence on forest resources, is an ideal setting to explore these dynamics. Integrating gender perspectives into environmental governance not only promotes fairness but also improves the effectiveness of sustainable development initiatives, ensuring more comprehensive and inclusive environmental management.

Research Problem

Despite the recognized need to integrate women into sustainable development, significant gender disparities persist in Melghat. These disparities hinder women's participation in environmental governance due to limited education, inadequate healthcare, and entrenched socio-economic inequalities. Such barriers significantly diminish their ability to engage effectively in governance and sustainable practices, ultimately impacting the region's resilience and sustainability.

Objective Of the Study

This study aims to critically examine the role of women in environmental governance in Melghat, identify the socio-economic barriers that restrict their participation and empowerment, and propose strategies to effectively integrate gender perspectives into sustainable development policies. By employing Sen's capabilities approach, this research seeks to understand and enhance the freedoms and capabilities of women in Melghat, supporting more inclusive and effective environmental governance and sustainable development practices.

Research Questions

1. How do socio-economic and cultural barriers influence women's participation in environmental governance in Melghat?
2. What roles are currently played by women in the sustainable

management of Melghat's natural resources?

3. What strategies could effectively overcome gender-specific challenges in Melghat to enhance sustainable development and environmental governance?

NatuRe aNd ScOPe Of the PROblem StatemeNt

In Melghat, gender disparities manifest as limited access to necessary resources and exclusion from decision-making processes, which are critical to sustainable development. This study focuses on how these gender barriers impact the region's environmental governance and sustainable practices.

Rationale of the Study

Addressing the gender-specific challenges in Melghat is crucial for developing policies that not only narrow the gender gap but also enhance the effectiveness of sustainable development strategies. This study will provide valuable insights into the benefits of empowering women in environmental governance roles, potentially leading to broader social and ecological improvements in Melghat and similar environments.

Review of the literature

The literature review examines how gender perspectives are incorporated into environmental governance, focusing particularly on the Melghat region in India. This review discusses theoretical approaches, empirical research, and specific case studies.

theoretical frameworks

Amartya Sen's Capabilities Approach: Sen's model views development as expanding the freedoms people enjoy (Sen, 1999). It's crucial for sustainable development because it stresses enhancing individual abilities and eliminating obstacles that prevent people from achieving their desired lives. Sen suggests that freedom is the ultimate goal and a vital means of development. This idea supports the integration of gender perspectives in environmental policies, advocating for the empowerment of women as essential contributors to sustainable results.

Bina Agarwal's Gender and Green Governance: Agarwal (2010) discusses the role of gender in environmental management, emphasizing that gender inequalities impede effective governance and the sustainable use of natural resources. Her key work, "Gender and Green Governance," argues that involving women in natural resource governance not only promotes gender equality but also improves the conservation and

sustainability of these resources. Agarwal notes that women, often the main users of communal resources in rural areas, introduce diverse and more sustainable management practices (Agarwal, 2010).

Empirical Research on Women's Roles: Research from various global

contexts shows that involving women in decision-making processes usually leads to more effective and sustainable governance of natural resources. Meinzen-Dick's (2014) findings support this, demonstrating that women's involvement results in better conservation and more equitable resource distribution. Additionally, projects in areas like Melghat have proven that gender-inclusive initiatives not only address gender-specific barriers but also provide wider community advantages, such as better biodiversity conservation and decreased resource depletion (Leach, Mearns, & Scoones, 1999).

Gender Disparities and Environmental Policies: Gender

disparities are evident in environmental policy and management, with women typically having less access to resources and decision-making than men. These disparities are intensified by institutional and socio-cultural barriers that restrict women's participation in public and political arenas. Agarwal (2001) points out that such inequalities can lead to inefficient and unsustainable environmental practices. Policies overlooking these gender-specific barriers often lead to poorer outcomes, which could be improved through more inclusive governance that involves women at all decision-making levels (Agarwal, 2010).

Case Studies: The Melghat region serves as an insightful case study for applying gender-focused theories to environmental governance. Known for its rich biodiversity and tribal population, Melghat faces challenges common to global sustainable development and gender equity. Research in this area indicates that including women in forest conservation not only boost the sustainability of these efforts but also elevates women's social status in the community, leading to wider socio-economic benefits (Chhatre & Agrawal, 2008).

Future Directions and Theoretical Implications: The field of integrating gender perspectives in environmental governance is still developing and requires more empirical research and theoretical refinement.

Future studies should examine the long-term effects of gender-inclusive policies and delve into how gender interacts with other socio-economic factors affecting environmental governance. There is also a need for more thorough policy frameworks that explicitly incorporate gender analyses to ensure effective and fair environmental governance. Such efforts should strive to turn theoretical insights into practical guidelines for policymakers, aiming

to establish more inclusive and sustainable environmental management strategies.

ReSeaRch methOdOIOgy

This section outlines the qualitative research approach used to examine the influence of gender on environmental governance in the Melghat region, specifically focusing on women's experiences and perspectives within this context.

Research design

Our study was structured around purposive sampling from five villages in Dharni taluka: Chaurakund, Ranamalur, Bod, Nanduri, and Forest Malur. These locations were chosen due to their active engagement in community-led environmental governance and existing conservation efforts. The aim was to gather in-depth insights from these specific settings.

Participant demographics

The study participants were women aged 18 to 50 from the Korku tribe, the dominant ethnic group in the area. We formed focus groups of 8 to 10 women from each village to facilitate rich and detailed discussions. This strategy was employed to ensure a broad representation of experiences from various age brackets and socioeconomic statuses, particularly from the economically disadvantaged segments.

data collection methods

Data collection was conducted through structured focus group discussions held in each of the selected villages. These sessions were designed to delve into the women's roles, perceptions, and personal experiences regarding the management of local environmental resources. The composition of the focus groups was carefully considered to create an environment conducive to open and unbiased sharing of thoughts and experiences.

analytical framework

We applied thematic analysis to interpret the data gathered from the discussions. This approach was instrumental in identifying recurring themes and patterns among the different focus groups. It proved effective in uncovering the challenges that women face in environmental leadership roles and the effects of enhancing their participation in these decision-making processes.

findings

In-depth research involved focus group discussions and interviews across five villages: Chaurakund, Ranamalur, Bod, Nanduri, and Forest Malur, the last of which has seen significant displacement due to a Tiger Reserve.

1. Role of Women in environmental governance: chaurakund and Ranamalur

Women's involvement in environmental governance has significantly boosted the sustainability and management of natural resources in their communities. In Chaurakund and Ranamalur, women have assumed leadership roles in water resource management and forest conservation.

Transformative Roles in Chaurakund: In Chaurakund, located in Melghat's Dharni block, local Korku women spearheaded the development of a low-cost, sustainable water filtration system using sand, charcoal, and gravel. This innovation not only improved water quality but also empowered them by engaging them directly in solution development.

A Korku woman shared at a community meeting: *"Ham log paani ke liye bahut door jaate the, sukh mausam me. Ab, hum apna kuan ka paani saaf karte hain, aur bacchon ko seedha pilate hain. Humne khud se yeh manage kiya!"* ("We used to travel far for water during the dry season. Now, we filter our well water, and it's directly drinkable by our children. We managed it ourselves!")

Forest Conservation Leadership in Forest Malur: In Forest Malur, women lead a community forest management group, focusing on rehabilitating areas damaged by overharvesting. They introduced a rotational system for collecting firewood and other forest products, promoting regrowth.

During a community meeting in Forest Malur, a Korku woman remarked: *"Humne dekha ki kuch ped aur paudhe ghayab ho rahe the. Yeh sirf humare baare mein nahi hai, hamare bacchon ke future ke baare mein bhi hai. Isliye, humne decided kiya ki purab disha se ab koi kaatne nahi hoga jab tak yeh dobara na uge. Hum log rotation me kaam karte hain, aur sabko niyam ka palan karna padega. Hum apne jungle ki raksha apne bachon ki tarah karte hain."* ("We noticed that certain plants and trees were disappearing. It wasn't just about us; it was about our children's future. So, we decided no more cutting from the eastern section until it grows back. We rotate the areas, and everyone must follow the rules. We watch over our forest like our children.")

These initiatives underscore the capability and motivation of women to

2. Socio-economic barriers

Despite their critical roles, women in Melghat face significant socio-economic obstacles that limit their active participation in environmental governance. These include deep-rooted educational disparities, traditional gender roles, and limited access to economic resources and decision-making platforms.

fgd from bod and Nanduri:

Bod: Here, traditional gender roles deeply embedded in the community significantly limit women's participation in decision-making processes, particularly in environmental committees.

During a focus group discussion in Bod, a local Korku woman stated: *"Jab bhi hum gram sabha me jaate hain, lagta hai jaise hamari awaaz hawa me kho jaati hai. Aadmi bolte hain, aur lagta hai jaise sab pehle se decide ho chuka hai. Ye jaan kar dukh hota hai ki apke paas vichaar hain*

par kabhi share nahi kar sakte." ("Whenever we go to the gram sabha, it feels like our voices just vanish into the air. The men speak, and it's like everything is decided in advance. It's disheartening, knowing you have ideas but might never get to share them.")

Nanduri: Here, educational barriers notably highlight the differences in opportunities available to men and women. Women's lower levels of formal education affect their confidence and ability to engage in technical discussions on environmental management.

A Korku woman shared during an interview in Nanduri: *"Main madad karna chahti hoon, hamare ped-paudhon aur paani ko behtar banane ke liye, par jab meeting hoti hai, aur baat technical ho jati hai, to main khud ko bahar khada hua mehsoos karti hoon. Kaise contribute karun jab unke shabdon ka pata hi nahi chalta. Aisa lagta hai jaise bahar khade ho kar andar dekh rahe ho."* ("I want to help, to improve our trees and water, but when there's a meeting, and the discussion turns technical, I feel like an outsider. How can I contribute when I don't understand their words? It's like standing on the outside, looking in.")

These insights from Bod and Nanduri illuminate not only the external barriers faced by women but also the internal struggles they endure due to societal expectations.

3. Benefits of Gender-Inclusive Policies

Integrating women into decision-making processes has proven to significantly enhance environmental governance. Women's unique perspectives, often grounded in sustainability and community well-being, ensure more comprehensive and effective environmental policies and projects.

fgd from Rana malur:

In Rana Malur, a gender-inclusive water management work highlighted the impact of including women in environmental planning. Women's indigenous knowledge of water sources played a critical role in the project.

During a community meeting in Rana Malur, a Korku woman said: *"Hamari maaon ne humein sikhaya hai ki jungle aur nadiyon ki suno; agar dhyan se suno to ye humse baat karti hain. Hum jaante hain garmiyon me paani kahan chhupa hota hai. Kyun na wahan isse bacha ke rakhein jab humein sakht zarurat ho?"* ("Our mothers taught us to listen to the forest and the streams; they speak to us if we listen carefully. We know where the water hides when the summer scorches the earth. Why not save it there for when we desperately need it?")

The inclusion of women led to the adoption of sustainable practices that improved water supply and ecological stability throughout the year. This case study from Rana Malur vividly illustrates the benefits of gender-inclusive policies in environmental governance, emphasizing the need to respect and integrate women's knowledge and perspectives. By doing so, communities address immediate environmental challenges and contribute to the creation of resilient, sustainable systems that benefit all community members.

discussion

Interpretation of Findings This study underscores the vital role that women from the Korku community in the Melghat region play in managing the environment. Using feminist political ecology and Amartya Sen's capabilities approach as frameworks (Agarwal, 2010; Sen, 1999), our findings reveal that including women in decision-making significantly boosts sustainable management of resources and supports equitable governance. Women's extensive knowledge of local ecology, demonstrated in the Chaurakund and Ranamalur case studies, is crucial for successful resource management and conservation efforts.

Our research confirms that excluding women from these roles hinders gender equality and misses a critical chance to enhance sustainability. Their in-depth understanding of local natural resources and commitment to sustainable practices is invaluable for effective environmental planning

Comparison with Other Regions The situation in Melghat shares similarities with other regions like the Chipko movement in Uttarakhand, India, and the role of women in conservation efforts in East African grasslands (Shiva, 1989; Rocheleau, Thomas-Slayter, & Wangari, 1996). However, Melghat differs as the inclusion of women in environmental governance is sporadic and informal, pointing to a gap between local customs and formal policy enforcement.

Comparative Analysis By placing our study in a broader comparative context, such as examining similar scenarios in the Sundarbans of West Bengal, India, and the Amazon Rainforest in Brazil, where local communities are integral to conservation, we gain further insights. This comparison enhances the relevance and depth of understanding of how gender dynamics influence environmental governance across various global settings.

Policy Recommendations and Practical Implications The study illustrates the critical role women, especially those from marginalized groups like the Korku in Melghat, have in environmental governance. It suggests practical steps to capitalize on this potential:

- y **Legal Framework Enhancement:** Amend the Forest Rights Act to ensure equal land and resource rights for women, including joint ownership by spouses and equal inheritance rights for daughters and sons (Agarwal, 2010).

- y **Implementation of Gender Quotas:** Mandate a minimum of 40% female participation in all environmental decision-making bodies at every level (Cornwall, 2003).
- y **Capacity Building Initiatives:**

 - y **Skill Development Workshops:** Establish workshops to enhance women's skills in sustainable farming and conservation, taking into account the linguistic and cultural nuances of tribal communities (Kabeer, 1999).

 - y **Educational Scholarships:** Offer scholarships for women in Melghat to study environmental sciences, thereby boosting their qualifications and expertise (Duflo, 2012).

- y **Economic Empowerment Strategies:**

 - y **Microfinance and Credit Access:** Provide microfinance options and low-interest loans to women starting sustainable businesses, such as organic farming or eco-tourism (Nussbaum, 2000).
 - y **Market Access Support:** Assist women in accessing broader

markets for eco-friendly products like organic food and sustainable handicrafts (Patel, 2019).

y Community Engagement and Awareness:

Gender Sensitization Campaigns: Conduct campaigns throughout Melghat to challenge traditional gender roles and emphasize the importance of women's contributions to environmental sustainability (Sharma, 2017).

Collaborative Management Models: Promote management models that guarantee women's equal involvement in both the planning and execution stages of resource management (Chhatre & Agrawal, 2008).

Limitations and Future Research Directions This study focuses primarily on the Korku community in the Melghat region, which may restrict the generalizability of its findings to areas with different socio-economic and environmental conditions. The reliance on qualitative data, while providing rich insights, might not fully represent broader, quantifiable impacts that are essential for widespread policy application.

future Research directions:

y **Broader Geographic Scope:** Future research should include a variety of locations and communities to test the replicability of these findings in other settings.

y **Quantitative Measures:** Employ quantitative methods to obtain more definitive data on the impact of women's involvement in environmental governance.

y **Longitudinal Studies:** Long-term studies can help observe the enduring effects of integrating women into environmental governance.

y **Comparative Studies:** Examining different levels of female involvement in various regions can highlight the direct benefits of active participation by women in environmental decision-making.

y **Policy Implementation Studies:** Investigating the actual application of gender-inclusive policies in environmental governance can help assess their effectiveness and recommend necessary adjustments.

conclusion

This research paper has examined how gender perspectives are integrated into sustainable development, focusing specifically on environmental governance in the Melghat region of Maharashtra, India.

Utilizing the theoretical frameworks of Amartya Sen's "Development as Freedom" and Bina Agarwal's "Gender and Green Governance," this study highlights women's essential role in managing the environment sustainably and the significant obstacles that prevent their full involvement. The findings confirm that empowering women in environmental decision-making supports the sustainable use of natural resources and leads to fairer governance structures. Women's participation results in more thorough and lasting environmental benefits, as they bring unique insights and traditional knowledge crucial for the long-term preservation of resources. The situation in Melghat reflects broader global challenges and opportunities in weaving gender considerations into sustainable development. Similar to movements like Chipko in India and conservation projects in East Africa, Melghat's experiences show the potential for improved sustainability and community welfare when women are engaged in governance. However, Melghat also faces substantial challenges due to systemic barriers that restrict women's involvement in environmental governance. This study offers several policy recommendations to address these barriers. These include formally recognizing women's contributions to environmental sustainability, enhancing capacity through education, creating inclusive policies, establishing support structures for women, and implementing community programs to encourage gender inclusivity. These measures are vital for achieving gender equality and the success of sustainable development goals in the region and beyond.

In summary, this research emphasizes the importance of including gender perspectives in all aspects of environmental governance to promote comprehensive, sustainable, and equitable development. By improving women's capabilities and involvement in environmental decision-making, places like Melghat can foster more robust and sustainable ecological and social systems. Future research should continue examining the long-term effects of gender-inclusive policies and work to turn theoretical ideas into practical, effective strategies, paving the way for more inclusive and sustainable environmental governance globally.

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