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Young Voices

Alternative Ways of Ecological Conservation: A Study of Sacred Groves

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Abstract

The T.N. Godavarman Thirumulpad v. Union of India judgment on December 18, 2024, highlighted the ecological importance of sacred groves like Rajasthan's Orans. These groves, preserved through cultural and religious practices, regulate resource use and sustain biodiversity, as seen in Uttarakhand's Hariyali Devi grove. In contrast, scientific conservation methods, such as national parks, often exclude local communities and overlook traditional knowledge. This essay critiques such approaches while recognizing efforts like the Forest Rights Act, Joint Forest Management, and the Convention on Biological Diversity to involve communities in conservation. Despite progress, challenges like unequal power dynamics persist. Integrating sacred groves into formal frameworks can combine indigenous knowledge with scientific methods for more holistic and sustainable biodiversity conservation.

Keywords: Sacred Groves, Ecological Conservation, Indigenous Knowledge, Biodiversity, Protected Areas, Forest Rights, Joint Forest Management

1. Introduction

December 18, 2024, witnessed a landmark judgment in the case T.N. Godavarman Thirumulpad v. Union of India, the Supreme Court of India made a significant ruling that emphasized the protection of sacred groves in Rajasthan, the Orans. This recognition underscored the critical role that indigenous practices, such as those related to sacred groves, play in ecological conservation, which has long been overlooked in favor of more scientifically driven methods developed in policy-making corridors. While these scientific methods of conservation have their merits, they often fail to consider the invaluable insights held by local communities that have coexisted harmoniously with nature for centuries.

This essay tries to provide an alternative to the methods of scientific ecological conservation in the form of encouraging sacred groves that have been practiced by different communities across India.

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Sacred groves are forest patches that have survived due to strong cultural forces that make it distinct from the rest of the surrounding agricultural or pastoral landscapes (Negi 2005). The scientific notion portrays local communities as a threat to the forest (Randeria 2007) thereby depriving the forest-dwelling and tribal communities of their livelihood and cultural and religious practices. Also, in order to restrict the movement of these people within protected areas deterrence through arrest and harassment is often adopted by the state institutions. Apart from this, the failure of scientific conservation methods to curb ecological destruction can be noted from the constant rise in biodiversity hotspots[2].

This essay explores an alternative to conventional scientific methods of ecological conservation by advocating for the recognition and revitalization of sacred groves as a viable solution to the current environmental crises. It delves into the indigenous knowledge systems that sustain these practices and contrasts them with modern scientific approaches to environmental protection. Additionally, the essay examines recent innovations introduced by the Government of India, particularly through the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, and Joint Forest Management practices. Thereby, the essay underscores the importance of blending traditional ecological knowledge with contemporary policy frameworks to ensure sustainable environmental management in India.

2. Epistemology of Sacred Groves: The Alternative Understanding of Ecology

In this section, the essay will discuss the ways of how knowledge systems have been used by the indigenous communities to allocate a patch of forest as a sacred grove. The essay has studied the sacred groves of the Himalayan state of Uttarakhand. The Himalayas cover more than 31.05% of India's forest cover and 40% of the species endemic to the Indian Sub-continent (Anthwal, 2008), thereby making it an important geographical zone in terms of ecological conservation.

Sacred sights are one of the oldest ways of protecting habitats, and they continue to form a large and mostly unrecognized network of sanctuaries around the world (Anthwal, 2008). These sacred groves are maintained by communities through several religious beliefs, rituals, and social conventions that restrict the excess use of forest resources, thereby helping in the conservation of biodiversity (Singh et al., 2017). 'Religious beliefs, tradition, and culture are the products of logical internalization of human experience and learning' (Anthwal 2008).

One such example of religious belief helping in the conservation of biodiversity is the deitification of forests. The sacred grove of Hariyali Devi is located above Kodima village in Rudrapayag, Uttarakhand. The grove has a temple in which a bejeweled idol of *Ma Hariyali Devi* astride a lion. Multiple beliefs surround the sanctity of the sacred grove of Hariyali Devi.

[2] Bio-diversity hotspots must contain at least 1,500 species of vascular plants found nowhere else on Earth (known as "endemic" species) and have lost at least 70 percent of its primary native vegetation.

"According to Hindu Mythology, when Devi Mahamaya was conceived in the form of Devaki's seventh child, the cruel brother of Devaki, Kansa threw Devi Mahamaya aggressively on the ground. Immediately multiple body parts of Devi got scattered all over the earth. The hand fell at Hariyali Devi. Since then, it has become a revered place as Siddha Peeth.

The myth also prevails according to which Yogmaya was the sister of Lord Krishna, and she replaced him in the cell of his parents during his birth. When Kansa threw her against the wall, she turned into lightning and came to Hariyali Parvat to make her abode. Since then, the adjoining forest has been known as "Hariyali" and is worshipped by people" (Singh et al., 2017, p. 9).

The sanctity of the grove is also maintained by restricting the movement in the groves. It is women who have mainly the responsibility to collect fodder and other household necessities from the forests, therefore restricting their movement ensures that the sacred groves are not exploited for the daily needs of the community (Negi, 2012; Singh et al., 2017).

Another example of restraint on the exploitation of resources for short-term gains can be seen in the grazing pastures in Hya-Roshe Bugyal located in Uttarakhand. It is regulated by allowing the grazing of only sacred yaks, this reduces the load on the grazing land. (Negi, 2012). Also, the community regulates the duration of harvests in a sustainable manner. For example, only those Brahmakamal are collected for offering prayers to goddess Nanda that are fully opened. The collection of the flowers is also done according to the environmental clock, i.e., after the seeds are shed by the species so that the activity does not affect the regeneration of the flower (Negi, 2012).

The tradition is carried forward and maintained by a celebration of festivals and the organization of fairs within these communities (Singh et al., 2017). At these fairs that are organized during festivals, the local communities reaffirm their commitment to the forest and the deity. The heads of the communities supervise the utilization and maintenance of the sacred groves to ensure that there is no deviation from the village-appointed rules (Singh et al. 2017).

The other ways of forest conservation that are scientific in nature will be discussed in the following section.

3. Contrast with the Scientific Epistemology

All kinds of representations of the environment have certain power relations hidden and prioritize one kind of knowledge system over others (Tomalin, 2005). The ecological conservation policy presently is dominantly guided by the scientific conceptions that are considered to be universal (Randeria, 2007) negating the indigenous knowledge, practice, and norms.

The concepts of conserving ecology that are scientific in nature include: the idea of classification of the environment, removing animals and plants from a context and putting them into an artificial category (Suchet, 2002), large-scale conservation strategies in the form of national parks and wildlife sanctuaries and

conservation and significance strategies based on scientific measurement (Randeria, 2007) for example to qualify as a biodiversity hotspot two criteria should be met, they are- it must contain at least 0.5% or 1,500 species of vascular plants as endemics, and it has to have lost at least 70% of its primary vegetation.

The essay has studied protected areas as one of the ways of scientific methods of ecological conservation. Protected areas are one of the dominant ways of forest conservation, they cover nearly 15% of the world's surface (Khan et al., 2008).

Protected areas are organized by the state offices and actors thereby making protected areas sites of territorialization and state formation (Lunstrum et al., 2018). Territorialization by state takes place through various activities, one of them is the responsibility that the state acquires itself to protect resources deemed valuable and vulnerable as 'national resources' or 'national heritage' (Lunstrum et al., 2018). For example, in India, the concept of protected areas was brought by the Britishers. The justification for establishing such an area was to place a considerable part of the country under the control of the Forest Department (Brockington et al., 2008).

The concept of protected areas also promotes the idea that wilderness needs to be separated conceptually and physically from anthropogenic landscapes. It develops the perspective that landscapes that are distant and exotic are worth saving (Brockington et al., 2008). Moreover, national parks are often presented as examples of nature in all its glory, unspoiled and pristine (Suchet, 2002). Therefore, the removal of Indigenous communities also became important to realize the essence of national parks as spaces of 'wilderness'. (Lunstrum et al., 2018). Protected areas, thus reflect conservation as a mode of 'biopolitical governance' that aims at controlling, managing, and regulating not only the nonhuman but human populations as well (Massé, 2020).

The following section has dealt with the innovations by the government in order to accommodate local communities in the scientific conservation of ecology and discusses several measures adopted at the national and international levels.

4. Dimensions of Innovation

It is being noted that scientific methods of ecological conservation have overtly tried to remove the local communities who were a part of the ecosystem. The centralized control during the 19th and 20th centuries failed either to conserve resources or to contribute substantially to the well-being of local populations (Bhattacharya, 2009). It is noted that where people are involved in forest management not only the degraded forest was re-generated but also the community's subsistence needs were met. As a result of the recognition of the significance of traditional ecological knowledge and the importance of involving local communities in conservation efforts, the Government of India has introduced several legislative measures and signed international conventions aimed at accommodating and empowering indigenous populations in the protection of biodiversity.

On the international front, India has been a signatory to the Convention on Biological Diversity since 1994, which stresses the need to preserve and maintain traditional practices of indigenous communities in situ. Article 10(c), which encourages the protection and encouragement of customary use of biological resources, reinforces the importance of integrating traditional knowledge in global conservation efforts. Additionally, India endorsed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in 2007, which recognizes indigenous peoples' rights to maintain and strengthen their spiritual relationship with their traditionally owned or occupied lands and territories.

On the legislative front, one of the key legislative provisions is Section 36C of the Wildlife Protection Act, 1972, which acknowledges 'community reserves. Further, Section 36(5) of the Biological Diversity Act, 2002 mandates that the Central Government must "endeavor to respect and protect the knowledge of local people relating to biological diversity."

Moreover, under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006, Section 3(1)(i) recognizes the rights of forest-dwelling communities to protect, regenerate, or conserve community forest resources that they have traditionally protected for sustainable use. Section 5(a) empowers these communities to safeguard wildlife, forests, and biodiversity, while Section 5(c) mandates the prevention of activities that could harm their cultural and natural heritage. These provisions ensure that local communities play an integral role in managing and conserving their natural surroundings, promoting both sustainable use and biodiversity protection.

The Government of India introduced guidelines on Joint Forest Management based on the National Forest Policy of 1988. Joint Forest management is a decentralized and people-centered forest management technique. Although Joint Forest management has been administered nationally, decisions on ways of implementation have been left to the individual states, leading to different strategies (Bhattacharya, 2009). Decentralization in forest management is also done through the formulation of micro-plans based on area visits by the local population.

Several field studies have indicated improvement in the forest condition in the areas where joint Forest Management has been adopted (Bhattacharya, 2009). A Case study of Choukoni Vanpanchayat Ranikhet, Uttarakhand has been taken to substantiate the claim. The association of the villagers with the forest was before the establishment of Vanpanchayat. The forest surrounding the village has a large number of chir pine trees, and due to their high oil content, the forest was highly inflammable. It was the villagers who for centuries protected the forest from fire. "Looking at their interest and relentless efforts of protecting the chir pine forests, the forest department proposed the formation of Van Panchayat in 1999.

They took the offer and became associated with the forest department formally for managing and protecting the forests by creating the VP" (Joint Forest Management Handbook, 2000).

The Vanpanchayat which is constituted of the villagers now makes decisions for the sustainable usage of non-timber forest products[3] and also ensures immediate action in case of fire outbreaks.

Together, these legislative measures and international commitments have created a framework for recognizing and empowering indigenous communities in the conservation of biodiversity, fostering a more inclusive approach to ecological preservation that integrates both traditional and scientific knowledge.

5. Challenges in Integrating Cultural Practices, Legislation, and Ecological Action

Simply blaming the West and Eurocentric understanding of ecology as the sole cause of the present ecological crisis is problematic. Normative cultural practices that are considered eco-friendly, do not guarantee whether people will be able to actualize those practices (Tomalin, 2005). Such as by simply linking goddess with earth may not translate into a practice of saving the earth as portraying women as goddesses has not led women to be placed in a higher position in society (Narayanan, 1997). It is often argued that the very basis of conserving nature is to follow the rituals and not for the sake of environmental protection (Tomalin, 2005).

Despite religio-cultural tradition playing an important role in day-to-day life, it has not been made one of the issues in cleaning of river Ganga. The government has spent millions of rupees in cleaning the river but little has improved (Chapple and Tucker, 2000).

The legislative innovations, while progressive, are also fraught with limitations. Even though the concept of Joint Forest Management was a positive step towards decentralized government and forest management, with the potential of empowering the community and increasing the livelihood security of the impoverished forest-dependent communities, the unequal participation of stakeholders, i.e., the local communities in the key decision-making process has made community forestry invaluable. The continuing imbalance in power and authority between the villagers and the Forest Department has emerged as a serious shortcoming of Joint Forest Management (Bhattacharya, 2009).

The implementation of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006 has been hindered by a disproportionate focus on Individual Forest Rights (IFRs), which are often treated as a mere land distribution scheme rather than acknowledging the pre-existing collective rights of forest-dependent communities (Samal 2020). This approach risks undermining the core objectives of the FRA, which is intended to recognize and secure both individual and community rights over forest resources. This disconnect between belief and action limits the effectiveness of sacred groves and traditional beliefs in achieving long-term ecological goals.

[3] According to the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act non timber forest produce includes bamboo, brushwood, cane, honey, wax, etc.

6. Conclusion

Protected areas and sacred groves have a common aim of conservation of ecology by restricting human activity in certain patches of forested lands. However, the stark difference between the two approaches is their methods of such restrictions. As already noted in the above sections of the essay, protected areas have a more exclusionary nature of conservation, whereby the communities that have been part of the forest ecosystem get left out, on the other hand, sacred groves have tried to accommodate both human and non-human populations.

Biodiversity outside the protected areas however is richer when compared to the state-established conservation centers (Anthwal, 2008). The reason behind this is the symbiotic relationship between biological and cultural diversity (Anthwal Ashish, 2008). It is one's culture that provides perspective to an individual to look at different things surrounding oneself including ecology (Milton, 1996). Therefore, the notion of ecology itself is a result of social construct. It is the value that people place on themselves, plants, and animals that determines their actions toward nature (Schultz, 2000). Therefore, the driving force towards the conservation of biodiversity will remain primarily ethical (Anthwal, 2008).

Sacred groves, though criticized for their lack of scientific basis, social restraints like taboos have succeeded in providing protection to the selected habitat patches, and plant and animal species (Anthwal, 2008). For example, sacred groves have played an important role in soil conservation by improving soil stability[4] (Kandari, 2014). Sacred groves also are spots of high carbon sequestration thereby contributing to reduced concentration of CO2 in the atmosphere, due to their thick vegetation cover (Kandari, 2014).

Therefore, the essay argues that accommodation of the practice of sacred groves in the conservation of ecological diversity. Reaching out to the indigenous communities who have been living in harmony with nature and transforming them into active participants in the formulation of ecological conservation policies is the need of the hour.

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[4] Plants like vetiver grass (Vetiveria zizanioides) and Eucalyptus act as a soil binder that prevents soil erosion.

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