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Original Article

A Review on Sacred Groves of South Gujarat, India

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ABSTRACT

The term "Holy Groves of South Gujarat" probably alludes to the trees' cultural and symbolic value in the area as seen through an artistic or conceptual prism. Sacred groves are forested regions or sections of woodland that are revered by the local populace. Since they are sometimes connected to the worship of gods, spirits, or nature itself, they are frequently kept because of their religious and cultural significance. Especially among indigenous populations, sacred woods in South Gujarat are deeply ingrained in local customs. These groves might be of different sizes and may be associated with particular ceremonies, villages, or temples. The groves serve as both ecological and spiritual sanctuaries since they frequently support a variety of plant, tree, and wildlife species.

Keywords: Vegetation, Religious and Cultural, Ecology, biodiversity, Gujarat, India

INTRODUCTION

The reverence of nature is ingrained in human nature, particularly in India. Sacred Groves are special vegetation preserved by the indigenous people and dedicated to the local deity. They are one type of nature worship. (Rajesh et al., 2016). Sacred groves are areas of natural vegetation or woodlands that have been preserved by indigenous people for ages via cultural and religious customs (Gadgil and Vartak, 1975). The sacred grove's size ranged from one to a thousand hectares, and it is home to a wide variety of plants and animals. Because sacred groves are thought to be the homes of gods, bhutas, saints, etc., indigenous communities have long protected these patches of vegetation, forbidding hunting, grazing by livestock, and tree-cutting and lopping (Brandis, 1897). This practice has kept the grove undisturbed over time (Hughes and Chandran, 1998). (Patel et al., 2014). Because they provide habitat for mammals and birds, sacred groves and trees indirectly aid in the preservation of living things. Five sacred forests are a treasure trove of rare and endemic species and are the religious practice of protecting biodiversity with strong beliefs, customs, and taboos. (Maru et al., 2013). Sacred Groves are a collection of trees or an area of flora that the locals have conserved via cultural and religious customs that have been developed to reduce damage. Sacred Groves are generally seen to be a treasure trove of rare, indigenous, and therapeutic plants. (Patel et al., 2013). Sacred groves are considered "mini biosphere reserves" due to their remarkable plant wealth and capacity for self-conservation (Gadgil & Vartak, 1975). The sacred trees found in sacred woods are revered by the populace. Because of their cultural and religious significance, the indigenous people conserve these trees, which are either edible or medicinal plant species (Sukumaran et al., 2008). Communities, nations, and future generations rely on biodiversity, which is the fundamental pillar of human survival and economic growth (Rampilla et al., 2015). Birds (Kangah-Kesse et al. 2009), amphibians (Rathod & Rathod 2013), small animals (Decher 1997), butterflies (Bossart et al. 2006), and even fungi (Kumar & Kaviyarasan 2011) are among the many taxa that have been identified from sacred forests worldwide (Kulkarni et al., 2018). The significance of sacred groves in biodiversity conservation has long been acknowledged. They are thought to be a repository of biodiversity gene pools and a treasure trove of several unique, endangered, and commercially significant plants utilized in Ayurvedic, tribal, and folk remedies (Sreeja et al., 2016). The goal of the current study was to raise awareness of the value of traditional knowledge and to discover new therapies by revealing the floristic diversity and ethnomedicinal wealth of the chosen sacred groves.

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The indigenous tribal societies use the medicinal flora wisely to treat infections and illnesses in order to stay healthy (Nair et al., 2024). "Botany" is the study of plants, and "ethno" is the study of humans. It symbolizes the interaction between humans and plants at every stage as well as how plants affect the environment and, in turn, human society (Chanda et al., 2019). Protecting several valuable food plants and numerous medicinal plants, sacred woods were surrounded by a diversity of landscape features, including savannah, fields and fallows, permanent agricultural zones, shifting agriculture, and secondary forests (Kawat et al., 2013). Generally speaking, sacred groves are thought to be a sanctuary for a region's relic flora, a source of seeds, and a treasure trove of rare, endemic, and therapeutic plants (Whittaker 1975). Gadgil and Vartak (1975) recognized them as'mini biosphere reserves' due to their remarkable plant wealth and conservation potential (Sukumaran et al., 2008).

SACRED GROVES IN INDIA

Sacred groves have been discovered in several parts of India where the native population resides, including the central hilly regions, the northeastern region, and the Western Ghats region. Although there are more than 14,000 known sacred groves in India, some scholars believe there may be as many as 150,000 (Solanki et al., 2021). Sacred groves have previously been documented in India, especially in areas where indigenous communities reside, such as the Himalayas, northeastern India, and the highlands of Bihar, Orissa, Madhya Pradesh, Andhra Pradesh, Karnataka, Tamil Nadu, and Kerala. Previous researchers have addressed the floristic and ethnobotanical features of sacred groves in India. (Panda et al., 2014). Many groups in India revere nature on the grounds that all of nature's creations must be preserved. Traditional values, religious beliefs, taboos, and sociocultural customs are the overarching ideas of the holy groves (Rajesh et al., 2016). According to Fergusson (1971), sacred groves were first documented by Brandis in 1857 and are believed to have pre-Vedic origins. Gadgil and Vartak (1981) reviewed sacred groves in several states. There have been about 13,270 intact sacred groves found. These sacred groves are known by different names in different parts of India (Ramakrishnan et al., 1998). Tamil Nadu is said to have 1270 of these holy groves. (Krishna et al., 2014). In addition to India and the Indian subcontinent, sacred groves can be found in America, Australia, Africa, Asia, and Europe. Most of India's sacred groves are found in the following states: Andhra Pradesh, Chhattisgarh, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Odisha, Rajasthan, Tamil Nadu, Uttarakhand, West Bengal, and the Union Territory of Puducherry. (Warrier et al., 2023). This practice was common in Roman, African, and Asian civilizations, albeit it took diverse forms. The majority religion in India, Hinduism, worships a wide range of living and nonliving natural phenomena. Numerous unique medicinal and ornamental plants, animals, and birds can be found on the sacred Himalayan peak. Because the whole mountain range is known as Dev Bhum, or "God's land," the villagers carry out a lot of rituals to make sure that these natural elements survive (Kumar et al., 2022).

Sacred Groves in India

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SACRED GROVES IN GUJARAT

The majority of the reports in Gujarat came from hilly areas, such as the 29 sacred groves in the Ambaji and Jessor sanctuary (Gupta et al., 2000), the seven sacred groves in the Pohsina forest (Mehta and Jain, 2011) in the north Gujarati district of Banaskantha, and a few from the south Gujarati district of Valsad (Patel et al., 2014). The remnants of the primary forest that the local population has not harmed are known as sacred groves, and they are home to rare, endemic, and endangered species. They are protected at all times because of the taboos and cultural and religious beliefs, as well as the gods that inhabit them (Patel et al., 2015). Sacred groves are the remains of the main forest that the local people have not harmed, and they are home to unique endemic, endangered species. Because of the taboos and cultural and religious beliefs, as well as the deities that inhabit them, they are still safeguarded today. Because of this, sacred groves continue to be preserved and are home to a wide variety of plants that are significant to ethnobotany (Maru et al., 2013). Sacred Groves are generally seen to be a treasure trove of rare, indigenous, and therapeutic plants. The tribal groups of Banaskantha District, Gujarat, India, have a long history of conserving the environment through the use of sacred groves, which are based on their traditional knowledge (Patel et al., 2013). Studies conducted in 11 sacred groves in Gujarat's Banaskantha District have found about 25 plant species. Only a small number of these groves have been preserved (Warrier et al., 2023). Sacred Groves are the best example of biodiversity conservation. The idea of Sacred Groves is as old as civilization itself, when a section of woodland or body of water is devoted to local deities and no one is allowed to cut down vegetation, kill animals, or harm any other living thing (GADHAVI et al., 2019). Fragments of natural forests or patches

of vegetation created by indigenous communities are known as sacred groves (Malhotra, 2007). They range in size from a few square meters with a few trees to several hectares, and they have been preserved and protected over the years in honor of their ancestral spirits and deities, where they carry out their religious and cultural rituals. Sacred Groves serve as an example of in situ conservation (Rajora et al.). From Gujarat, 29 SGs have been reported. Gupta and associates (2000). In North Gujarat's Sabarkantha district, there have been reports of 28 SGs. (Mehta 2011) (Malsater Alpesh et al., 2017). Situated in the Ambaji range forest, close to the villag Padaliya, is the "Digma bhankhro" sacred grove, which is over 300–400 years old (SMRUTI et al., 2015). Among the many benefits that sacred groves offer are flood control, water purification, temperature maintenance, a botanical garden and arboreta for academic purposes and nature lovers, a model of wild relatives of cultivated plants, a storehouse of wild medicinal and edible plants, refuge for birds and insects, locations for regional environmental studies, a home for microbes and fungi, etc (Pandey et al., 2023). With over 1500 stilt roots, the revered banyan tree currently occupies 5.5 acres and is recognized by the Guinness Book of World Records as the largest banyan tree in the world. It surpassed the previous record set by the well-known banyan tree at the Botanical Gardens in Calcutta (David 1996). Experts say that the overall number of sacred groves could be as high one lakh (Patel et al.).

SACRED GROVES IN SOUTH GUJARAT

Plant sociology, often known as phytosociology, is the study of the structure of plant communities. Paczoski created the term "phytosociology," which refers to the study of elements of plant communal relations. Quantitative estimation of several characteristics, such as cover, abundance, frequency, etc., is a common practice in phytosociological methodologies (Palmer, 2002). Although none of these species are equally significant, a small number of overtopping species—known as dominants—modify the habitat and regulate the growth of other species in the community due to their size and size (Kumar et al., 2016). The current study aims to demonstrate the crucial function that Kansari Mavli Sacred Grove plays in plant species conservation. In Gujarat state's Vyara Division, the sacred grove is located in the Songadh range. The amount of forest cover is quickly declining as a result of overuse of forest resources for food, forage, and timber. The locals are protecting this forest section, which boasts a vast diversity of plants. 149 plant species in all have been identified, researched, and gathered (Gamit et al., 2021). The Narmada district's Garudeshwar and Nandod taluka was selected as the main focus of this floristic study because of its rich plant diversity. There are 737 angiosperms in all, belonging to 415 genera and 125 families (Rathod et al., 2024). Based on questions from the local community, firsthand observations, and forest officials, the area's floral and faunal patterns were examined. The research area is located in Gujarat's Dahej, Bharuch District. Saltpans and mud flats make up the western portion of the research region. With the exception of a few Prosopis cineraria trees and sporadic Prosopis juliflora plants, the area is fallow and nearly flat with little undulation. From the research region, a total of 41 tree species from 20 families have been identified. Twenty-seven shrub species from eighteen families were found in the study region during the current survey (Kumar et al., 2015). The Mahua natural forest population, which is located in two distinct biological regions—southern Gujarat and south-eastern Gujarat—was the subject of the study. Undisturbed and disturbed sites were identified in each region, and the natural regeneration and population structure were ascertained (Hegde et al., 2018).

Sacred groves in Gujarat

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CONCLUSION

Because of their spiritual and religious significance, natural habitats are protected and venerated in South Gujarat's sacred groves, which represent a vital cultural and ecological history. These groves are usually little pieces of land or wooded areas devoted to local spirits, ancestors, or deities. They are important natural zones that preserve biodiversity as well as hallowed locations for ceremonies. South Gujarat's sacred groves offer a special fusion of ecological significance and cultural legacy. Despite being essential to the community's environmental and spiritual rituals, they are threatened by contemporary development. As a result, it is critical to promote their preservation by combining legal protection, environmental stewardship, and cultural respect

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