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EMPOWERING WOMEN FOR BIODIVERSITY CONSERVATION: A GLOBAL PERSPECTIVE WITH CASE STUDIES

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Abstract

Since its inception, women have made significant contributions to the environmental movement. Biodiversity conservation is a pressing global concern, with women playing a critical but often overlooked role in this endeavor. This research paper aims to shed light on women's significant contributions to biodiversity conservation and emphasizes the importance of gender-inclusive approaches in environmental management. It highlights the multifaceted roles that women play in preserving and promoting biodiversity through the analysis of diverse case studies from around the world. The inclusion of women's perspectives and participation in conservation efforts is crucial for achieving sustainable results. These case studies will highlight the various roles that women play around the world in biodiversity conservation, including advocacy for policies, sustainable agriculture, community engagement, and scientific research. Their work highlights the value of recognizing and assisting women in conservation initiatives

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and makes a substantial contribution to the preservation of ecosystems and the advancement of sustainable practices.

Keywords

Biodiversity, environment, women, conservation, sustainable.

Conservation of biodiversity is critical for maintaining ecological balance, ensuring sustainable development, and mitigating the effects of climate change. Despite the undeniable relationship between gender and conservation, women's roles in biodiversity initiatives continue to be underrepresented in academic literature and policy frameworks.

The purpose of this research paper is to explore the various roles that women play in biodiversity conservation; assess the environmental impact of women-led conservation initiatives and emphasize the significance of gender-inclusive approaches in conservation policy.

To collect data on women's involvement in biodiversity conservation, a comprehensive literature review and case study analysis were conducted. The case studies were chosen to represent different geographical regions and ecosystems, allowing for a global perspective on women's contributions.

Women's Roles in Biodiversity Conservation**Community Engagement**

Women are often the primary guardians of natural resources in their communities. Case studies from Southeast Asia and Sub-Saharan Africa show how women actively participate in community-based conservation projects, managing natural resources in a sustainable manner, and passing on traditional ecological knowledge to future generations.

Advocacy and Scientific Research

Women make significant contributions to scientific research and biodiversity conservation advocacy. Women researchers and activists play critical roles in identifying conservation priorities,

conducting field studies, and advocating for policy changes, as evidenced by examples from academia and non-governmental organizations.

Traditional Knowledge and Sustainable Agriculture

Women contribute to biodiversity conservation by practicing sustainable agriculture and preserving traditional knowledge. Indigenous community examples show how women farmers use agroecological methods to preserve biodiversity while ensuring food security and cultural sustainability.

We have compiled profiles of revolutionary women from across the environmental movement for this study.

Wangari Maathai, an environmentalist and Nobel Peace Prize laureate, founded the Green Belt Movement in Kenya in 1977. This movement emphasized tree planting, environmental conservation, sustainable land use practices, and women's rights. The movement aimed to combat deforestation, restore degraded ecosystems, and economically empower rural women by engaging them in tree-planting activities. The initiative helped to conserve biodiversity while also addressing socioeconomic concerns. She spent her life arguing that environmental action is "more than planting trees; it's planting ideas." Since its inception, the movement has trained over 30,000 women and planted more than 51 million trees, earning her the Nobel Peace Prize. Maathai has made a significant contribution to the global environmental movement through her commitment to ecofeminism and equitable participation.

Bibi Hakimeh is a well-known participant in the Hima Women's Cooperative, a local group in Lebanon. In Hima, a traditional community-based conservation system, the cooperative focuses on biodiversity conservation and sustainable resource management. Women play a crucial role in maintaining Lebanon's diverse ecosystems through their active participation in ecotourism, habitat restoration, and native species protection.

A key figure in the Indian independence movement, Kamaladevi Chattopadhyay played a pivotal role in advancing

customary agriculture. Chattopadhyay founded Navdanya, an organization that uses organic farming and seed saving to preserve biodiversity. Women farmers are actively contributing to the conservation of traditional knowledge, agroecological practices, and indigenous seed preservation. The significance of women in sustainable agriculture and biodiversity conservation is emphasized by this initiative.

Marina Silva, a former Brazilian Environment Minister, was instrumental in establishing extractive reserves in the Amazon rainforest. Silva fought for the rights of Amazonian traditional communities, including women. The establishment of extractive reserves empowered local women to manage natural resources in a sustainable manner, promoting biodiversity conservation while supporting their livelihoods through the non-destructive use of forest products.

Forest ecologist Nalini Nadkarni is well-known for her pioneering work in forest canopy research. Nadkarni's role in biodiversity conservation involves studying the complex ecosystems of tree canopies. She promotes the involvement of women in scientific research through her initiatives, such as the "Canopymeg" project, fostering a gender-inclusive approach to biodiversity conservation by expanding our understanding of forest ecosystems.

Gaura Devi was a grassroots environmental activist whose bravery and determination defined the Chipko movement. Gaura Devi led 26 other women into the woods late at night to confront the forest company workers who were going to cut down the trees and challenge them to use their axes. Despite abuse and threats of violence, she was able to halt the loggers' work by hugging the trees. All night, the women of the Raini village and Gaura Devi stood guard over the trees. Over the next few days, many more villagers joined the protest.

Suryamani Bhagat, founder of the Torang tribal rights and cultural center in the eastern Indian state of Jharkhand, is working with women in her village of Kotari to protect the state's valuable forests. Working under the auspices of the Jharkhand Save the Forest

Movement (also known locally as the Jharkhand Jangal Bachao Andolan), Bhagat initially brought together 15 adivasi women to oppose attempts by a state-appointed forest official to plant commercially viable timber with no biodiversity or consumption value for the villagers who live off the land.

This research paper concludes that recognizing and harnessing the contributions of women in biodiversity conservation is necessary for achieving sustainable and equitable conservation outcomes. Using significant examples, the paper emphasizes the importance of adopting gender-inclusive approaches in policies and practices to address the complex challenges posed by biodiversity loss.

References:

1. Mora, C, D.P. Tittensor, S. Adl, A.G.B. Simpson and B. Worm. 2011. How many species are there on earth and in the ocean? PLoSBiol9(8): 1-8.
2. Hall OP and Ferero OS (2013) Biological Diversity in the patent system. PLoS ONE 8(11); e78737.doi:10.1371/journal.pone.0078737.
3. Singh, P. & Dash, S.S.2014. Plant discoveries 2013 – New Genera, Species and new records. Botanical survey of India, Kolkata.
4. Singha, R.K., M. Dube, R.D. Tripathi, A. Kumar, P. Tripathi and S .Dwivedi. 2010. India a megadiversity nation. International Society of environmental Botanists, Environews. 16(4). Oct
5. Anonymous (2012) World intellectual property organization. Women and traditional knowledge.
6. GRAIN (2000). Potato: A fragile gift from the Andes. September 2000.
7. Owen, Al (2008). Grades, gender, and encouragement: A regression discontinuity analysis. MPRA paper 11586, University library of Munich, Germany.
8. Cox PA (1995). Shaman as Scientist: Indigenous knowledge systems in pharmacological research and conservation. In K.

- Hosttetmann et al. (eds). *Phytochemistry of plants used in traditional medicine*, Clarendon press, Oxford.
9. CSE (centre for Science and Environment) (1982) *The state of India's environment (1982). A Citizens report*. CSE, New Delhi.
 10. Natarajan B (2012). *Biodiversity and traditional knowledge; Perspective for a gift economy*.
 11. Rout, S.D., S.K. Panda, N, Mishra and T. Panda. 2010. *Role of Tribals in collection of commercial non-timber forest products in Mayurbhanj Distt. Odisha . Studs Tribes Tribals* 8(1): 21-25.
 12. Kaushik, P., M. S. Dhaliwal and S. Kumar. *Usefulness of tree under exploited vegetable Legumes-A Review*. *International journal of current microbiology and applied sciences* 7: 861-870.
 13. Abhijeet, P. Kaushik and M. Verma. 2018 *Sponge Gourd an Unexploited Cucurbit*. *Trends in Biosciences* 11 (8) 1772-1774.
 14. Gurulakshmi, K.G. 2012 *Role of women in environmental conservation*. *Zenith International journal of Bussiness Economics & Management Research* 2(4): 253- 269.
 15. Shrivastava, R,C. and Adi Community. 2009. *Traditional knowledge of Adi tribe of Arunachal Pradesh on plants*. *Indian Journal of Traditional knowledge* 8(21): 146- 153.
 16. Agarwal, A. and D.R. Arora. 1989. "Women in Rural Society "Vohra Pub. and Distributors Allahabad.
 17. Gadgil, M. 1991. *Conserving India's Biodivresity : The social context*. *Evolutionary trends in Plants* 5 3:8.
 18. Van Andel T, de Boer HJ, Barnes J, Vandebroek I. *Medicinal plants used for menstrual disorders in Latin America, the Caribbean, sub-saharan Africa, South and Southeast Asia and their uterine properties: A review*. *Journal of Ethnopharmacology*, 2014; 155:992-1000.
 19. Mukherjee PK Wahil A. *Intregated Approches towards drug development from Ayurveda and other systems of medicine*. *Journal of Ethnopharmacology*, 2006; 103: 25-35.
 20. De Boer HJ, Cotingting C. *Medicinal plants for women's*

- healthcare in South east Asia: A meta -analysis of their traditional use, Chemical constituents, and pharmacology. *Journal of Ethnopharmacology*, 2014; 151:747-767.
21. Samy RP, Ignacimuthu S. Antibacterial activity of some folklore medicinal plants used by tribals in Western Ghatsof India. *Journal of Ethnopharmacology*, 2000; 69: 63-71.
 22. Mohamad YBH, Chin W, Holdsworth D. Traditional medicinal plants of Brunei Darussalam, Part II Sengkurong. *Pharmaceutical Biology*, 1991; 29: 252–258.
 23. Westermayer J. Folk medicine in Laos: a comparison between two ethnic groups. *Social Science and Medicine*, 1988; 27: 769–778.
 24. Caniago I, Siebert SF. Medicinal plant ecology, knowledge and conservation in Kalimantan, Indonesia. *Economic Botany*, 1998; 52: 229–250.
 25. Zheng X, Xing F. Ethnobotanical study on medicinal plants around Mt. Yinggeling, Hainan Island, China. *Journal of Ethnopharmacology*, 2009; 124: 197–210.
 26. Roosita K, Kusharto CM, Sekiyama M, Fachrurozi Y, Ohtsuka R. Medicinal plants used by the villagers of a Sundanese community in West Java, Indonesia. *Journal of Ethnopharmacology*, 2008; 115: 72–81.