



# Women and Biodiversity

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## Abstract:

*Gender is an important factor in shaping attitudes towards conservation, and a lack of attention to gender diversity in perceptions can work against the objectives of community-based conservation actions and programs. Women play a vital role in conservation, as do many of the world's leading female conservationists working to save endangered species. Women need to participate equally and actively in the conservation and sustainable use of biodiversity because they play an important role as land managers and resource users, and face negative impacts from biodiversity loss and gender conservation measures. A case study about the role of women of Assam regarding biodiversity conservation has been presented with reference from various journals as well as reports. The different ways through which biodiversity can be conserved is mentioned in this article. Why women are not given equal access as well as why their efforts are not recognized in the public sphere is being explained in this paper.*

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**Keywords:** *Biodiversity, Women, 20<sup>th</sup> century*

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## 1. Introduction

(Grossman, 2019), has argued that ecologists of 20<sup>th</sup> century have explored how biodiversity might shape ecosystems, often taking diversity to be a consequence of ecological conditions in a particular place rather than a cause of those same conditions. Biodiversity has contributed in many ways to the development of human culture and in turn, human communities have played a major role in shaping the diversity of nature. The importance associated with the issue of biodiversity conservation involves good judgment about work for future generations and responsibility for the non-human world.

There is an urgent need to educate people to adopt environment friendly practices and reorient their activities in such a way that our development is harmonious with other life forms and is sustainable. Women need to be equally and actively involved in processes to conserve and sustainably use biodiversity because they play critical roles as primary land managers and resource users, and they face disproportionate impacts both from biodiversity loss and gender-blind conservation measures.

## 2. Women and Biodiversity

The links between gender and diversity is many. The construction of women as the "second sex" is linked to the same inability to cope with difference as the development paradigm that leads to the displacement and extinction of diversity in the biological world. In the patriarchal world view, man is the measure of all value and there is no room for diversity—only hierarchy. Woman, being different, is treated as unequal and inferior. Nature's diversity is not seen as intrinsically valuable in itself. (Shiva, 1992, P.205).

For example, while women in many countries are engaging in small scale agriculture as well as various activities related to the protection of biodiversity, but their works and efforts are not given much attention. They are side lined. The loss of biodiversity also places a heavy burden on women and girls by increasing the time they need to access essential resources such as water, firewood, and medical plants, reducing the amount of time they can spend on income and education.

Without the contribution of women and girls, there efforts towards conservation of biodiversity will be overlooked and therefore perpetuate gender inequalities. The participation of women in biodiversity conservation should be improved at every level and sphere to enable an equal platform.

The Convention on Biological Diversity has developed a Gender Action Plan outlining the role of the Secretary in promoting and advancing efforts at national, regional, and international levels to promote gender equality and inclusion gender equality. The Millennium Development Goals emphasize a clear link between gender equality, poverty eradication, biodiversity conservation and sustainable development. Such insights should be incorporated into our vision and approach to reducing biodiversity loss, reducing poverty and improving human well-being. (United Nations).

### **3. Role of Women in Preserving Biodiversity**

Women rely on healthy areas to support their families, and as a result, they are increasingly affected by environmental degradation and disasters such as floods, biodiversity loss and climate change. Women in rural and indigenous communities carry certain responsibilities to ensure the well-being of their families such as fetching water and firewood

However, women's representation in environmental decision-making processes is still limited and their access to and management of land and marine resources may be limited.

The roles and responsibilities of men and women in the management of biodiversity, as well as the ability to participate in decision-making, vary from country to country and culture. In most cases, however, there are gender differences and inequalities, which often favour men. Significant gender disparities are reflected in economic opportunities and access to and control of land, biodiversity resources and other productive assets, decision-making power, and the risk of biodiversity loss, climate change and natural disasters. (CBD,2017). Countries which are poor have a lot of supplies of genetic plant resources. Therefore, it is important to realize that these resources are not exploited in order for commercial gain.

According to the UN Food and Agriculture Organization, 2017 “Genetic resources for food and agriculture are the raw materials upon which the world relies to improve the productivity and quality of crops, livestock, forestry and fisheries, as well as to maintain healthy populations of wild species.”In developing countries, women are often the primary caregivers of these services; they are the keepers of the seed; they protect, cultivate and use these resources in their daily lives.

Furthermore, they tend to be the guardians of traditional knowledge associated with these dwindling genetic resources. (UNEP, 2017). Apart from equality, empowering women 's full participation in biodiversity decisions is essential to ensure that biodiversity conservation and sustainable use efforts are successful over the long term. In addition to the donations and purchases of women and girls, these efforts pose a risk of ignoring the causes of biodiversity loss, as well as potential solutions, and may further perpetuate gender inequality.

### **4. Women in Developing and Poor Countries**

(Shiva,1992), has argued that many communities in third world countries depend on biological resources for their sustainability and wellbeing.

In these societies, biodiversity is a means of production and a means to an end. It is the foundation of survival that must be maintained. The sustainability of livelihoods is ultimately linked to the conservation and sustainable use of natural resources throughout their diversity. (Shiva,1992).

Women’s knowledge is very much crucial for biodiversity conservation as well as utilisation because they can perform multiple tasks in various sectors. Women have remained invisible as agricultural farmers and producers as people fail to recognize their efforts.

In many developing countries women are paid to provide traditional information about plants and land; are not paid to plant, raise or collect medicinal plants that the family needs from time to time; and often, are not invited, or given an opportunity to express their views on community development programs. Their initial knowledge of the area and its use is often overlooked when it comes to finding sustainable agricultural solutions that support their families on a daily basis and they are not paid for their work as food producers. The food they grow is shared with their family. Any money the family earns comes from the surplus, and women do not receive a fair share of this income. (UNEP,2017).

However, women's ability to conserve biodiversity remains to be fully explored. This is especially true of indigenous and rural women, who are often marginalized in decision-making processes. Studies show that involving women in forest management and fishing groups can lead to better resource management and conservation outcomes. Despite this, women are less represented in decision-making positions related to environmental issues and sustainable development.

### **5. Encouraging rural women to protect forests through entrepreneurship**

The rural area is full of business opportunities, many of which are based on ancestral knowledge or culture. Globally, women contribute significantly to organic farming; professional food and handicrafts; collect forest products (such as edible wild fruits and vegetables, traditional medicine, frames); and ecotourism, among others. (IUCN,2021).

Women also use their traditional knowledge to manage resources in a sustainable manner. It is often passed down from generation to generation, this helps to increase revenue and preserve the interconnected heritage of the biodiversity and cultural (natural) cultures of their areas. With their ability to reach out and promote collaborative action among others, strong women entrepreneurs are also important in tackling biodiversity loss and sustainable management of forest environments to mitigate climate change. (IUCN, 2021).

In order to promote effective policies on biodiversity conservation, sustainable use and sharing of its benefits, we need to understand and disclose biodiversity practices, gender access and use, and gender inequality in resource management. We need to consider the effects of gender differences and inequalities in the conservation and sustainable use of biodiversity, and the ways in which these differences and inequalities affect women's and men's biodiversity policies, planning and programs. (CBD,2017).

### **6. Informed custodians of biodiversity**

“I do not despair ever, for I guard one seed, a little life seed that I shall safeguard and plant again.” (Shiva,1996; P.129)

Men's roles and responsibilities often link them to the market and provide better access to information. As they interact with the outside world, as well as the latest strategies and practices, they often focus more on trade, more on production for profit. For many women, the most important thing is to support the family and the community - from raising livestock for local people, to growing home-grown crops. With a strong role in connecting natural resources with traditional practices, and with the vast amount of knowledge they have, women are increasingly aware of the introduction of new methods or processes that threaten the sustainability of these resources. Acquiring land is one resource that women farmers need. Both men and women who work with plants and animals need credit, technical support, and extension services. Women's plants and activities are often overlooked or even considered as good investment objectives. For example, women's small home gardens are often regarded as suitable for technical assistance.

A UN report on the state of world biodiversity for food and agriculture links rising food insecurity and chronic hunger to threatened habitats and ecosystems. But traditional female stewards of biodiversity offer hope.

Women who have long considered themselves to be “poor and needy” are now recognizing, accepted as biodiversityists for the production of sustainable food, that they play an important role in “household security and social security”. The concept of diversity is best found in the biodiversity and the links of women to it. It is helpful to look at the prominent structures from below, from the ground of diversity.

### **7. Challenges of excluding women from biodiversity conservation**

The recognition of women’s work of what is labour and what is not is worsen by the fact that they can perform many chores at the same time with a great volume. Considering the way women are inside society, it is truly unfortunate that they are being ignored in the management of biodiversity, despite international agreements and national laws recognizing the role of women in conserving biodiversity.

Women need to participate in programs to discuss and make sustainable use of biodiversity because they play an important role as global managers and resource users. They often use natural resources differently from men but often have little effect on how local resources are managed. The growing need is that empowering more women in the use of space and decision- making may lead to better resource management and conservation. (Bajner,2019)

The connection between gender and the use of biodiversity varies and depends on specific economic, cultural and ethnic conditions. But women may not participate in conservation activities or because they are locked out because of their own desires or because they do not feel empowered to express their cultural background. This lack of understanding is a major problem in conservation projects.

Women have a unique relationship with biodiversity and the world, women are at the forefront as wildlife growers, local farmers, horticulturalists, herbs and seed preservatives. There are many examples proving that women and men have different uses, knowledge, and habits related to biodiversity. These different relationships and biodiversity cause different effects of sexuality as they change the abundance and the composition of biodiversity. These changes can reduce women's access to and control, natural resources (i.e., land, water, cattle and trees) and reduce their chances of providing their families with a decent standard of living. (IUCN)

Women's voice and ideas should be an integral part of natural resource management, ensuring that their needs, priorities and concerns about natural resources are adequately addressed in decision-making and that women and men benefit equally from conservation programs and policies. Involvement of all members of the community, women and men, can also increase the chances of conservation processes being followed over time.

### **8. Biodiversity and Women of Assam**

North-East India is rich in biodiversity. The north-eastern region is dominated by ethnic groups and an agricultural-based economy. Rural and urban women have a good relationship with nature in their daily life practices. In comparison, men use natural resources for commercial purposes on the contrary; women are exposed to natural resources for their basic living needs.

The biodiversity of Assam, a region in the north-eastern part of India, makes it a popular biodiversity hotspot with many unique flora and fauna. A major breakthrough in recent years has been the conservation of Indian rhinos in Kaziranga National Park, but the rapid population growth in Assam threatens many plants and animals and their habitats.

Indigenous women conserve many forest plants that are used for wound healing and other herbal remedies. Many species of plants are very important to the economy. The stems and leaves of other plants become powdered and attach to the wounds or fragments of broken bones. In this way the indigenous people of our country help to save the environment and protect it from degradation.

The women of Assam played an ironic role in the conservation of biodiversity. In Assam, tribal women belonging to a different tribal group like Bodo, Rabha, Dimasa, Karbi and other communities have a lot of contributions to conserve nature in their areas with their religious and cultural perspective. Traditionally, the tribal people have right on the land, water and forest on their surroundings and exercise the control within their jurisdiction. In the agrarian set-up of Assam, the rural and tribal women mainly engaged in crop cultivation, animal husbandry, fishing, etc. The tribal women have abundant knowledge about the herbal medicinal plant of their areas. They preserve some plant for their religious practices and worship in the name of a specific God. The Bodo women conserve about 48 different plants to use (leaves, stems and tubers) for socio-cultural and religious purposes in the Bodo Territorial Council area. Some traditional religious beliefs make the tribal women of Assam conserve the specific plants and worshipped them as a God or Goddesses. Like, Tulsi, Nimbu, Arjun, Bel is a common plant worshipped in the name of goddesses of Lakshmi, followed by Lord Brihaspati, Lord Brahma and Lord Shiva. (Goswami,2020; PP 290,291).

### **9. Approach towards a Gender Responsive implementation of Biodiversity Conservation**

Women around the world are less represented in decision-making positions related to environmental issues and sustainable development. Women are also far behind men in finding paid employment in the natural resource management sectors - especially agriculture, fisheries, and forestry - in both developing and developed countries.

Ensuring that all stakeholders, resource managers and transformation agents - women and men have the opportunity to participate and participate effectively is critical to achieving the goals and objectives of biodiversity. Failure to recognize the role and contributions of women, as well as to address any obstacles they may face, could jeopardize conservation efforts.

We need to reduce both cultural and systemic barriers to allow women to express their needs, knowledge, priorities, and solutions to sustainable development - at the same level as men. Equal rights and access to land ownership and control are also of paramount importance to women around the world, as reflected in the Sustainable Development Goals (targets 1.4, 2.3, 5.a).

We need to put our attention and resources at the local level, to ensure that projects and programs are implemented in a way that addresses gender issues. We need to spread awareness among women and girls about proposed acts related to the biodiversity that affects them, and we must build their knowledge about their rights and their options to contribute to shaping those acts.

We must also promote full cooperation and support for men and boys so that we can actively engage women and girls in biodiversity conservation. It is important for men and boys to understand and support women's empowerment measures, to ensure that these measures are accepted in the community. An inclusive approach will also contribute to addressing the root causes of inequality, by creating awareness and promoting profitable long-term action.

### **10. Conclusion**

Today, women around the world are changing the nature of conservation. As the end of many species of animals and habitats hangs in the balance, women are on the rise to meet global challenges through cooperation, compassion, and courage. Research shows that prevention projects get better results when they involve women in decision-making. However, obstacles such as prejudice, discrimination, harassment, income inequality, cultural barriers, and violence still exist. The major and negative impacts of these gender challenges are still being considered and discussed openly in the conservation area.

Recognizing, strengthening, and improving women's status, knowledge, and strengths in relation to the sustainable management of biodiversity are key factors in the success of conservation and use of natural resources, as well as in women's empowerment. Gender programs and projects that provide value to the



ideas, experiences, and voices of all actors involved may have a significant impact on issues of gender equality and empowerment, as well as biological preservation. diversity. Measures should be taken at various levels: at the international level, such as enhancing women's participation in the conference and other international forums, as well as national and regional standards, such as taking measures to protect the environment and sustainable development programs. (Zwifel,1997).

The great potential for women to contribute to biodiversity conservation and sustainable development is yet to be fully explored. We need change at all levels to improve the participation of women and girls in biodiversity conservation programs. Time is now. It will take ongoing effort and support to make gender equality in biodiversity a reality, but governments and international and national partners are increasingly recognizing and promoting greater attention to gender issues, thus relying more on a just and prosperous future. Now, we must all commit ourselves and take action to make this brilliant vision a reality.

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