

**MANAGING AND MAINTAINING SACRED GROVE AND IT'S  
SOCIO-ECONOMIC AND ECOLOGICAL IMPLICATIONS IN  
KERALA**

**A Dissertation submitted to the University of Kerala in Partial Fulfillment of the  
Requirements for the Masters of Arts Degree Examination in Sociology**

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## DECLARATION

I, Aswathy Gopinath, hereby declare that the dissertation titled " MANAGING AND MAINTAINING SACRED GROVE AND IT'S SOCIO-ECONOMIC AND ECOLOGICAL IMPLICATIONS IN KERALA" is based on the original work carried out by me and submitted to the University of Kerala during the year 2022-2024 towards partial fulfillment of the requirements for the Master of Sociology Degree Examination. It has not been submitted for the award of any degree, diploma, fellowship or other similar title of recognition before.

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## **CERTIFICATE OF APPROVAL**

This is to certify that the dissertation entitled " **MANAGING AND MAINTAINING SACRED GROVE AND IT'S SOCIO-ECONOMIC AND ECOLOGICAL IMPLICATIONS IN KERALA**" is a record of genuine work done by **ASWATHY GOPINATH**, a fourth semester, Master of Sociology student of this college under my supervision and guidance and that is hereby approved for submission.

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## **ABSTRACT**

This research study explores the management and maintenance of sacred groves in Kerala, focusing on their socio-cultural, economic, and ecological implications. Sacred groves, revered as spiritual abodes in Hinduism, play a crucial role in preserving biodiversity and cultural heritage. The study examines how Hindu beliefs, caste dynamics, gender roles, and historical family traditions influence the preservation and rituals associated with these groves. Utilizing qualitative research methods, including interviews and case studies, the research highlights the significant role socio-cultural aspects play in the protection and sustainable management of sacred groves.

The findings reveal that sacred groves are not only ecological entities but also deeply embedded in religious and cultural practices. Caste associations determine ownership and the conduct of rituals, while gender norms influence participation in religious ceremonies. These dynamics contribute to the preservation of sacred groves, supported by cultural taboos and the belief in divine retribution for disturbing these sites. Ecologically, the sacred status of certain trees and plants promotes biodiversity conservation, as they are preserved through religious practices and spiritual reverence. The study also uncovers economic challenges associated with maintaining sacred groves, where financial burdens on families responsible for their upkeep are significant. However, sacred groves offer economic benefits to ritual specialists and, in some cases, receive government subsidies.

This research provides a comprehensive understanding of the interplay between socio-cultural beliefs and environmental conservation, emphasizing the importance of sacred groves as both ecological sanctuaries and cultural heritage sites. The study contributes to the broader discourse on the sustainable management of sacred groves and suggests that integrating cultural and ecological strategies is essential for their preservation in the future.

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## CHAPTER 1

### 1. 1. INTRODUCTION

Sacred groves, small forest patches instilled with religious significance, are critical to both ecological balance and socio-cultural heritage. These groves, varying in size, are found in diverse environments, from hilly terrains to marshlands, and are integral to the local landscape in Kerala, where they are referred to as *Kavus*. Sacred groves play a vital role in preserving biodiversity. They act as reservoirs of flora and fauna, maintaining species richness and ecosystem health. These groves often serve as sanctuaries for a variety of plant and animal species, some of which may be rare or endemic. Their preservation of natural habitats helps sustain ecological balance, providing essential ecosystem services such as clean air and water, which are crucial for the well-being of local communities. In addition to their ecological value, sacred groves hold profound socio-cultural importance. They are often associated with local deities, including naga (serpent deities), ancestral spirits, or deities connected to specific familial or community traditions. Each grove is a living repository of religious practices, with rituals performed on designated days according to long-standing traditions. The cultural and spiritual significance of these groves fosters a sense of communal identity and continuity, linking present-day practices with historical and mythological narratives.

Sacred groves contribute to local economies by providing various ecosystem services and resources. They supply non-timber forest products that can be used for daily needs or sold in local markets, offering economic benefits to nearby residents. Moreover, the management of sacred groves often involves local families or temple trusts, integrating them into the local economy and reinforcing their role in community life. The management of sacred groves typically falls to individual families, temple trusts, or groups of families. This management is guided by traditional practices and communal agreements, which help sustain the religious and ecological integrity of the groves. However, modernization and urbanization pose significant threats to these sacred sites. Development activities, changes in land use, and environmental degradation have led to the deterioration of many groves, threatening their ecological and cultural value.

In Kerala, sacred groves are often situated near homes, appearing as small patches of forest that are closely tied to ritual beliefs and practices. The continued preservation of these groves is crucial for maintaining not only their ecological functions but also the cultural and social

fabric of the communities that revere them. The present study tries to understand how the two families or *Koottukudumbam* manage and maintain the Sacred groves and the social-cultural, economic, and ecological implications.

## **1.2. BACKGROUND OF THE STUDY**

Sacred groves, traditionally revered patches of forest, are integral to the cultural and ecological fabric of many regions in India, particularly Kerala. These groves, often dedicated to local deities, serve as important biodiversity hotspots and play a crucial role in maintaining ecological balance by preserving unique flora and fauna.

### **1.2.1. Sacred Groves: Origin and Histories**

Many sacred groves are associated with origin stories that often involve supernatural forces. Some of these tales also highlight connections between sacred groves, historical events, and personalities (Chandrashekhara, 2011). Generally, each Sacred grove was named according to the deity worshipped or related to the family or person.

Sacred groves are one of the oldest forms of environmental protection, deeply rooted in various cultures across the world. These forested areas, set aside as sacred, have been integral to the spiritual and cultural practices of many ancient civilizations. The concept of sacred groves can be traced back to prehistoric times when early human societies worshipped natural elements such as trees, rivers, and mountains as deities. In ancient Greece, for instance, sacred groves were dedicated to gods such as Artemis and Zeus, and were places where divine presence was believed to manifest (Hughes, 1986). Similarly, in pre-Christian Europe, sacred groves were central to pagan rituals and were often regarded as the dwelling places of spirits and gods (Rotherham, 2011).

In Africa, sacred groves have long been a part of indigenous religions, serving as places of worship, rituals, and community gatherings. These groves were often protected by strict taboos and were believed to be inhabited by ancestral spirits (Fairhead & Leach, 1996). In Asia, particularly in India, the tradition of sacred groves has a rich history, deeply entwined with Hinduism, Buddhism, and local tribal religions (Gadgil & Vartak, 1975).

In India, sacred groves have been documented as early as the Vedic period, with references to such sites found in ancient scriptures. These groves, known as *Devrai* in Maharashtra, *Sarnas*

in Jharkhand, and *Kavus* in Kerala, were integral to the spiritual and ecological life of communities. The tradition of sacred groves in Kerala, specifically, is thought to have evolved from the Dravidian practices of nature worship, which predate the arrival of Aryan culture. Over time, these groves became associated with the local pantheon of gods and goddesses, with each grove often dedicated to a specific deity, such as *Bhadrakali*, *Ayyappan*, or *Naga* (Sivaramakrishnan, 1995).

Sacred groves, known locally as *Kavus*, are one of the most ancient forms of environmental protection in India, particularly in the state of Kerala. These groves are small patches of forest dedicated to local deities and have historically been protected by the communities that surround them through religious and cultural practices. They play a critical role not only in maintaining biodiversity but also in preserving the socio-cultural heritage of the region. However, in recent decades, these groves have faced significant challenges due to socio-economic changes and ecological pressures (Chandran & Hughes, 2000).

Kerala, with its rich tradition of sacred groves, offers a unique case study for understanding the complex interplay between ecological conservation and socio-economic dynamics. The sacred groves of Kerala have been documented for their high biodiversity, harboring species that are often rare or endangered (Pushpagadan et al., 1998). These groves serve as reservoirs of genetic resources and are vital for maintaining the ecological balance within the regions where they are located. However, the pressures of modernization, including urbanization, land-use changes, and the decline of traditional religious practices, have led to the degradation of these sacred spaces (Rajendraprasad, 1995; Bhagwat & Rutte, 2006).

### 1.2.2. Sacred Groves: India

India has a rich tradition of nature worship, a practice that persists today, particularly through the conservation of sacred groves. These groves are remnants of native vegetation, often linked to local deities, and are protected by communities through taboos, spiritual beliefs, and societal norms (Gadgil & Vartak, 1975). The biologically rich regions of the world are recognized as biodiversity hotspots. At present, 34 biodiversity hotspots in the world cover only 2.3% of the earth's land surface (Mittermeier et al, 2005). India has a long history of nature worship, and that practice continues even today, especially through sacred groves.

According to Ramakrishnan et al. (1990), sacred groves also known as sacred forests, are areas of natural vegetation, often small or medium-sized, that hold deep religious, cultural, or spiritual significance to certain indigenous and traditional communities. These groves are considered sacred and are protected by the communities due to their belief in the presence of deities, spirits, or ancestors within the natural elements of the grove.

The protection of these areas is upheld through customary laws, taboos, and rituals, making them unique examples of community-based conservation (Gadgil & Vartak, 1975). Sacred groves are commonly dedicated to natural deities such as Naga Devatas (guardians of nature and water bodies), Yakshas and Yakshinis (considered protectors of the groves and worshipped for blessings and protection), spirits of mountains (Parvati or Shailaputri), spirits of forests (Shiva, Lord of Forests), Durga (protector of nature and wildlife), and harvest deities such as Vishnu and Annapurna (goddess of food and nourishment) (Krishna, 2017).

These small forest patches are conserved by local people and are closely intertwined with socio-cultural and religious practices (Singh et al., 2021). This study aims to investigate the socio-cultural conditions of sacred groves. Sacred groves are the home of local flora and fauna, a veritable gene pool of animal, insect, bird, and plant species, and a mini-biosphere reserve (Krishna, 2017).

### **1.2.3. Socio-Economic Implications of Sacred Grove**

The socio-economic implications of managing sacred groves are multifaceted. Traditionally, these groves have been maintained by specific communities or families, often through collective action and shared cultural practices. However, as Kerala undergoes rapid economic development, the traditional custodians of these groves are increasingly facing financial constraints, leading to the neglect or even destruction of the groves (Induchoodan, 1996). The shift from agrarian to non-agrarian economies has also played a role in diminishing the importance of these groves in daily life, as younger generations move away from rural areas and adopt different values and lifestyles. Furthermore, the ecological implications of sacred grove management are becoming increasingly apparent. The degradation of these groves not only leads to a loss of biodiversity but also disrupts the ecological services they provide, such as water conservation, soil fertility, and climate regulation (Swamy et al., 2003).

#### **1.2.4. Ecological Implications of Sacred Grove**

Sacred groves are often considered biodiversity hotspots, harboring a rich variety of flora and fauna. In Kerala, these groves contain species that are not found in the surrounding cultivated or urban areas. The isolation of these groves from direct human interference has allowed them to maintain a high level of biodiversity. Research has shown that sacred groves in the Western Ghats, where Kerala is located, support a significant number of endemic species, making them crucial for conservation efforts (Jamir & Pandey, 2003). The presence of sacred groves has been linked to the survival of rare and medicinal plant species, which are often collected and used by local communities (Khumbongmayum, et al., 2006), helping climate regulation, water conservation, and maintaining soil health.

#### **1.3. STATEMENT OF THE PROBLEM**

Sacred groves are unique habitats that act as repositories of biodiversity and genetic resources. The historical significance of sacred groves, or "*Kavus*," in Kerala is deeply intertwined with the region's cultural, religious, and ecological heritage. These groves, traditionally regarded as sacred spaces, have been integral to the spiritual life of communities in Kerala for centuries. Their origins are believed to date back to ancient times when nature worship was a predominant practice among indigenous communities. Over time, these groves became associated with Hindu deities, often housing shrines dedicated to local gods and goddesses, making them vital religious centers.

Sacred groves in Kerala served not only as places of worship but also as sanctuaries for preserving biodiversity and traditional knowledge. These groves were often protected by religious taboos, which prohibited the cutting of trees and hunting of animals within their boundaries, thereby ensuring the conservation of flora and fauna. The belief in the divine presence within these groves fostered a sense of reverence and responsibility among the local population, contributing to the long-term preservation of these ecosystems (Chandran, 1997).

Over the centuries, the role of sacred groves evolved in response to changing socio-political and religious dynamics. During the medieval period, many groves were incorporated into the temple complexes of dominant Hindu communities, further solidifying their religious significance. These groves became sites for community rituals, festivals, and folk

performances, which played a crucial role in maintaining the cultural identity of local populations (Gadgil & Vartak, 1976).

Despite the changes brought about by modernity, sacred groves in Kerala continue to be revered as cultural and spiritual hubs. They serve as repositories of traditional ecological knowledge, passed down through generations, and are central to the cultural narratives of the communities that maintain them. However, the pressures of urbanization and land development have led to the degradation of many sacred groves, posing a significant challenge to their preservation (Bhagwat & Rutte, 2006; Rajendraprasad, 1995).

The flora in sacred groves is typically rich in species diversity, including a variety of trees, shrubs, climbers, and herbs. These groves often harbor medicinal plants, many of which are integral to traditional healthcare systems. The undisturbed nature of these groves allows for the growth of mature, climax vegetation that supports complex ecological interactions. For example, certain tree species found in sacred groves, such as *Aegle Marmelos* (Bael), *Ficus religiosa* (Peepal), and *Saraca asoca* (Ashoka), are considered sacred and are rarely found outside these protected areas (Gadgil & Vartak, 1976).

According to Ramanujam & Kadamban, 2001, the fauna associated with sacred groves is equally diverse. These groves provide a refuge for a variety of birds, mammals, reptiles, amphibians, and insects. The presence of these species contributes to the ecological stability of the region by maintaining food chains, pollination networks, and seed dispersal processes. For instance, many sacred groves in Kerala are known to host species like the Malabar giant squirrel (*Ratufa indica*), various species of bats, and a wide array of bird species, including hornbills and owls, which rely on the dense, undisturbed canopy for shelter and food.

The ecological health of sacred groves is intrinsically linked to the well-being of the local communities that depend on them. These groves often serve as sources of non-timber forest products (NTFPs) such as fruits, nuts, honey, and medicinal plants, which are crucial for the livelihoods of many rural populations. The sustainable use of these resources, guided by traditional knowledge and cultural practices, ensures that the ecological balance of the groves is maintained over time (Bhagwat et al., 2005).

The communities surrounding sacred groves have a deep-rooted commitment to preserving them, which is integral to their social and cultural identity. The religious and spiritual

significance attributed to these groves fosters a sense of stewardship among the local people, who view the protection of these sites as a moral and religious duty. This communal responsibility has historically been a powerful force in conserving biodiversity and ensuring the sustainable use of resources within the groves.

However, the connection between sacred groves and society is not static; it evolves with changing social dynamics. In recent years, the pressures of modernization, changing land-use patterns, and economic development have threatened the integrity of many sacred groves. The erosion of traditional beliefs and practices has led to the degradation of these groves, resulting in the loss of biodiversity and the disruption of ecological balance. Nonetheless, there is a growing recognition of the need to integrate traditional conservation practices with modern environmental management strategies to preserve the ecological and cultural value of sacred groves (Chandran, 1997).

Festivals and rituals associated with sacred groves are central to their preservation. Many groves are dedicated to specific deities, and annual festivals or periodic rituals are held to honor these deities. During these events, the local community engages in activities that reinforce the sacredness of the grove, such as offerings, prayers, and ceremonial performances. These rituals often have strict protocols that prohibit harmful activities like cutting trees, hunting, or even entering certain parts of the grove, thereby protecting the biodiversity within these spaces (Gadgil & Vartak, 1976). For example, the *Theyyam* festival, celebrated in northern Kerala, involves rituals performed in sacred groves dedicated to local deities. The entire community participates in these rituals, which not only reinforce social bonds but also ensure that the grove is left undisturbed, thus aiding in its conservation.

Oral histories and traditions often include myths and legends that emphasize the sacredness of the grove and the dire consequences of violating its sanctity. Such narratives serve as informal yet powerful conservation tools, deterring activities that could harm the grove. The transmission of these stories across generations helps preserve the cultural memory of the grove's significance, which in turn supports its physical preservation.

Despite their historical effectiveness in conserving sacred groves, these cultural and religious practices are increasingly under threat due to modernization, urbanization, and changing social dynamics which has led to a decline in the observance of rituals and festivals that once played a crucial role in the protection of sacred groves. According to Chandran, (1997) as younger



generations migrate to urban areas and adopt different lifestyles, the willingness or ability to invest in the upkeep of sacred groves may diminish. This generational shift can lead to neglect, with the groves either being left unattended or, in some cases, sold off or converted to more economically productive uses, such as agriculture or real estate development (Gadgil & Vartak, 1976). Economic pressures and the commercialization of land have led to the fragmentation and degradation of many sacred groves. As land values increase, the temptation to convert sacred groves into agricultural land or sell them for development purposes grows, especially in the absence of strong cultural and religious motivations to protect them (Bhagwat et al., 2005).

To address the economic challenges facing the conservation of sacred groves, it is essential to explore sustainable management and funding models that can provide both financial support and incentives for preservation including Community-Based Conservation Initiatives, Ecotourism and Cultural Heritage Projects, Government Support and Incentives, and Payment for Ecosystem Services (PES). Ecotourism initiatives can provide financial incentives for preserving the groves, while also raising awareness of their ecological and cultural significance. However, such projects must be carefully managed to avoid commercialization and ensure that the primary focus remains on conservation rather than profit (Ormsby & Bhagwat, 2010). Legal protections, such as designating sacred groves as protected areas, can also help safeguard them from development pressures (Ramakrishnan, 1996). Payment for Ecosystem Services (PES) is an emerging model that compensates landowners for the ecological benefits provided by their land. In the context of sacred groves, PES schemes could involve payments to landowners for maintaining the biodiversity, carbon sequestration, and water conservation services provided by the groves. This model not only provides a financial incentive for conservation but also recognizes the broader societal value of the ecological services offered by sacred groves (Wunder, 2005).

#### 1.4. RESEARCH GAP

The study on sacred groves in Kerala, particularly in Thrissur, lies in its comprehensive approach to understanding the complex interplay between socio-cultural, ecological, and economic factors in the preservation and management of these vital ecosystems. This research aims to fill a crucial gap in the existing literature by addressing key research questions that explore how Hindu beliefs, gender dynamics, caste structures, and historical family and community connections impact the rituals, management, and preservation of sacred groves. The study on sacred groves in Kerala, particularly in Thrissur, would explore the role of the

*Kavu* (sacred grove) by gathering information about the rituals and practices followed, the deities installed, the history of the *Kavu*, and the economic conditions influencing its conservation, especially if the *Kavu* is in a state of deterioration. The research would delve into the etymological interpretation of the Malayalam word *Kavu*, which derives from the Latin word *sacred*, meaning restricted. Thus, sacred groves imply a need for protection; however, this ideal is often contradicted by the development activities prevalent in the contemporary world. The study would be designed to assess the socio-cultural conditions of sacred groves, emphasizing the intertwining of trees and spiritual beliefs in Hinduism. It would examine how current religious practices, such as festivals, folklore, and folk art associated with these sacred groves, have deep-rooted caste associations and how these associations significantly contribute to the protection of *Kavus*. The research would also highlight that most *Kavus* are owned by the Namboothiri, Nair, and Ezhava communities, with a few belonging to scheduled castes. The study would note that traditional rituals and *poojas* are typically performed by Brahmins, while non-Brahmin rituals are conducted by the scheduled castes.

#### Research Question

- How do socio-cultural aspects such as Hindu beliefs, gender, castes dynamics, and historical connections of families and communities impact the preservation, management, and rituals associated with sacred grove?
- How do the beliefs and cultural practices associated with sacred grove influence the Phyto-diversity and contribute to ecological conservation?
- What are the economic benefits and challenges of conserving sacred grove and how do these contribute to sustainable management and local livelihoods?
- How do the intersections of socio-cultural beliefs and practices enhance public awareness and contribute to the conservation and sustainable management of sacred grove?

#### **1.5. SIGNIFICANCE OF THE STUDY**

The study on the sacred groves will help to assess the status of the groves, their biodiversity and its deterioration, history, myths and sacred duties, traditional culture, and management. Preservation of sacred groves is one of the best methods for maintaining biodiversity in the changing contemporary world. Habitat destruction or degradation due to several developmental activities, including the acquisition of lands for the construction of buildings and roads, caused

the destruction of sacred groves in Kerala, and this study would be an eye-opener to protect those sacred groves in Thrissur.

By systematically assessing the biodiversity within these sacred spaces and analyzing the influence of cultural practices on phyto-diversity, the study will contribute to the broader discourse on biodiversity conservation and cultural heritage management. The research will provide evidence-based recommendations for the conservation and sustainable management of sacred groves, integrating traditional knowledge with contemporary conservation strategies. This integration is essential for ensuring that the wisdom of local communities is preserved and effectively applied in modern environmental management.

In addition to its ecological and socio-economic focus, the study will delve into the myths, sacred duties, and traditional practices associated with sacred groves. This exploration will contribute significantly to the preservation of intangible cultural heritage, acknowledging the deep spiritual and cultural connections that local communities have with these groves. Such connections are often overlooked in purely ecological studies, yet they play a crucial role in the continued conservation of these sacred spaces.

This research will raise public consciousness by emphasizing the connections between socio-cultural beliefs and practices and ecological preservation. By demonstrating how these intersections contribute to the conservation and sustainable management of sacred groves, the research will serve as a vital tool for policymakers, conservationists, and the general public. It will emphasize the threats posed to sacred groves by developmental activities, such as land acquisition for buildings and roads, advocating for the protection of these groves as biodiversity hotspots and culturally significant spaces.

Finally, the comprehensive approach of this study will provide a strong foundation for future research. By addressing the socio-cultural, ecological, and economic dimensions of sacred grove management, the study will open new avenues for exploring the role of sacred groves in other regions, the impact of climate change on these ecosystems, and the effectiveness of different conservation strategies. The findings from this research could inspire further interdisciplinary studies, combining ecological, cultural, and socio-economic perspectives, thereby enriching the broader understanding of sacred groves and their significance in contemporary society.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

#### **2.1. INTRODUCTION**

The study's focus on the socio-economic implications of sacred groves adds another critical dimension to its significance. By exploring how sacred groves contribute to local livelihoods and the economic challenges and benefits associated with their conservation, the research will highlight the socio-economic advantages of preserving these ecosystems. This is particularly relevant in the context of sustainable development, where the challenge often lies in balancing economic growth with environmental preservation. The findings from this study will be invaluable in informing local and regional conservation policies that support both environmental sustainability and economic development. Thus, the review of literature of the present study has been organized into two four sub-themes. First, it describes the socio-cultural context of the sacred grove, second, it analyses the religious aspects involved in it. Thirdly, it looks at the ecological implications. And finally, the Economic aspects are discussed. Summary of the major points of the existing literature on sacred groves and their contributions and influences on the above mentioned four contexts are included in this chapter. Through this chapter, the present study is placed within the framework of existing data.

#### **2.2. Socio-Cultural Context**

Sacred groves (SGs) form an essential part of the socio-cultural fabric of traditional and indigenous communities across India, playing a pivotal role in maintaining social cohesion through religious practices and community engagement. SGs are communally protected forest patches, where the cutting of trees is strictly prohibited, except for religious purposes like temple construction or rituals (Kandari et al., 2014). These practices emphasize the integration of environmental stewardship with cultural values, where actions like the "Maiti Andolan" movement in Uttarakhand encourage newlywed couples to plant tree seedlings, symbolizing environmental responsibility and contributing to the mitigation of natural disasters like landslides (Meenakshi et al., 2011). Across India, festivals such as Deepawali, Navratri, Salui, and Karam involve sacred groves, reinforcing their role as focal points for social and cultural gatherings (Deb & Malhotra, 1997; Anthwal et al., 2006). This socio-cultural integration

strengthens the community's connection to the environment while fostering a sense of collective responsibility toward conservation.

Murugan et al. (2008) studied sacred groves and serpent worship in Kerala's Palakkad district, identifying three types of groves: primitive, recent, and sacraments devoid of vegetation. Their methodology involved field surveys and interviews with local elders, *Pulluvas*, and *Namboothiris*, uncovering how serpent worship is linked to myths and cultural beliefs. They found that groves with no vegetation are remnants of an earlier socio-cultural epoch, illustrating how these spaces acted as cultural transmission points from prehistoric times. Taboos, rituals, and religious practices within the groves served as traditional mechanisms for conserving natural resources, indicating that the socio-cultural context of sacred groves played a significant role in integrating conservation with cultural beliefs. However, modernization and changing lifestyles now threaten these conservation practices, leading to the gradual decline of this cultural heritage (Murugan et al., 2008). Similarly, Acharya and Ormsby (2017) explored the socio-cultural dimensions of Nepali sacred groves, or *Devithans*, in Sikkim, which have been largely overlooked compared to Buddhist Gumpa forests. Their research highlights how *Devithans* are deeply embedded in the community's daily life, with norms regulating who can access these sacred spaces. Cultural beliefs, such as restricting menstruating or pregnant women from entering *Devithans*, illustrate the community's strict adherence to traditional practices. The ownership of *Devithans* is often linked to clans or caste groups, reinforcing familial connections to the landscape and the community's identity (Acharya & Ormsby, 2017). This demonstrates how sacred groves contribute to shaping local identities and maintaining social cohesion through the regulation of cultural practices.

In rural Kodagu and urban Kasaragod, socio-cultural practices significantly influence the management and conservation of sacred groves. Ballullaya et al. (2019) found that rural communities viewed SGs as usufruct forests, vital for gathering resources such as firewood, fodder, and medicinal plants. Conversely, urban communities, while not directly dependent on SGs for livelihood, valued them for their spiritual significance and the ecological services they provide. The contrast between rural and urban perceptions reflects the shift in socio-cultural practices driven by modernization, with urban communities increasingly recognizing the environmental benefits of sacred groves (Ballullaya et al., 2019).

Singh (2006) conducted a study on four sacred groves in Pune district, Maharashtra, exploring how socio-cultural norms regulate resource use. Using qualitative interviews and quantitative

data collection, Singh examined the attitudes of local communities toward sacred and non-sacred forests. The findings revealed that sacred groves were heavily used but managed through restrictions and taboos that conserved forest species. Grazing and timber collection were prohibited in some groves, whereas medicinal plants and fallen fruits could be harvested under certain conditions. The study highlights the effectiveness of socio-cultural norms in minimizing human impact on sacred groves compared to non-sacred forests, though the limited size and isolation of these groves reduce their overall conservation potential (Singh, 2006).

The cultural and spiritual significance of sacred groves as biodiversity conservation sites is further emphasized in studies conducted in Meghalaya and Karnataka. Through interviews with 156 residents across these regions, researchers explored the management of sacred groves, restrictions on resource use, and the role of rituals in conservation. The study found that sacred groves vary in size and level of preservation, with some communities imposing strict prohibitions on resource extraction, while others allow limited use for fuel wood collection. Rituals associated with festivals and religious ceremonies, such as *pujas* and offerings, played a crucial role in maintaining the sacredness of the groves, further embedding them in the socio-cultural life of the communities (Jeeva et al., 2006).

Vipat and Bharucha (2014) studied the Devrai sacred groves in Maharashtra's Mulshi region, focusing on how religious beliefs drive the preservation of these groves. The research revealed that traditional rituals and cultural practices continue to play a central role in maintaining the groves, particularly among local tribes like the Dhangar, Mahadeo Koli, and Maratha. Despite the ecological benefits of preserving sacred groves, the study concluded that religious motivations rather than intentional biodiversity conservation efforts primarily influence their protection. However, the declining interest in traditional rituals among younger generations poses a threat to the long-term preservation of these culturally significant spaces (Vipat & Bharucha, 2014). Prasad et al. (2015) conducted a study on urban residents' awareness and perceptions of sacred groves in Bankura District, West Bengal. Through interviews and questionnaires, the study found varying levels of awareness regarding sacred groves and biodiversity conservation. While many urban residents were familiar with environmental issues like pollution, fewer were aware of the specific importance of sacred groves. The research underscores the need for increased community participation and targeted awareness campaigns to foster greater involvement in conservation efforts, highlighting the role of socio-cultural dynamics in shaping attitudes toward sacred groves (Prasad et al., 2015).

### 2.3. RELIGIOUS CONTEXT

Religion has long played a pivotal role in the conservation of sacred groves (SGs) across various regions of India, with religious beliefs and practices deeply intertwined with environmental stewardship. These sacred spaces are protected and preserved due to their association with local deities, religious taboos, and rituals. The religious significance assigned to trees, plants, and animals within these groves forms the cornerstone of traditional conservation practices, emphasizing the integration of spiritual values into ecological preservation.

A key study by Colding and Folke (1997) and Kandari et al. (2014) highlights how certain plant species within SGs, such as *Saussurea obvallata* and *Delphinium vestitum*, are considered sacred and are only harvested by priests during specific periods. This practice of limiting access to sacred resources aligns with religious taboos, which function as traditional conservation mechanisms. In Hinduism, various animals like the eagle (Garuda), peacock, bull, and tiger are closely associated with deities, reinforcing the symbolic and religious importance of wildlife. The sacred animals embody a form of ecological harmony, wherein protecting wildlife becomes an extension of religious duty (King-Oliver et al., 1997). Further reinforcing this perspective, Kalam (1996) documents the religious rituals carried out in Karnataka, where cattle images are offered to SGs to ensure the health and well-being of livestock. These rituals not only exemplify the connection between religion and natural resource management but also signify the communal responsibilities that revolve around the spiritual dimensions of SGs. In this context, religious festivals and rituals play a significant role in maintaining the integrity of SGs, creating a system of ecological governance that is rooted in spiritual beliefs.

Ballullaya et al. (2019) explore the dynamics of religious influence on SG conservation in rural and urban settings. The study indicates that in rural areas, the level of reverence afforded to SGs is deeply tied to the type of deity worshipped. Deities such as Naga, Shiva, and Vishnu, who command deep respect, are central to SGs, leading to minimal resource extraction. The associated religious taboos ensure that the groves remain undisturbed, contributing to greater conservation efforts. However, the study also reveals the effects of Sanskritization, where traditional local deities are being replaced by Sanskritic deities. This shift alters the spiritual dynamics within the groves, potentially influencing both the religious and ecological practices that have historically preserved these spaces. The role of government involvement in SG conservation, as seen in Kerala, further illustrates the religious importance attached to these

sacred sites. Ballullaya et al. (2019) document the Malabar Devoswam Board's initiative of installing bio-fences around SGs, emphasizing the need for structured protection, which simultaneously reinforces the spiritual value of these groves. Although urban communities may not rely on SGs for resources, the spiritual respect they maintain underscores the role religion plays even in less dependent settings.

The spiritual practices associated with SGs in Sikkim also reflect the connection between religion and ecological management. Acharya and Ormsby (2017) identify the taboos surrounding SGs, where activities such as washing utensils or desecrating sacred spaces are strictly prohibited. Community members believe that disrespecting the groves can lead to dire consequences such as sickness or the drying up of springs (*Dharas*), demonstrating the perceived supernatural protection afforded to SGs. This spiritual caution aids in the protection and preservation of these natural spaces, contributing to ecological conservation through religious observance. Similarly, Vipat and Bharucha (2014) discuss the religious significance of *Devrai* groves in Maharashtra, which are preserved due to their association with local deities. The study, conducted among the Dhangar, Mahadeo Koli, and Maratha tribes, highlights how traditional conservation practices within these groves are rooted in religious beliefs. Rituals conducted within the groves, based on folk knowledge, maintain the connection between the community and the environment, ensuring that these sacred spaces remain intact. Despite the lack of formal biodiversity conservation frameworks, the religious practices associated with *Devrai* have inadvertently sustained ecological balance in the region.

The various studies collectively underline the critical role religion plays in the conservation of SGs across India. Through religious taboos, rituals, and the reverence afforded to sacred deities, local communities have developed a form of ecological governance deeply intertwined with spiritual practices. These practices not only foster a sense of spiritual duty but also contribute to the protection of biodiversity. However, as modern influences like Sanskritization and urbanization emerge, the traditional religious dynamics within SGs are changing, which may impact their conservation. Nonetheless, religion remains a powerful force in the preservation of these vital ecological spaces, ensuring their continued existence through spiritually guided conservation efforts.



## 2.4. ECOLOGICAL CONTEXT

Ecologically, sacred groves (SGs) are critical for biodiversity conservation and ecosystem services, particularly in India, one of the 12 mega-biodiversity nations globally. Sacred groves contribute to soil and water conservation, especially in hilly areas where they stabilize the soil and prevent erosion, while also preserving water bodies crucial during droughts (Kandari et al., 2014). This is evident from practices like constructing concrete structures around natural water sources, which reflect local efforts to conserve these resources. The presence of medicinal plants within SGs supports biodiversity while maintaining traditional ecological knowledge passed down through generations, even in communities with low literacy levels (Bhandary & Chandrasekhar, 2003). However, sacred groves face growing threats from tourism, encroachment, and the invasion of exotic species, which challenge their ecological balance. Thus, community engagement and stronger legislative protections are essential for their long-term survival (Kandari et al., 2014). A similar narrative unfolds in both urban and rural contexts, where SGs are acknowledged for their ecological services, including biodiversity conservation, gas exchange, and habitat maintenance. Although rural communities rely on SGs for resources, spiritual beliefs help maintain habitat quality, allowing SGs to function as sanctuaries for flora and fauna (Ballullaya et al., 2019).

The sacred groves in Sikkim, for instance, provide vital ecosystem services such as water collection from sacred springs (dharas), ensuring regulated access to resources and thereby reinforcing sustainable use (Acharya & Ormsby, 2017). However, these sacred landscapes are also subject to internal cultural politics and ethnic assertions, which shape their management and conservation. This finding underlines the importance of integrating symbolic and political dimensions into conservation strategies beyond the ecological aspects alone.

In the Western Ghats, sacred groves have preserved significant forest patches rich in endemic species, maintaining biodiversity through traditional conservation practices (Vipat & Bharucha, 2014). However, socio-economic changes and development pressures threaten around 40% of the groves in regions like Mulshi, necessitating interventions like the establishment of Biodiversity Management Committees and the promotion of sustainable tourism to ensure their protection.

Similarly, Dar et al. (2019) explored tree diversity, biomass, and carbon storage in the sacred groves of Central India. These groves are home to rare and endangered species, contributing to

carbon cycling and mitigating climate change. The research conducted in Madhya Pradesh's Chhindwara district employed phytosociological methods to assess 41 groves, revealing the vital role of SGs in conserving biodiversity and carbon storage. Sacred groves in India also play an essential role in watershed conservation and nutrient cycling. Research by Gadgil and Vartak (1976) on sacred groves in the Western Ghats showed that these sites serve as ecological sanctuaries for various life forms, protected through traditional religious practices. These sacred sites are linked to goddess worship, where even the removal of dead wood is forbidden. Additionally, the preservation of sacred groves may hold valuable genotypes for future conservation efforts.

Further studies in regions like Mahe (Acharya & Ormsby, 2017) and Chhattisgarh (Chandrakar et al., 2014) affirm that SGs act as refuges for rare and endangered species. Despite religious erosion and encroachment, these groves have demonstrated resilience against deforestation. Sacred groves continue to play a crucial role in conserving genetic diversity, even as smaller fragments face challenges in supporting species richness and ecosystem health.

Ray et al. (2014) emphasize that sacred groves foster a harmonious relationship between human societies and nature. In India, where sacred groves predate the Vedic period, these ecological preserves are crucial for maintaining biodiversity. Yet, these sacred spaces are under threat from commercial forestry, urbanization, and changing belief systems, particularly as modernization diminishes the cultural value of SGs, fragmenting them and leading to species loss (Malhotra et al., 2001).

Thus, the reviewed studies highlight that sacred groves serve as critical ecological preserves, but their continued conservation depends on addressing both ecological and socio-cultural challenges. Conservation strategies should incorporate traditional beliefs and local community management to ensure the preservation of biodiversity, and the cultural heritage embedded in these landscapes.

## **2.4. ECONOMIC CONTEXT**

Sacred groves (SGs) serve not only as ecological sanctuaries but also play a significant role in the economic livelihoods of local communities. The economic pressures on sacred groves, particularly in rural areas, arise primarily from resource extraction and human-wildlife conflicts. In the Kodagu region, for instance, rural communities face substantial economic

strain due to crop losses caused by larger wildlife such as elephants and tigers, highlighting the delicate balance between conservation and livelihood (Ballullaya et al., 2019). In contrast, urban areas face less severe economic impacts, dealing mainly with smaller animals like wild boars and civet cats. This distinction between rural and urban economic impacts underscores the need for tailored conservation strategies that balance resource use with the preservation of sacred groves.

Economically, sacred groves contribute by supporting local ecosystems that provide essential resources such as medicinal and aromatic plants. Species like *Mentha arvensis*, *Coriandrum sativum*, and *Trigonella foenum-graecum* found in these groves play a pivotal role in local biodiversity conservation and traditional medicine, benefiting the livelihoods of indigenous communities (King-Oliver et al., 1997; Pandey, 2003). The spiritual and cultural beliefs surrounding sacred groves often prevent the overharvesting of these resources, fostering sustainable livelihoods. However, the growing pressures of modern development, including tourism and the exploitation of valuable species like sandalwood, pose significant economic challenges. Kandari et al. (2014) emphasize the need for stricter regulatory frameworks to safeguard these natural resources, which are integral to both local economies and biodiversity.

Vipat and Bharucha (2014) explore the economic reliance of local tribes on sacred groves for resources such as fuel, medicinal plants, and non-timber forest products. However, the study also identifies development pressures, including the conversion of agricultural land into urban areas, as key threats to the continued availability of these resources. The authors suggest exploring alternative conservation strategies, such as eco-development and sustainable tourism, to strike a balance between economic development and the preservation of sacred groves.

In Kerala, Sreelekha and Joy (2021) explored sacred groves are deeply intertwined with cultural and religious practices. The study focuses on the management of two groves in Thrissur district, highlighting the strong cultural and religious pride associated with these groves. However, the authors also note that the economic benefits of these groves, particularly in terms of biodiversity and resource use, are often overlooked in favor of religious aspects. The increasing threats of land encroachment and evolving religious practices have led to diminished biodiversity and ecological value, prompting a call for the integration of forest management laws with religious practices to preserve the groves' economic and ecological importance.

The economic value of sacred groves extends beyond their resource potential to their role in biodiversity conservation. Sukumaran et al. (2008) conducted a survey of 201 miniature sacred groves in Tamil Nadu's Kanyakumari district, emphasizing the conservation of medicinal plants confined to these groves. These plants are not only vital for local biodiversity but also for the economic sustainability of communities that rely on them for medicinal purposes. Despite the increasing pressures of environmental degradation, the strong religious beliefs surrounding sacred groves have maintained their conservation status, preserving both their economic and ecological value. Ray and Ramachandra (2020) examine the often-overlooked smaller sacred groves, emphasizing their ecological and economic significance despite their vulnerability to forest fragmentation and development pressures. Small groves, typically less than one hectare, are crucial for supporting plant and animal biodiversity, regulating temperature, conserving water, and sequestering carbon. However, their economic value is often underestimated due to misconceptions about their significance. The study highlights the potential of sustainable practices, such as agroforestry, to balance conservation with economic resource use, underscoring the importance of local community participation in preserving these groves.

The study by Acharya and Ormsby (2017) highlights the regulated use of natural resources within sacred groves, particularly in the case of water collection from dharas. While resource extraction is generally prohibited to maintain the sanctity of the groves, this controlled usage ensures the sustainability of essential ecosystem services like water provision. The study emphasizes that sacred groves serve as ecological and economic sanctuaries, providing vital resources to local communities while safeguarding the ecological integrity of the landscape. The reviewed studies underscore the need for tailored conservation strategies, stricter regulatory frameworks, and community-based approaches to ensure the sustainable use and preservation of sacred groves.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1. INTRODUCTION

The research focuses on how the families and kinships manage and maintain the sacred groves, particularly among the Hindu *Koottu Kudumbam* or group of families in Thrissur district, Kerala. Also studies its socio-economic and ecological implications for them. A descriptive, qualitative approach is employed to provide an in-depth understanding of the socio-economic and ecological factors that shape the management and conservation of these sacred groves. The study uses purposive sampling to select participants with specific knowledge of sacred groves, and data is gathered through unstructured interviews and participant observation. Thematic analysis is applied to the collected data, allowing for the identification of main themes related to the socio-economic and ecological dynamics of sacred groves. Limitations include restricted access due to cultural sensitivities and the small sample size, which limits the generalizability of findings.

#### 3.2. TITLE OF THE STUDY

MANAGING AND MAINTAINING SACRED GROVE AND IT'S SOCIO-ECONOMIC AND ECOLOGICAL IMPLICATIONS IN KERALA

#### 3.3. RESEARCH QUESTIONS

##### 3.3.1 General Research Question

How are sacred groves in Kerala managed and maintained, and what are the socio-economic and ecological implications of these practices?

##### 3.3.2 Specific Research Question

- How do socio-cultural aspects such as Hindu beliefs, gender, castes dynamics, and historical connections of families and communities impact the preservation, management, and rituals associated with sacred grove?
- How do the beliefs and cultural practices associated with sacred grove influence the phyto-diversity and contribute to ecological conservation?

- What are the economic benefits and challenges of conserving sacred grove and how do these contribute to sustainable management and local livelihoods?
- How do the intersections of socio-cultural beliefs and practices enhance public awareness and contribute to the conservation and sustainable management of sacred grove?

### **3.4. AREA OF THE STUDY**

Thrissur district has been chosen for the study. Because, In Kerala, sacred groves are distributed throughout the state, with a majority concentrated in the northern regions<sup>1</sup> (Kerala Forest Department,2020). Kannur and Kasargod districts are particularly notable for Kavus or sacred groves (Chandran, 2019). However, limited research has been conducted on sacred groves in the Thrissur district, and no previous studies have specifically examined the groves in Madakkathara Panchayath. Madakkathara Panchayath is renowned for its agricultural nurseries and is home to the Kerala Agricultural University, making it an ideal location for this investigation. The sacred groves in Madakkathara Panchayath, known for their cultural and ecological significance, offer a valuable site for understanding how these ecosystems are managed by the local families and the implications of these practices on both. A pilot study conducted by the researcher confirmed the relevance of this region for exploring the socio-economic and ecological aspects of sacred grove management.

### **3.5. TYPE OF THE STUDY**

The present study is qualitative in nature. The study focuses on the two Hindu families belong to two different castes who owned sacred grove and its socio-economic and ecological implications a qualitative approach (Patton, 2002; Merriam and Associates, 2002) was chosen because it helps to understand situations in their uniqueness as part of a particular context and the interactions within them.

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<sup>1</sup> Kerala Forest Department. (n.d.). *Sacred groves*. Kerala Forest & Wildlife Department. <http://old.forest.kerala.gov.in>

### **3.6. RESEARCH DESIGN**

The descriptive research design is used in this study rather than testing the hypothesis. This method enables the researcher to delve deep into the research questions and present a detailed and factual representation of the socio-economic and ecological aspects of sacred groves. A descriptive study is chosen because it helps to understand the practices of managing sacred groves by a group of families or *Koottukudumbam* specifically two Hindu castes group of families and their associated ecological and socio-economic implications. This design allows the researcher to conduct a case study for an in-depth understanding of the phenomena.

### **3.7. SAMPLING**

The researcher uses purposive sampling in the study because it allows for the intentional selection of the participants with specific knowledge and experience related to sacred groves. This approach ensures that the data collected is rich and relevant to sacred grove management and its socio-economic and ecological aspects. Since the study focuses on understanding particular phenomena, purposive sampling helps target, two different Hindu castes group of families or *Koottukudumbam* who are directly involved in or knowledgeable about the subject matter, making the findings more meaningful.

#### **3.7.1. UNIVERSE**

The researcher selected two different Hindu castes group of families or *Koottukudumbam* specifically *Panan* and *Panickar* as the universe of the study. *Panan* is a subcaste belonging to the schedule caste and *Panickar* is a sub-caste under the Nair community who were residing in Madakkathara Panchayat.

#### **3.7.2. INCLUSION CRITERIA**

*Panicker*, a sub-caste under the Nair community, and *Panan*, a subcaste under the scheduled caste, these two Hindu castes group of families or *Koottukudumbam* are included in this study.

### **3.8. SOURCES OF DATA**

For this study, the researcher collected primary data from the participants, as the information needed to be collected directly from them regarding the management of sacred groves and the

socio-economic and ecological implications, including the history of sacred groves and the reasons for worshipping specific deities in sacred groves, which was recorded on a voice recorder. Secondary data is collected from research articles, journals, and online websites to substantiate the researcher's statements.

### **3.9. TOOLS OF DATA COLLECTION**

Interview guide was employed as a tool to conduct in-depth interviews with participants and participant observation is used as the tool for the data collection in the present study.

### **3.10. TOOLS OF DATA ANALYSIS**

Since it is a qualitative Study, the researcher uses a thematic analysis method of data analysis. The method helps the researcher to identify themes within the data collected through interviews related to the management and maintenance of sacred groves and its socio-economic and ecological aspects. Since the study uses primary data and involves in-depth interviews this tool enables the researchers to explore a structured analysis of the complex, non-numerical data gathered from the participants.

### **3.11. LIMITATIONS OF THE STUDY**

Since the researcher uses a case study, only a few sacred groves are taken into account, the sample size is not enough to represent the overall sacred groves in Thrissur. As sacred groves are culturally and religiously significant there was a restriction on access, limiting the researcher's ability to perform a participant observation. This study being a qualitative one, there is a limitation of generalization of findings.



## CHAPTER 4

### CASE PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1. INTRODUCTION

This study explores the management and maintenance of sacred groves and their socio-cultural, economic, and ecological implications. It seeks to understand how these factors collectively influence the management, conservation, and sustainability of sacred groves, highlighting their crucial roles in environmental preservation and the social cohesion of local communities. Data for this research were collected through personal interviews with family members who play significant roles in maintaining and managing sacred groves. These participants come from two different caste groups, each owning a sacred grove, providing a diverse perspective on the socio-cultural, economic, and ecological dynamics involved.

#### 4.2. NARRATIVES OF THE CASE STUDIES

The case studies presented in this research offer a detailed exploration of sacred groves in Kerala, highlighting the rich tapestry of socio-cultural beliefs, practices, and traditions associated with these sites. Each case study focuses on specific groves managed by different communities, revealing how historical narratives, religious rituals, and socio-economic factors shape the management and preservation of these sacred spaces.

##### 4.2.1. Case 1: The Role of a *Panan* Family in the Management and Maintenance of a Sacred Grove

This case study presents the experience and responsibilities of *Panan* family, a sub-caste of the Scheduled Castes, in managing and maintaining a sacred grove (*kavu*) located within the boundaries of their courtyard. The participant, a male member of the family, has been entrusted with the rituals and overall maintenance of the sacred grove, which has been in existence for approximately 200 years. This sacred grove is considered a *kudumbha shetram* (family temple) and is central to the religious and cultural practices of the family and the surrounding community. The participant traced the history of the sacred grove back to around 200 years, emphasizing its role as a *kudumbha shetram*, where the main deity, *Devi*, has been worshipped since the time of his grandfather. The grove, measuring about three cents in area, is enclosed

by fourwalls and has a roof covered with sheets, reflecting the developments that have occurred over time.



*Figure 4 Sacred Grove maintained by Panan Family*



*Figure 5 Sacred Grove maintained by Panan Family*

The participant shared, "This Kavu is our family temple, or Kudumbha Shetram, where Devi has been worshipped for 200 years. Along with Devi, Sasthavu, Malankurathi, Malanayadi, and Muthappan are also worshipped here.



Figure 6 Chirakkal Amma (Main Deity of Sacred Grove maintained by Panan Family) and Sasthavu



Figure 4 Malankurathi and Malayanayadi and Muthappan

These deities, particularly *Chirakkal Amma* (an incarnation of *Bhadrakali*), hold significant importance in the family's religious practices.



Figure 5 Malankurathi and Malanayadi ( Avathar of God Shiva and Parvati)



Figure 6 Muthappan

The participant recounted a significant event in which financial difficulties led to the sale of their ancestral land, which subsequently prompted the family's decision to relocate.

The participant stated, *"Early these deities were placed in another place in this panchayat. Due to debt, our family had to leave our homeland, so we brought the deities to this new place."*

The property, once sold to a Christian family, became the site of a critical moment when the new owner expressed a desire to remove the sacred grove. Confronted with the threat to their religious heritage, the participant acted decisively to protect the deities, moving them to their present location. This account highlights how economic challenges can affect cultural and

religious practices and demonstrates the participant's commitment to preserving their ancestral traditions despite external pressures.

The relocation and continued worship of these deities highlight the deep connection between the family and their ancestral traditions. The participant's grandfather was responsible for the *kudiyiruthuka* (installation) of the deities in the sacred grove, a process that requires specific knowledge and rituals to provide life to the *prathishta* (idol).

The participant elaborated on the procedure, *"Those who have knowledge about the procedures can do prathishta. It involves sealing the prathishta on the appropriate floor or ashtapetha, giving life to them through special chanting, and performing pooja to make a life on prathishta."*

The *Jeeva Mantra* used during the time of *prathishta* is:

*"ohm pranaya prana linghaya prana prathishtaya swaha*

*ohm yanthraya yanthra lighaya yanthra prathishtaya swaha*

*ohm jeevaya jeevalinghaya jeeva prathishtaya swaha"*

The participant further emphasized the importance of conducting rituals according to the deity's preferences.

While Brahmins initially performed the pooja, an astrologer later revealed that the *Devi* preferred the rituals to be conducted by a *Panan*.

The participant shared, *"Even though we conducted poojas with Namboothiris for 3-4 years, the astrologer said that Devi, who is worshipped here, prefers to receive pooja from a Panan. He said that even if we give one flower for pooja with the right knowledge, Amma will be with us."*

The sacred grove hosts several rituals and ceremonies that have been passed down through generations. One of the most significant rituals is *Ezhunullipp*, conducted annually in May, two days before *Thrissur Pooram*, on the star date of *Ayilyam*. This ritual involves bringing the major deity, *Chirakkal Amma*, from a nearby temple with *Palkindi*, ceremonial object resembling a copper bowl, intricately decorated with cloth, flowers, and other sacred items,

which symbolizes the presence of the deity during rituals. It is used in place of an elephant for the *Ezhunnallippu* procession, where it represents the deity being carried in a ritualistic manner. The *Palkindi* contains offerings such as milk and is considered a sacred embodiment of the deity, typically used during the annual rituals associated with the main deity, *Chirakkal Amma*, in the sacred grove. *Melam*, and *Thaalam*, a plate with flowers and a lamp, usually held by 21 or 101 women.

The participant recalled, "*Once we decided to bring an elephant for this Ezhunullipp, offered by a nearby temple, but an elder in our family advised against it.*"

He said that "*if Devi gets on the elephant, we must continue this every year, otherwise Devi will not come down to our grove.*" Due to economic constraints, the family opted for *Palkindi* instead of an elephant, a practice that has been continued annually."

After *Ezhunullipp*, rituals such as *Nandunippattu* and *Kalamezhuth* are conducted as grand events, involving the local community. *Nandunippattu* is an art of singing accompanied by an instrument called *Nanduni*, performed by the *Velanmar* sub-caste of the Scheduled Castes. *Thayambaka*, an art form using instruments like *Chenda*, and *Kozhi Vettu* (the ritual killing of a chicken as an offering to *Devi*) are also integral parts of these ceremonies. The participant detailed the significance of these rituals, "*Kozhivettu or Kuruthi Tharpanam is a ritual in the sacred grove, where the cock is killed by the person administering the pooja. This ritual is done for Perumbadanmar, who are believed to protect Devi.*"

During the ritual, the *Velichappadu* (oracle) performs *Thullal* (a ritualistic dance), and it is believed that during this time, *Devi* manifests in front of the people. The participant shared his personal experience as *Velichappadu*, stating, "*During the time of Kuruthi, the Velichappadu feels a spark in their body, and it is believed that Devi presents herself in front of the people as a person.*" This ritualistic dance and the insights gained during it are considered divine, providing guidance to the community.

The sacred grove's main deity, *Chirakkal Amma*, is identified as *Nana Durga*, a deity that must always be kept wet. In the early period, the deity was installed in an open area, ensuring it remained wet. However, after the construction of the *Kovil* (temple), a small hole was provided on the roof to allow continuous wetness on her head. The participant explained the construction of the four walls around the deity, which was done to prohibit the surrounding people from

seeing the pooja or during *neydhyam* (food offering) to *Devi*. This development was completed within four years, reflecting the participant's commitment to maintaining the sanctity and privacy of the sacred grove.

The participant's involvement in the sacred grove began at the age of 15, and he has since taken on the responsibility of performing daily morning pooja. He shared, "*I started performing daily pooja after a nightmare where Devi came to me and said she needed Nithyapooja (daily pooja). I understood the importance of this ritual and have continued it without fail.*" However, he expressed concern about the future, noting that his next generation shows little interest in these duties. To address this, he has started involving his grandson in the rituals, particularly in lighting the lamp in the morning and evening.

The participant also highlighted the economic challenges of maintaining the sacred grove. He noted that 40 years ago, managing the sacred grove was difficult due to the rising costs of materials needed for pooja and rituals, as well as increased labor charges for art forms and programs. Initially, the participant bore the financial burden himself, but over time, he began collecting funds from family relatives and the local community.

He remarked, "*Every year, we must conduct these ceremonies; otherwise, there should be a valid reason, like the year we didn't conduct any programs because my mother passed away.*" Despite facing some resistance from the community, who questioned why they should contribute to the family's sacred grove, the participant emphasized the importance of collective participation in the ceremonies and *Annadhanam* (food offering).

The local populace's belief in the sacred grove is evident in their financial contributions and active participation in the rituals. The participant shared that people from the surrounding area often come to give offerings or *Vazhipadu* to the goddess, including *neydhyam* or food offerings. He recounted an experience involving his father's brother's daughter, who had a nightmare where she stood near the sacred grove, with the goddess standing behind her with gold-colored teeth and an attractive sari. Following this vision, she decided to provide *neydhyam* for the goddess and the local community.

Despite the participant's deep connection to the sacred grove, he expressed concern about the lack of knowledge being passed down to the next generation. He stated, "*I haven't shared much about the history of our sacred grove with the younger generation, and they don't seem to have*

*much interest or knowledge about it.*" However, he remains hopeful that with time, they will take an active role in maintaining the sacred grove.

The participant also discussed the rules and restrictions surrounding ritual purity and the role of gender in sacred grove management. He explained that women are allowed to enter the sacred grove for cleaning and worship, but they must maintain a distance during menstruation, referred to as *Aitham* or *Sudhakedu*. During these times, women can be in the house but should avoid contact with others. The participant shared that in the early period, his wife was responsible for preparing food for *Devi*, but after finding a hair in the food, she stopped. He emphasized the importance of preparing *neydhyam* with utmost care, as it is a crucial offering to *Devi*.

Furthermore, the participant mentioned that during *Ezhunullipp*, his wife would carry the *Thaalam* (plate with flowers and lamp) to the sacred grove. However, during menstruation, women are prohibited from even entering the kitchen, and food must be prepared by others in the household. The participant's daughter-in-law currently prepares food for *Devi* and is expected to continue these practices.

In conclusion, the participant expressed hope that the family and local community would continue to uphold the traditions and rituals associated with the sacred grove.

He shared, *"I believe that if we continue to do this for the next generation, they will take it forward. The community is very cooperative, and they actively participate in the programs and rituals, ensuring that our sacred grove remains a vital part of our cultural heritage."*

The participant also described the condition of a nearby deteriorated *Sarpa Kavu*, a sacred grove dedicated to the deity *Naga Rajavu*. The grove was established following an oracle received by a woman in the household, who, after suffering from her husband's abuse, prayed to the deity *Thanikudathamma* for peace. During a moment in her kitchen while preparing fish curry, she entered a trance and began to perform a *Thullal*. When neighbors inquired about her state, she revealed that she was possessed by *Thanikudathamma*, leading the family to install the deity as the major figure in the grove. The grove, believed to be around 50 years old, initially contained only the goddess, but additional deities were installed as offerings from others. The family, however, misused the funds meant for the grove's upkeep, diverting them to household needs. Additionally, one of the sons in the family began stealing utensils from the



temple and drinking alcohol. His actions are believed to have brought about a curse (*Dhosham*), leading to his bedridden condition. The family eventually abandoned their home, and as a result, the sacred grove fell into disrepair.



*Figure 7 Deteriorated Sacred Grove of Naga Diety near to the sacred Grove of Panan Family*



*Figure 8 Main Kovil of Deteriorated Sacred Grove*



*Figure 9 cover tied to protect sacred grove*



*Figure 10 Ganapati worship in the deteriorated sacred grove*



*Figure 11 A Naga raja deity or Prathishta in sacred grove surrounded jasmine flower*



*Figure 12 Stones of Naga deities in deteriorated sacred Grove*



*Figure 13 Front view of deteriorated sacred grove*



*Figure 14 Sacred Tree and Deity Installed Under the Sacred Banyan Tree*

Even though the participant itself destruct many flora as the fear of animals as the sacred groves is situated near to the home.

This case study offers valuable insights into the complexities of managing and maintaining a sacred grove within a specific socio-cultural context. The participant's experiences highlight the importance of ritualistic knowledge, community involvement, and the challenges of preserving traditional practices in the face of economic and generational changes.

#### **4.2.2. Case 2 The Role of a *Panickar* Family in the Management and Maintenance of a Sacred Grove**

The sacred grove under discussion has been maintained by the Panickar family, a subcaste of the Nair community, for approximately 500 years. This grove, consisting of four smaller groves—two on the southern side (Thekku) and two on the northern side (Vadakku) is located within the family's *Tharavadu* (Ancestral Home), which originally belonged to the father's side of the family.

Historically, this ancestral home was part of the Elethinte Ellam or Mana Veedu, which were Brahmin households. The sacred grove initially belonged to the Manaveettukar, who later transferred ownership to the Panickar family. According to the participant, the Kumarapurath

Raja played a crucial role in the history of the grove, bringing and installing the deities in the area. He stated, "*Kumarapurath Raja brought these deities from Vellaniseri to Madakkathara, emphasizing that in any native place, a Panickar must be present or Desath Oru Panickar venam.*"

This remark underscores the importance of the Panickar presence in the community's religious and cultural fabric. The Kumarapuram palace, which still stands in Eravimangalam, is tied to this history. The grove houses several significant deities, including Naga Rajavu in the southern part (Thekku Bhagam) and Nagayakshi Amma, Anjara Mani Nagam, Mani Nagam, and Karinagam (part of the Ashta Nagangal) in the northern part (Vadakku Bhagam). The participant admitted, however, that he does not know the exact reason these deities were installed in their space, noting that "*the Naga family has been here since we received it.*"

Annually, during the Malayalam month of Kanni, on the day of the Ayilyam star, an Ayilya Pooja is conducted by Vasudhevan Namboodiri, a Poojari from Perumpadapp Mana near Ollukkara. While the family originally intended to perform monthly poojas, economic constraints have limited them to conducting this ritual once a year.

The participant's family consisted of his mother, father, and two sisters, all of whom have passed away, leaving him and his seven brothers. His father, who passed away 20 years ago, was known for his diligent maintenance of the sacred grove. The participant reflected, "*My father maintained the sacred grove well, but eventually, he became too afraid to even light the lamp in the Kavuu.*" Since childhood, the participant has taken on the responsibility of lighting the lamp in the grove, a task that has been passed down through generations.

Adjacent to the sacred grove is a *Kalari* (training ground), specifically a Pandheeradi Kalari. The family owns a total of 45 cents of land, of which 10 cents are dedicated to the sacred grove. This proximity to the *Kalari* highlights the deep cultural significance of the space, intertwining the martial and spiritual traditions of the community.

During the time of the participant's father, the family performed several significant rituals, including the Ganapati Homam. This ritual involved a unique sculpture of Ganapati with eight hands, each holding a weapon (*Ayudham*), crafted from *Karimkallu* (A type of stone) by Kuttan Panickar, the participant's grandfather's father's son. Tragically, two hands of the Ganapati sculpture were broken.

As the participant recounted this, he became visibly emotional, explaining through tears, *“It was broken by Norman, my brother, out of anger because he hadn’t been married.”*

Norman’s actions stemmed from frustration and anger at not having his marriage arranged, leading him to take out his emotions on the sacred sculpture. Despite this, Norman later installed several other deities in the grove, including Brahma Rakshasu, Durga Devi, and Raktheswari. These deities, along with Ganapati, became integral to the sacred space.

The sacred grove also houses Puliyan Pulli Namboodiri, an unusual and significant deity with a unique history. Puliyan Pulli Namboodiri, sometimes referred to as the *“Namboodiri Asudhi”* or *“untouchable Namboodiri,”* is said to have been a Namboodiri who consumed *Kallum* (liquor) and *Thavidum*, which led to his ostracization by the main Namboodiri community.

The participant shared the story of how Puliyan Pulli Namboodiri was installed in their sacred grove: *“When they moved to this new place, my father and his sister didn’t bring the deities from the old home. But there was a jackfruit tree at the site, and one midnight, we heard the trunk of this tree break and fall. When we went to investigate, with a petrol candle, or Randhal, we saw two stones.”*

His grandfather received an oracle that night, asking, *“Why didn’t you bring me?”*

This event led to the installation of Puliyan Pulli Namboodiri in their grove, represented by a large round stone and a big *Sanghu*-shaped stone. The rituals for Puliyan Pulli Namboodiri are conducted with liquor and non-vegetarian offerings, including *Kallu*, *Thavidu* (ground fried rice), and *Kozhi Chora* (chicken blood). These rituals are performed annually during the Malayalam month of Karkidakam and on Vishu Sankranti.

The participant emphasized that all rituals must be conducted by their family, and if any responsibilities were to be transferred to another person, the consent of the deities would be necessary.

He said, *“If the deities want to leave us, they will show signs and inform us. It will be revealed through astrology.”* The family consults an astrologer for *Ashttamangalyam*, a traditional ritual to seek divine guidance, during which it was revealed that there is a presence of Bhagavati along with Puliyan Pulli Namboodiri in the grove.

Within the sacred grove, alongside Puliampulli Namboodiri, resides Bhagavati. Unlike Puliampulli Namboodiri, Bhagavati does not have a formal *prathishta* (installation) within the grove; her presence is a matter of *Sankalppam* (imagination or belief). Bhagavati is worshipped under a Kovalam tree, a simple yet profound connection that has been maintained over generations.

During the participant's father's time, the family regularly performed rituals for Naga Rajavu, including offering *Palum*, *Noorum* (milk and turmeric) on every *Ayilyam* star of the Malayalam month. However, these rituals have since ceased.

The participant explained, *“It’s not because of economic problems. After our parents passed away, we were deeply affected mentally, and both my elder brother and sister developed mental issues.”* He emphasized that these mental health issues might not be solely due to the lack of rituals and festivals in the sacred grove but could be attributed to other factors as well.

His younger brother, Norman, once advised him to build his home near the grove. Recalling this, the participant became emotional and said, *“We didn’t feel any problems related to the sacred grove.”*

He believes that Norman has been blessed by the deities. He recounted a particular incident involving Norman: *“Once, Norman had promised to perform the Kalasam ritual for Puthiyampulli Namboodiri. But he had to leave urgently and decided to skip the ritual. Suddenly, his neck got stuck to the left side, and no one could turn it back to normal. I felt in my heart that it might be because he didn’t do the Kalasam. So, I decided to offer some money to Puthiyampulli Namboodiri, and immediately, his neck straightened.”* The participant shared this with teary eyes, emphasizing the powerful connection the family has with the deities.

Among the rituals performed in the grove during his father's time were *Palmatt* and *Kalam*, intricate ceremonies involving the creation of 41 grids made from rice flour, turmeric powder, and *Krishnapodi* (burnt rice husk ash). In each of the 41 squares, a lighted lamp (*Nilavilakku*) and a small banana leaf were placed. Offerings included *Avil* (flattened rice), *Malar* (puffed rice), bananas, jaggery, and *Pandham* (a type of firestick believed to be used by Puthiyam pulli Namboodiri). The pooja also involved the use of camphor and sandalwood.



One of the most intense rituals involved the sacrifice of a cock, whose blood was offered by pouring it onto the sacred stone. The cock's head was then fried on a traditional three-stone hearth.

The participant explained that "*They believed that liquor and the fried cock's head were the food eaten by Puthiyampulli Namboodiri.*" Following this, *Kuruthi* was prepared by mixing turmeric powder with lime soda (*Chunnambu*), creating a brick-red liquid that was then poured onto the *Kalam*.

During his father's time, these rituals were carried out regularly, particularly on auspicious days such as Tuesdays, Fridays, Amavasya (new moon days), Karkidaka Sankranti, Vishu Sankranti, and Uthradam of Onam. The participant recalled how these rituals were an integral part of their life, deeply embedded in the family's traditions and beliefs.

Through this narrative, the participant conveys the deep spiritual connection his family had with the sacred grove and the rituals that were once an integral part of their lives. Despite the cessation of these practices, the memory of them remains vivid, intertwined with the challenges and changes the family has faced over time.

The sacred grove is home to a variety of plants, each with its own religious and cultural significance. Among the trees, he mentions *chela*, a pure white stem and green leaves, resembling a eucalyptus tree. This tree, along with two sandalwood trees and a Koovam tree, stands out in the grove. Interestingly, the Koovam tree, which typically bears small, tasty fruits, does not produce any fruit in this sacred space. The participant believes this is because the fruits would fall on the bodies of the deities, causing them pain. He reflects, "The deities won't allow the trees in the sacred grove to bear fruit. It's all part of the religious miracles we witness here."

There is no physical sculpture representing the Naga deity in the grove; instead, the presence of the deity is symbolized through *Sankalpam*. The participant points out that a Sarpagandhi plant, along with a chain of creepers growing on the Koovam tree, resembles the Naga Devata. He has also observed many new plants sprouting in the grove, though he does not know their names. Due to economic challenges, the participant's family had to sell two of the sandalwood trees. Among the other plants in the grove are Karinechi, with violet-colored undersides of the

leaves; Aadalodakam; Kuvalam; Karlakam, known for its use in treating venomous bites; Sanghupushpa; Thazhuthama; Keezarnelli; Desapushpa; Thakara; Mukutti; and Karuka.

In earlier times, many locals would come to the participant's home to purchase Karlakam, but now most of these plants have disappeared from the area. The participant notes, "*We didn't invite others from the local populace because many of them have no belief.*"

The participant highlights a significant tradition regarding the Naga deities' area: women are not permitted to enter, except on one specific day each year, during the Ayilyam star in the Malayalam month of Kanni. On this day, the grove is purified with *Punyaham* or holy water.

He is knowledgeable about the protection and conservation of sacred groves, aware that the Jaiva Vaividhya Board offers subsidies for such efforts in Kerala. However, he laments that despite asking many people, "*nobody knows about it,*" though he mentions that Perumpadappu Mana is already receiving this subsidy.

Reflecting on his experiences, the participant states, "*I've learned that if we make any break in the offerings, it will show through signs.*" He firmly believes that if an offering to the Sarpa deities is neglected, the deities will remind the person of their obligation through signs, often in the form of snake sightings. This belief underscores the deep connection between the sacred grove and the spiritual practices that have been maintained, despite the challenges faced by the family and the broader community.

He explains that he had brought a photo of the Devi to begin a *pooja*. His brother Norman, also wishing to perform the ritual, asked for the photo, and the participant obliged by giving it to him. However, after some time, the photo fell from its stand, though it remained unharmed. Feeling a strong connection to the Devi, the participant decided to take the photo back from Norman and perform the *pooja* himself. That night, he experienced a vivid nightmare, which he describes in detail:

*"Saraswathi Devi appeared in my dream, wearing a white saree and holding a veena in her hands, which were resting on a white lotus. The brightness of her nose ring was striking. Devi came closer to me, near the mani Kinar (well) in our home. She instructed me to place the bucket used to draw water from the well into it, and I obeyed. When I pulled the bucket up, it was filled with rice, flowers, and Thulasi leaves along with the water. Devi then told me to pour*

*it into the courtyard, and I did as she asked. Afterward, she requested a white lotus. I ran to the nearby lotus farm, gathered two lotuses, and offered them to her. She took the flowers and disappeared."*

The participant believes that this experience was a sign from the Devi, indicating that he is meant to perform the *pooja* regularly. He feels a strong sense of duty to light the lamp every day as part of this practice. He adds, "If we fail to do it, we can ask for pardon from the gods, and they will forgive us." Additionally, he mentions that in their family, they abstain from eating non-vegetarian food on Tuesdays and Fridays. There is also a strict rule that women in their menstrual period are not allowed to enter the sacred grove during that time.

The participant also reflects on his family's unique position in the community. "*We are the only Panickar family in Madakkathara, specifically in our area at Aalu Junction,*" he notes. He explains that in every Panickar household, having a *Kalari* (a traditional martial arts training area) is a must. While his grandfather was an astrologer, the participant acknowledges that his father did not continue in that path, and both he and his relatives have discontinued the tradition of astrology. Despite these changes, the participant emphasizes that his entire family is well-versed in the history of their sacred grove. This deep-rooted knowledge and connection to their heritage continue to play a significant role in their lives, guiding their spiritual practices and preserving the sacred traditions associated with the grove.



*Figure 15 Sangalpa Prathishta of Ashta Naga in Sacred Grove Maintained by Panickar Family*



*Figure 16 Flora in Deteriorated Sacred Grove*



*Figure 17 Deteriorated Sacred Grove in Panickar family*



*Figure 18 Naga Deity Installed Area in Sacred Grove Maintained By Panickar Family*



*Figure 19 Sarpa Kavu*



*Figure 20 Sarpagandi Plant In Sarpakavu Maintained by Panickar Family*

### **4.3. DATA ANALYSIS AND INTERPRETATION**

Thematic analysis is used in this qualitative study for analysis of the data collected through in-depth interviews and with using ethnographic method of participant observation. The researcher closely examines the data to identify common themes – topics, ideas, and patterns of meaning repeatedly. Hence while going through the data, researcher found following themes for analysis of data.

### **THEMES**

The researcher has delineated four main themes and ten corresponding sub-themes to guide the analysis of the collected data.

1. Socio-cultural context

- Intergenerational Knowledge transfer
  - Cultural identify and belonging
  - Emotional and psychological well-being
2. Economic context
    - Economic Challenges in Ritual Maintenance
    - Sacred Groves as Economic Burdens
  3. Religious context
    - Religious practices and religious devotion
    - Devine retribution and protection
    - Symbolism and sacred groves
  4. Ecological context
    - Conservation Practices in Sacred Groves
    - Human Impact on Sacred Grove Ecosystems

#### **4.3.1. Socio-Cultural Context**

The first category of research focuses on the socio-cultural context of the management and maintenance of the sacred grove by two different caste group of families or *koottukudumbam*. This includes Intergenerational knowledge transfer, cultural identity and belonging, emotional and psychological well-being.

##### **4.3.1.1. Intergenerational Knowledge Transfer**

Intergenerational knowledge transfer is a crucial component of sacred grove management, where traditional practices and rituals are passed down through generations. In Case 1, involving the Panan family, the participant's account underscores the importance of such knowledge in maintaining the sacred grove and its associated rituals. This practice aligns with the findings of Murugan et al. (2008), who highlight the significance of oral transmission in preserving cultural knowledge and practices within communities in Palakkad, Kerala.

The participant elaborates on the process of *kudiyiruthuka* (installation of deities), a significant ritual that demands specific, specialized knowledge passed down through generations. He explains, "*Those who have knowledge about the procedures can do prathishta. It involves sealing the prathishta on the appropriate floor or ashtapetha, giving life to them through*

*special chanting and performing pooja to make a life on prathishta.*" The participant's account is consistent with Singh (2006), who emphasizes the role of intergenerational transfer in maintaining sacred grove practices, ensuring that ecological and spiritual knowledge is not lost.

From a young age, the participant has been actively engaged in performing daily morning *pooja* since the age of 15, demonstrating a strong commitment to these rituals. He recounts, "*I started performing daily pooja after a nightmare where Devi came to me and said she needed Nithyapooja (Daily Pooja). I understood the importance of this ritual and have continued it without fail.*" This experience not only illustrates his dedication but also shows a conscious effort to impart this knowledge to the next generation, involving his grandson in the rituals despite the latter's apparent disinterest.

However, the participant expresses concern over the younger generation's lack of interest in these sacred duties. He notes, "*I haven't shared much about the history of our sacred grove with the younger generation, and they don't seem to have much interest or knowledge about it.*" This statement reveals a significant challenge in the transfer of traditional knowledge. The younger generation's disinterest and lack of engagement pose a threat to the continuity of these practices, highlighting the weakness of maintaining traditional rituals amid generational shifts. Despite efforts to involve the younger generation in these practices, the participant expresses concern over their lack of interest, noting, "*I haven't shared much about the history of our sacred grove with the younger generation, and they don't seem to have much interest or knowledge about it.*" This statement reflects a challenge in the transfer of traditional knowledge, similar to the findings of Acharya and Ormsby (2017), who discuss the disconnection felt by younger generations from traditional practices due to modern influences and socio-economic changes in Sikkim, India.

Despite the participant's efforts to involve his grandson in the upkeep and rituals of the sacred grove, the evident gap in knowledge transfer points to a broader issue of cultural and spiritual disconnect in contemporary times. The participant's narrative reflects a sense of urgency and concern about preserving these rituals and traditions, underscoring the critical need for effective intergenerational knowledge transfer to sustain the sacred grove's cultural and spiritual heritage.

This case study of the Panickar family provides a compelling example of intergenerational knowledge transfer, illustrating how cultural, religious, and traditional practices are passed



down through generations. The participant's reflections on his family's history and the maintenance of the sacred grove offer insights into the ways in which religious responsibilities and ritual knowledge are transmitted from one generation to the next. This demonstrates the effectiveness of oral tradition in preserving cultural and religious heritage ( Singh, 2006).

The participant vividly recalls his father's diligent maintenance of the sacred grove and the performance of rituals, such as the Ayilya Pooja for naga deities. This careful observance of rituals underscores the family's deep-rooted commitment to preserving their cultural and spiritual heritage. The participant's own involvement from a young age, particularly his responsibility for lighting the lamp in the grove, highlights the direct transmission of religious duties from father to son. This ongoing practice is a testament to the family's dedication to maintaining their ancestral traditions, ensuring that these practices are not lost over time. As the participant reflects, "*My father maintained the sacred grove well, but eventually, he became too afraid to even light the lamp in the kavu.*" This statement reveals the participant's awareness of the shift in his father's ability to fulfill these duties, possibly due to age and fear, which further emphasizes the importance of passing down these responsibilities to younger generations.

Moreover, the participant recounts various stories and narratives passed down by his ancestors, including the origins of the grove's deities and the rituals associated with them. For instance, he shares the tale of the Kumarapurath Raja's role in bringing the deities to the area and the installation of Puliyan Pulli Namboodiri following a significant event involving a jackfruit tree. These narratives are not merely tales; they serve as vital mechanisms for preserving and transmitting cultural and religious knowledge across generations. The participant's extensive knowledge of the sacred grove and its maintenance demonstrates the effectiveness of this oral tradition in keeping the family's heritage alive.

The participant's devotion to specific rituals and beliefs further underscores the transmission of cultural norms and religious practices within the family. His adherence to practices such as lighting the lamp daily, abstaining from non-vegetarian food on certain days, and prohibiting women from entering the sacred grove during both menstrual and non-menstrual days reflects a deep respect for the inherited customs. These practices are not only expressions of personal faith but also serve as daily reminders of the family's cultural and religious identity. The participant's statement, "*If we make any break in the offerings, it will show through signs,*" reflects a profound belief in the consequences of neglecting these inherited practices. This

belief system reinforces the importance of maintaining these traditions and the perceived spiritual ramifications of failing to do so.

#### 4.3.1.2. Cultural Identity and Belonging

The sacred grove serves as a symbol of cultural identity and belonging on the significance of sacred sites in reinforcing cultural and community ties for both group of families, Panan family and Panickar family and the surrounding community. It represents their connection to their ancestral traditions and religious practices.

The sacred grove associated with the Panan family is described as a *Kudumbha Shetram* (family temple), highlighting its role as a central place for both family worship and community rituals. This designation underscores the grove's importance not only as a religious site but also as a symbol of cultural and familial identity. The participant's statement, "*This Kavu is our family temple, or Kudumbha Shetram, where Devi has been worshipped for 200 years*" reflects the findings of Ormsby (2013), who analyzed the cultural significance of sacred groves in Meghalaya and Karnataka, highlighting their role in reinforcing community bonds and cultural continuity.

The participant's account of relocating the deities due to economic difficulties illustrates the family's unwavering commitment to preserving their cultural heritage, despite facing financial hardships. He recounts, early these deities were placed in another place in this panchayat. Due to debt, our family had to leave our homeland, so we brought the deities to this new place. This narrative demonstrates the resilience of the Panan family in maintaining their religious traditions; even when economic constraints forced them to sell their property to a Christian family, they remained dedicated to protecting their sacred practices. When the new owner expressed a desire to remove the sacred grove, the participant took decisive action to safeguard the deities by relocating them to their present location. This move reflects the family's strong determination to preserve their religious heritage against all odds.

Additionally, the sacred grove serves as a venue for various community rituals, such as *Ezhunullipp* and *Nandunippattu*, which further illustrates its role in fostering a sense of belonging and collective identity among the local community. The participant describes these rituals as "grand events, involving the local community," highlighting the grove's function as a space for communal gatherings and cultural expression. This aspect of the grove reinforces its

significance not just as a religious site, but also as a focal point for community cohesion and cultural continuity within the Panan family and their surrounding community.

The sacred grove and its associated rituals are integral to the Panickar family's cultural identity. Case 2 notes, "*We are the only Panickar family in Madakkathara, specifically in our area at Aalu Junction,*" highlighting their unique position in maintaining these cultural and spiritual traditions. This connection to their heritage is further emphasized by the family's continued stewardship of the grove, despite the challenges they face.

The participant's testimony underscores the family's role as custodians of the sacred grove and their broader social and spiritual responsibilities. The family's involvement in rituals, such as the annual *Ayilya Pooja* conducted by Vasudhevan Namboodiri, and the presence of the *Kalari* (training ground) adjacent to the grove, intertwine their identity with the martial and spiritual traditions.

The statement by case 2, "*In any native place, a Panickar must be present or Desath Oru Panickar Venam,*" emphasizes the perceived necessity of the Panickar presence in the community's religious and cultural life.

The installation of unique deities like Puliyan Pulli Namboodiri and the performance of distinctive rituals such as the *Kuruthi* (a ritual involving the sacrifice of a cock) further highlight the family's commitment to preserving their cultural and religious uniqueness. The participant's emotional recounting of these rituals and the associated stories reflects a deep sense of belonging and identity tied to these practices.

#### 4.3.1.3. Emotional and Psychological Well-Being

The sacred grove and its associated rituals also play a significant role in the emotional and psychological well-being for both families.

The case 1 Panan family shares his experience as a *Velichappadu* (oracle), where he performs *Thullal* (a ritualistic dance) believed to manifest Devi's presence.

He states, "During the time of *Kuruthi*, the *Velichappadu* feels a spark in their body, and it is believed that Devi presents herself in front of the people as a person as tell about insights and

concerns of *others*." This indicates the emotional and spiritual significance of the rituals, providing guidance and support to the community.

The account of the nearby deteriorated *Sarpa Kavu* (sacred grove dedicated to Naga Rajavu) highlights the emotional consequences of neglecting sacred duties. The case of the deteriorated *Sarpa Kavu* (sacred grove dedicated to Naga Rajavu) illustrates the negative impact of neglecting rituals. The participant also mentions that misusing funds and neglecting rituals led to a *Dhosham* (curse) and subsequent misfortunes.

The participant's decision to maintain daily pooja following a nightmare illustrates the emotional weight of these duties. He notes, "*I started performing daily pooja after a nightmare where Devi came to me and said she needed Nithyapooja (daily pooja)*." This reflects the psychological influence of religious experiences on the participant's actions and sense of duty.

The case 2's narrative reveals the impact of cultural and religious responsibilities on the family's emotional health. Case 2 visibly affected through emotions, when recounting stories related to the sacred grove and its rituals. His tears while discussing the broken sculpture of Ganapati and the subsequent actions of his brother Norman illustrate the deep emotional connection, that he and his family have with the grove and its traditions.

Case 2 says, "*It was broken by Norman, my brother, out of anger because he hadn't been married,*" showing how personal emotions and family dynamics are intertwined with the sacred space. The cessation of certain rituals following the deaths of his parents and the mental health issues that arose among his siblings suggest a psychological toll associated with the disruption of traditional practices.

Case 2 reflects, "*After our parents passed away, we were deeply affected mentally, and both my elder brother and sister developed mental issues.*" This indicates the potential impact of spiritual neglect and the importance of ritual continuity for the family's mental well-being.

The participant's vivid dream involving Saraswathi Devi and his interpretation of it as a sign from the goddess underscores the psychological significance of spiritual experiences in his life. This dream and the subsequent emotional response demonstrate the interplay between spirituality and psychological well-being, as the participant feels a strong sense of duty to

perform daily poojas, believing that these actions are crucial for maintaining spiritual harmony and personal peace.

Case 2 participant mentions, "*Even though we don't perform all the rituals now, I still feel the presence of the deities. I believe they show us signs when something needs to be done or when an offering has been missed.*" This illustrates how spiritual beliefs help the participant cope with the loss of traditional practices by relying on the guidance of the deities. It shows a psychological resilience where, despite changes, the participant finds comfort and direction in spiritual signs.

The participant's effort to continue some rituals, like the *Kalagam* performed by his younger brother Norman, despite the challenges, reflects an ongoing process of adapting to change. "*Norman still performs the Kalagam occasionally. It's our way of trying to keep the traditions alive, even if we can't do everything as before.*" This shows a determination to preserve what they can and maintenance of the rituals in sacred grove

He believed that his birth is also related to the past event happened in their home. Death of a girl who is willing to do all the rituals in their grove, he is believing that he born as that girl. Emotional attachment leads to the acceptance of every situation in a positive way which related to sacred grove.

In summary, the Panan and Panickar families highlight the importance of intergenerational knowledge in managing sacred groves. The Panan family's commitment to rituals and involving younger generations, alongside the Panickar family's transmission of religious duties, underscores the value of maintaining traditions despite challenges. Sacred groves are crucial for cultural and communal identity. The Panan family's grove serves as a family temple for worship and rituals, while the Panickar family's grove supports cultural and spiritual practices through events like *Ayilya Pooja*. These groves bridge past and present, fostering cultural continuity and community cohesion. The emotional and psychological significance of rituals is evident in both families. For the Panan family, rituals provide essential spiritual support, with neglect leading to misfortunes, while the Panickar family's continued practices despite disruptions show deep emotional attachment. Preserving these rituals is vital for cultural heritage and emotional well-being.

### 4.3.2. Economic Context

The second category of research focuses on the economic context of the management and maintenance of the sacred grove by two different caste group of families or *Koottukudumbam*. This includes Economic Challenges in Ritual Maintenance and Balancing Heritage and Economic Hardship

#### 4.3.2.1. Economic Challenges in Ritual Maintenance

In case 1 The economic difficulties faced by the family in preserving their sacred grove are evident in several aspects of the participant's testimony.

The participant discusses the significant financial burden associated with maintaining the sacred grove and performing the required rituals. Over time, the rising costs of materials for pooja, labor charges for art forms, and the expenses involved in hosting annual ceremonies like *Ezhunullipp* have made it challenging for the family to uphold their traditional practices.

The participant states, "*40 years ago, managing the sacred grove was difficult due to the rising costs of materials needed for pooja and rituals, as well as increased labor charges for art forms and programs.*" This highlights how economic constraints have directly impacted the family's ability to continue their ritual practices. This is similar to the findings by Kandari et al. (2014), who discuss how the financial burden of maintaining sacred groves affects tribal communities' ability to perform rituals, often leading to alterations in traditional practices (Kandari et al., 2014).

Due to financial constraints, the family made adaptations to traditional rituals, such as opting for a *Palkindi* instead of an elephant during the *Ezhunullipp* procession. This decision was influenced by an elder's advice and the economic infeasibility of maintaining an elephant procession annually.

The participant recounts, "*Once we decided to bring an elephant for this Ezhunullipp, offered by a nearby temple, but an elder in our family advised against it. He said that if Devi gets on the elephant, we must continue this every year; otherwise, Devi will not come down to our grove.*" This testimony illustrates how economic challenges necessitate adjustments to ritual practices while still attempting to maintain their integrity. The adaptations made, such as replacing elephants with *Palkindi* due to financial constraints, resonate with findings by

Murugan et al. (2008), who note that economic hardships often lead to modifications in ritual practices to make them more financially viable.

Initially, the participant bore the financial burden of maintaining the sacred grove himself. Over time, recognizing the unsustainable nature of this approach, he sought financial support from family relatives and the local community to ensure the continuation of rituals. This aligns with findings by Ballullaya et al. (2019), who emphasize the importance of community involvement in the conservation of sacred groves in South India (Ballullaya et al., 2019). This illustrates that community participation is a critical factor in overcoming economic challenges in both regions.

He remarks, "*Despite facing some resistance from the community, who questioned why they should contribute to the family's sacred grove, the participant emphasized the importance of collective participation in the ceremonies and Annadhanam (food offering).*" This demonstrates the critical role of community involvement in alleviating the economic pressures of maintaining the sacred grove.

#### 4.3.2.2. Balancing Heritage and Economic Hardship

While sacred groves are integral to cultural and religious practices, the economic burden they represent is tangible in this case study. The participant's experiences highlight the difficulties in balancing economic realities with cultural preservation.

The participant recounts how economic difficulties, specifically debt, led to the sale of their ancestral land and the subsequent relocation of the sacred grove to their current place. This move was not just a physical relocation but also a significant cultural and emotional shift for the family.

The participant shared, "*Due to debt, our family had to leave our homeland, so we brought the deities to this new place.*" This statement underscores how economic hardships can force families to make difficult decisions that impact their cultural and religious heritage.

The participant also describes a nearby deteriorated *Sarpa Kavu* (Sacred Grove) dedicated to Naga Rajavu. Economic mismanagement and the misuse of funds meant for the grove's upkeep led to its decline. The family's diversion of these funds for household needs and subsequent abandonment of the sacred grove resulted in its neglect.

He noted, "*The family, however, misused the funds meant for the grove's upkeep, diverting them to household needs. Additionally, one of the sons in the family began stealing utensils from the temple and drinking alcohol.*" This example illustrates how economic mismanagement can lead to the deterioration of sacred groves and the erosion of cultural practices. The decline of a sacred grove due to economic mismanagement and the diversion of funds for household needs reflects the findings by Prasad et al. (2015), who note that misuse of funds and economic mismanagement are critical factors contributing to the neglect of sacred groves

Despite the financial challenges, the participant expresses a deep commitment to maintaining the sacred grove, indicating that the family does not perceive it solely as an economic burden. Instead, they view the grove as an essential part of their cultural and religious identity, worth the economic sacrifices required. The participant shared, "I believe that if we continue to do this for the next generation, they will take it forward. The community is very cooperative, and they actively participate in the programs and rituals, ensuring that our sacred grove remains a vital part of our cultural heritage." This sentiment reflects the complex relationship between economic realities and cultural values, where the sacred grove is seen as both a financial challenge and a cherished tradition.

The economic challenges faced by the Panickar family or case 2 in maintaining the sacred grove are deeply intertwined with their cultural and religious responsibilities. The participant's testimony highlights the economic constraints that have limited the family's ability to perform regular rituals. Initially, the family intended to conduct monthly poojas for the deities in the grove. However, financial difficulties have restricted them to conducting the Ayilya Pooja only once a year during the Malayalam month of Kanni.

The participant stated, "*While the family originally intended to perform monthly poojas, economic constraints have limited them to conducting this ritual once a year.*" This quote underscores the direct impact of financial limitations on the frequency of ritual maintenance, indicating that economic hardships significantly hinder the family's capacity to uphold their religious duties consistently.

Additionally, the family's struggle to maintain the grove is further evidenced by the sale of valuable sandalwood trees. The participant mentioned, "*Due to economic challenges, the participant's family had to sell two of the sandalwood trees.*" This action reflects the financial pressures the family faces, compelling them to sell assets that are not only valuable but also



have cultural and ecological significance within the sacred grove. The sale of these trees demonstrates the tangible effects of economic hardship on the conservation and ritual practices associated with sacred groves. The sale of sandalwood trees from the sacred grove due to financial needs mirrors the findings by Vipat and Bharucha (2014), who discuss how economic pressures often compel families to sell valuable resources from sacred groves, compromising their ecological and cultural integrity

The participant's narrative reveals that the sacred grove is perceived as a financial liability due to the costs associated with its upkeep and the rituals that need to be performed.

The presence of multiple deities in the grove requires specific offerings and rituals, each with associated costs. The participant detailed various rituals, such as the kalam and Palmatt, which involve intricate preparations and offerings of items like rice flour, turmeric powder, camphor, and even the sacrifice of a cock. These rituals, while culturally significant, are financially burdensome.

The participant recounted an incident where economic pressures and personal frustrations led to the damage of sacred sculptures. "*Norman, my brother, out of anger because he hadn't been married, broke two hands of the Ganapati sculpture.*" This quote illustrates the intertwining of economic burdens with personal and familial tensions, reflecting how financial difficulties can exacerbate stress and lead to actions that further compromise the sanctity and maintenance of the sacred grove.

Often case 2 finds an economic burden in the need for divine consultation through astrology, which is often sought when making decisions about the grove's management. The participant shared, "The family consults an astrologer for Ashttamangalyam, a traditional ritual to seek divine guidance." The cost of such consultations adds to the financial strain, making the sacred grove not only a cultural responsibility but also an economic one.

Overall, economic challenges significantly impact the maintenance and rituals associated with sacred groves, as demonstrated by the and *Panickar* families. In the Panan case, rising costs of materials and labor for rituals have necessitated adaptations, such as replacing elephants with *Palkindi* in processions. Financial constraints also forced the family to relocate their sacred grove and seek community support to continue traditions *Panan*, highlighting the strain on both cultural practices and family finances.

Similarly, the Panickar family's economic difficulties have led to a reduction in ritual frequency and the sale of valuable assets like sandalwood trees. The financial pressures are further compounded by the costs of maintaining rituals and seeking astrological consultations. These economic burdens not only challenge the family's ability to uphold religious practices but also lead to tensions and compromises in the grove's upkeep.

In both sacred grove through conducting rituals and ceremonies, there is an economic benefit for the society through every time it helps for the performer through wage, different people and involve in various rituals in sacred grove including drawing of *kalam*, event management, *Poojari* and people using instruments. Through maintaining sacred grove, the society also get benefited in economic means and underscore the complex interplay between economic hardship and cultural preservation. Despite financial pressures, the sacred groves remain vital to the families' cultural and religious identities, revealing the intricate balance between managing economic realities and sustaining cherished traditions.

### **4.3.3. Religious Context**

The third category of research focuses on the economic context of the management and maintenance of the sacred grove by two different caste group of families or *Koottukudumbam*. This includes Religious practices and religious devotion, Devine retribution and protection Symbolism and sacred groves.

#### **4.3.3.1. Religious Practices and Religious Devotion**

The sacred grove managed by the Panan family case 1, identified as a *Kudumbha Shetram* (family temple), is central to their religious life and practices. The grove is not just a place of worship but a symbol of continuity and devotion, reflecting a deep connection with the deities worshipped there. The participant's testimony reveals a profound commitment to maintaining these practices, despite economic hardships and generational shifts.

The participant explains his role in performing daily morning pooja after experiencing a nightmare in which Devi requested a *Nithyapooja* (daily ritual). Murugan et al. (2008) and Acharya and Ormsby (2017) discuss the role of sacred groves as centers of religious life, where practices like daily poojas and community rituals strengthen social bonds and cultural identity. This personal encounter with the deity emphasizes the importance of regular worship and the

participant's dedication to fulfilling these spiritual duties: *"I started performing daily pooja after a nightmare where Devi came to me and said she needed Nithyapooja (Daily Pooja). I understood the importance of this ritual and have continued it without fail."*

The grove hosts significant annual rituals such as *Ezhunullipp*, *Nandunippattu*, and *Kalamezhuth*, which involve the local community. These ceremonies reflect the collective religious devotion and the role of the sacred grove in fostering communal bonds: *"The community is very cooperative, and they actively participate in the programs and rituals, ensuring that our sacred grove remains a vital part of our cultural heritage."*

The case of the Panickar family's sacred grove highlights deep-rooted religious practices and devotion that are integral to their cultural identity. The maintenance of the grove, which has been in the family for approximately 500 years, showcases a continuity of religious devotion across generations. The participant's testimonies reveal that various rituals and ceremonies, such as the annual Ayilya Pooja and the performance of the Ganapati Homam, are crucial aspects of their devotion. The participant's statement, *"My father maintained the sacred grove well, but eventually, he became too afraid to even light the lamp in the Kavu,"* reflects a shift in ritual practices due to personal fears or possibly spiritual reverence, which still signifies devotion. Despite economic challenges and the loss of family members, the participant continues to light the lamp in the grove, demonstrating enduring commitment to religious traditions.

The narrative also illustrates the family's adherence to traditional customs, such as the prohibition against women entering the Naga deities' area, except during the Ayilyam star in the Malayalam month of Kanni and abstaining from non-vegetarian food on certain days. These practices underscore the family's strict observance of religious norms, which they believe maintain the sanctity of the sacred space

#### 4.3.3.2. Divine Retribution and Protection

The case 1 highlights the sacred grove's role as a spiritual safeguard for the family and community. The deities worshipped in the grove are believed to have protective powers, and deviations from established rituals or disrespect towards the sacred space are considered to bring divine displeasure or misfortune.

The narrative includes instances where the participant experiences direct communication with the deity, such as during the ritual dance of *Thullal*. These moments are perceived as divine manifestations, reinforcing the belief in the deities' active role in protecting and guiding the family:

*"During the time of Kuruthi, the Velichappadu feels a spark in their body, and it is believed that Devi presents herself in front of the people as a person."*

The participant also describes a nearby deteriorated *Sarpa kavu* (sacred grove dedicated to Naga Rajavu), where mismanagement and disrespect towards the deities led to perceived curses and misfortunes. This account underscores the belief in divine retribution for neglecting religious duties and misusing sacred funds: *"The family, however, misused the funds meant for the grove's upkeep, diverting them to household needs... His actions are believed to have brought about a curse (Dhosham), leading to his bedridden condition."*

The case 2 accounts indicate a belief in divine retribution and protection, which are central themes in the religious context of sacred groves. For example, the participant describes an incident where his brother Norman's neck became stiff after neglecting to perform the *Kalasam* ritual. He states, *"I felt in my heart that it might be because he didn't do the Kalasam. So I decided to offer some money to Puthiyampulli Namboodiri, and immediately, his neck straightened."* This incident suggests a belief that the deities actively intervene in the lives of the family members, enforcing ritual observance through signs or retributive actions.

Additionally, the story of the installation of Puliyan Pulli Namboodiri through a divine oracle further emphasizes the theme of divine retribution and protection. The breaking of the jackfruit tree and the subsequent discovery of two stones, accompanied by an oracle questioning why the deities were not brought to the new place, suggests that neglecting sacred duties can result in supernatural occurrences, perceived as divine warnings.

The participant's vivid nightmare involving Saraswathi Devi is another testament to the belief in divine retribution and guidance. The dream, which the participant interprets as a sign from the goddess, reinforces his obligation to perform regular *pooja* and maintain the grove. This narrative highlights the perceived presence of divine forces that guide and protect the family, ensuring adherence to religious obligations.

#### 4.3.3.3. Symbolism and Sacred Groves

The sacred grove, or *Kavu*, itself is a powerful symbol within the religious context of the Panan family or case 1, embodying both spiritual and cultural significance. It represents a physical space where the divine intersects with the everyday, providing a sanctuary for religious expression and community identity.

The installation of deities within the sacred grove, such as Chirakkal Amma and Nana Durga, reflects specific symbolic meanings and rituals. The participant describes the need to keep Nana Durga perpetually wet, symbolizing purity and the continuous presence of the divine: *"The sacred grove's main deity, Chirakkal Amma, is identified as Nana Durga, a deity that must always be kept wet... a small hole was provided on the roof to allow continuous wetness on her head."*

Objects used in rituals, like the *Palkindi* in place of an elephant, serve as symbolic representations of the deities and the family's devotion. Gadgil and Vartak (1976) and Sreelekha and Joy (2021), who explore how sacred groves serve as physical manifestations of cultural and spiritual beliefs. These substitutions due to economic constraints also illustrate the adaptability of religious practices while preserving their symbolic essence: *"The Palkindi contains offerings such as milk and is considered a sacred embodiment of the deity, typically used during the annual rituals associated with the main deity, Chirakkal Amma, in the sacred grove."*

The participant discusses various rules and restrictions within the sacred grove, particularly those related to gender and ritual purity. These practices underscore the sacredness of the grove and its role as a protected space where the divine is both revered and feared: *"He explained that women are allowed to enter the sacred grove for cleaning and worship, but they must maintain a distance during menstruation, referred to as Aitham or Sudhakedu."*

The Panan family's sacred grove case study provides a comprehensive insight into the religious context surrounding sacred groves in Kerala. Through the participant's testimonies, it becomes evident that these spaces are not merely physical locations but are imbued with deep religious significance and symbolic meaning.

Symbolism plays a significant role in the religious context of the *Panickar* family's sacred grove. The grove itself is a symbol of cultural and spiritual heritage, representing a space where various deities are believed to reside. The presence of multiple deities, such as Naga Rajavu, *Nagayakshi Amma*, and *Puliyana Pulli Namboodiri*, each with distinct rituals and offerings, reflects the grove's rich symbolic significance.

The absence of physical idols for some deities, such as the Naga deity, whose presence is symbolized through *Sankalpam* (imagination or belief), further underscores the symbolic nature of the sacred grove. This symbolic representation aligns with traditional Hindu beliefs, where the divine is often conceptualized in non-material forms.

The participant's reference to various plants within the grove, such as the *Koovam* tree, which does not bear fruit to prevent causing pain to the deities, and the *Sarpagandhi* plant, resembling the Naga Devata, highlights the symbolic relationship between nature and divinity. These plants are not only physical entities but also represent the deities' presence and their protective influence over the sacred space.

Overall, the cases of the *Panan* and *Panickar* families highlight the profound religious and symbolic significance of sacred groves. For the *Panan* family, the grove is central to daily and annual rituals, symbolizing a deep connection with the divine despite economic and generational challenges. Practices like keeping *Nana Durga* perpetually wet and using *Palkindi* instead of an elephant reflect the adaptability of rituals. The *Panickar* family's grove represents enduring cultural and spiritual heritage, with deities symbolized through practices like *Sankalpam* for the Naga deity. Their experience with divine retribution and symbolic plants underscores the integration of nature, divinity, and ritual. Both cases demonstrate that sacred groves are vital for religious devotion and cultural continuity, serving as sanctuaries where divine presence and spiritual practices are preserved and revered.

#### **4.3.4. Ecological Context**

The last category of research focuses on the economic context of the management and maintenance of the sacred grove by two different caste group of families or *Koottukudumbam*. This includes Conservation Practices in Sacred Groves and Human Impact on Sacred Grove Ecosystems.

#### 4.3.4.1. Conservation Practices in Sacred Groves

Case 1 emphasized the importance of rituals and ceremonies, which inherently include practices that contribute to the conservation of the grove. He stated, “*I started performing daily pooja after a nightmare where Devi came to me and said she needed Nithyapooja (daily pooja). I understood the importance of this ritual and have continued it without fail.*” This commitment to daily rituals ensures that the sacred grove remains well-maintained, clean, and protected from neglect.

The construction of a roof with a small hole to keep the main deity, Chirakkal Amma, wet reflects an adaptation that aligns with both religious beliefs and the ecological need to maintain the natural state of the grove.

The participant's recount of destroying flora due to fear of animals invading the home shows a conflict between daily life and ecological preservation. Despite this, the overall effort to maintain the grove, driven by religious obligations, aligns with conservation practices even if they are not explicitly intended for ecological protection.

The sacred grove managed by the Panickar family or case 2 is a rich repository of cultural and ecological traditions that have been maintained for approximately 500 years. The participant's narrative reflects a deep understanding and commitment to conservation practices rooted in both spiritual beliefs and community responsibilities.

The Panickar family has traditionally conducted various rituals such as *Ayilya Pooja*, *Ganapati Homam*, and other specific offerings for deities like Puliyan Pulli Namboodiri and Naga Rajavu. These rituals often involve the use of natural elements like plants, flowers, and specific foods, integrating ecological conservation with spiritual practices.

The participant highlights, “During the *Ayilya Pooja*, *Palum*, *Noorum* (milk and turmeric) were offered on every *Ayilyam* star of the Malayalam month.” This practice not only reinforces the religious significance of the grove but also ensures regular interaction with the natural environment, fostering a sense of stewardship and respect for the flora.

The grove's management also includes specific prohibitions that indirectly aid in conservation. For example, the participant mentions that people are generally not allowed to enter the area

dedicated to Naga deities, except during a specific ritual and women are not allowed during menstrual age. This restriction reduces human interference, potentially allowing for undisturbed ecological growth within the grove.

The participant's detailed account of the plant species within the grove demonstrates an understanding of biodiversity and its cultural importance. The presence of trees like the eucalyptus-like *chela*, sandalwood, and medicinal plants such as *Karlakam* and *Aadalodakam* signifies the grove's role in conserving local flora. The participant notes, "Among the trees, he mentions *chela*, a pure white stem and green leaves, resembling a eucalyptus tree." This not only reflects the ecological diversity within the grove but also underscores the importance of these plants in religious and traditional healing practices.

The narrative reveals that spiritual beliefs and practices significantly influence conservation. The participant shares a belief that the deities influence the ecological state of the grove, saying, "*The deities won't allow the trees in the sacred grove to bear fruit. It's all part of the religious miracles we witness here.*" This perception suggests a reciprocal relationship between spiritual practices and environmental management, where ecological phenomena are seen as divine signs guiding the community's actions.

#### 4.3.4.2. Human Impact on Sacred Grove Ecosystems

Human activities, whether intentional or unintentional, significantly impact sacred grove ecosystems. The case study illustrates both positive and negative human impacts on the sacred grove managed by the Panan family.

The participant described the deterioration of a nearby *Sarpa Kavu* due to misuse of funds and neglect. He noted, "*The family misused the funds meant for the grove's upkeep, diverting them to household needs... The family eventually abandoned their home, and as a result, the sacred grove fell into disrepair.*" This account underscores how economic hardship and lack of proper management can lead to the degradation of sacred groves, resulting in ecological loss.

The participant admitted to destroying certain flora to prevent animals from invading the household. This action directly impacts the biodiversity of the grove, reducing the variety of plant species and potentially disrupting the habitat for local wildlife.



Case 1 testimonies reflect a dual role in both conserving and impacting the sacred grove's ecosystem. On one hand, religious practices foster conservation through regular maintenance, community involvement, and reverence for the grove's sanctity. On the other hand, human actions driven by economic necessity, fear, and neglect can lead to the deterioration of these sacred spaces.

While the sacred grove is a site of ecological conservation, human activities and decisions have also impacted its ecosystem, reflecting both the challenges and the dynamics of maintaining sacred spaces in contemporary contexts.

Economic constraints have influenced the frequency and scale of rituals performed in the grove managed by case 2 Panickar family, which in turn affects its ecological upkeep. The participant mentions, "Economic constraints have limited them to conducting this ritual once a year," highlighting that financial challenges can lead to a decrease in ritual activities that traditionally contributed to ecological management. This ritual typically involves offering natural substances like milk, turmeric (*Noorum*), and other organic materials, which are believed to have ecological benefits. Regular offerings of these materials could enrich the soil with nutrients and promote the growth of plant species that are important for maintaining the biodiversity and ecological balance of the grove.

The need to sell sandalwood trees due to economic hardships indicates a direct human impact on the grove's biodiversity. The participant recounts, "Due to economic challenges, the participant's family had to sell two of the sandalwood trees." This action, while economically necessary, contributes to the degradation of the grove's ecological diversity and the loss of valuable plant species.

Changes in cultural practices and the abandonment of traditional rituals have also impacted the grove's ecology.

The participant describes how rituals involving offerings like *Palum Noorum* have ceased following the passing of his parents, stating, "These rituals have since ceased." The discontinuation of these practices may lead to reduced human interaction with the grove, potentially affecting its ecological dynamics and the maintenance of sacred plant species.

The participant's awareness of government subsidies for sacred grove conservation, provided by the Jaiva Vaividhya Board, reflects an understanding of external support mechanisms for ecological preservation. However, he laments the lack of widespread knowledge and utilization of these resources, stating, "Despite asking many people, nobody knows about it," suggesting a gap in community engagement and support that could enhance conservation efforts of case2. Overall, the ecological context of sacred groves, as illustrated by the Panan and Panickar family cases, underscores the intricate relationship between religious practices and environmental conservation.

In both cases, sacred groves serve as focal points for conservation efforts, driven by spiritual beliefs and ritual practices. The Panan family's daily pooja and the maintenance of Chirakkal Amma's deity with a wet roof reflect an integration of religious devotion and ecological stewardship, even as conflicts between daily life and conservation arise. Similarly, the Panickar family's rituals, such as Ayilya Pooja and the use of natural offerings, highlight a deep-rooted tradition of ecological respect, though economic constraints have limited the frequency of these practices and led to the sale of valuable plant species.

Human impacts, both positive and negative, are evident in the management of these sacred groves. Economic hardships and mismanagement have led to the deterioration of some sacred spaces, while conservation practices rooted in religious traditions foster ongoing ecological maintenance. The dual role of human activity encompassing both reverent care and inadvertent harm reflects the complexities of preserving sacred groves in contemporary contexts.

#### **4.4. DISCUSSION**

Sacred groves are found all over the world and help protect a wide variety of plants, animals, and microorganisms. They also take care of the soil and water in their area. People have given these places a sense of sacredness by associating them with gods, which helps preserve both living things and natural resources. Sacred groves are known for their rich biodiversity because people often limit entry, restrict resource use, and keep the areas undisturbed. They also protect many threatened species, like those that are endangered or rare, making them important spots for local biodiversity. The primary objective of this study was to explore how socio-cultural aspects, such as Hindu beliefs, gender dynamics, caste structures, and historical connections of families and communities, impact the preservation, management, and rituals associated with sacred groves. This research specifically focused on understanding the socio-cultural

conditions of sacred groves and how these elements influence ecological conservation and economic sustainability. The study found that sacred groves in Kerala are deeply intertwined with Hindu religious beliefs and practices, which significantly influence their management and preservation.

Sacred groves are perceived as abodes of deities and spiritual entities, and this belief fosters a strong sense of sanctity and reverence towards them. These religious practices, including festivals, folklore, and folk art, often have caste associations, with different communities playing distinct roles in the upkeep and ritualistic practices of the groves. This study explores the various roles that gender, caste, and economics play in the rituals and management of sacred groves, highlighting their importance in ecological conservation and socio-cultural practices. It finds that gender dynamics are crucial in shaping who can perform certain rituals in sacred groves, with practices varying widely across different communities. Some groves have no gender-based restrictions, while others have specific deities worshipped by genders. The research also emphasizes the ecological significance of sacred groves, noting that the belief in the divine qualities of certain trees and plants leads to protective attitudes and sustainable practices. Sacred groves act as reservoirs of biodiversity, with cultural taboos and restrictions helping to prevent over-exploitation. Economically, sacred groves provide both opportunities and challenges. They offer livelihood opportunities for those involved in rituals and maintenance but can also be financially burdensome for the families or communities responsible. The study suggests that conservation strategies for sacred groves in Kerala should integrate ecological and socio-cultural goals, recognizing them as both ecological and socio-cultural assets. Strategies should be inclusive, considering local beliefs, traditions, and socio-economic conditions to create culturally sensitive management practices.

Despite its comprehensive approach, this study has several limitations. The conclusions may be less generalizable and subject to bias if they primarily rely on qualitative data, such as case studies and interviews. Furthermore, because the research was conducted in the unique sociocultural setting of Kerala, the results could not be entirely applicable to sacred groves in other areas with distinct ecological or cultural dynamics. Future studies could benefit from a more extensive quantitative assessment of biodiversity across different types of sacred groves and regions.

In conclusion, this study highlights the importance of sacred groves in Kerala and its socio-cultural, economic, and ecological implications. By fostering a deeper understanding of the

complex interactions between people, culture, and the environment, we can develop more effective strategies for the conservation and sustainable management of sacred groves, ensuring their continued role in preserving both biodiversity and cultural heritage.

## **CHAPTER 5**

### **FINDINGS AND CONCLUSION**

#### **5.1. INTRODUCTION**

This chapter deals with the findings of this research highlights how socio-cultural factors, such as Hindu beliefs, gender roles, caste dynamics, and historical family ties, shape the preservation, management, and rituals of sacred groves in Kerala. These groves serve as both ecological sanctuaries and cultural heritage sites, deeply rooted in local religious and social practices. The study examines how traditional beliefs and social structures contribute to their conservation and addresses the economic challenges and opportunities involved in maintaining these groves.

#### **5.2. MAJOR FINDINGS**

##### **5.2.1. Socio-Cultural Context**

The primary objective of this qualitative study was to explore how socio-cultural aspects such as Hindu beliefs, gender, caste dynamics, and historical connections of families and communities impact the preservation, management, and rituals associated with sacred groves. The study finds that these socio-cultural aspects play a significant role in the management and maintenance of sacred groves. Hindu beliefs and religious practices are central to the existence and management of sacred groves. These beliefs often regard sacred groves as abodes of deities and spiritual entities, imbuing them with a sense of sanctity and reverence. The sanctity attributed to these groves dictates the rituals performed, the preservation efforts, and the community's relationship with the natural environment. Sacred groves are often protected due to the belief that they are home to deities, spirits, or ancestors. The fear of divine retribution or misfortune if the grove is disturbed plays a critical role in conserving these sites.

Traditional gender norms and the roles assigned to men and women in religious practices shape who can perform certain rituals and how these rituals are conducted. This is also different according to the community that manages the sacred grove; for example, there are no restrictions on who can perform rituals based on gender, and certain deities are worshipped by specific genders. Different castes have varying levels of access to and responsibilities for the groves, influenced by historical roles and social stratification within Hindu society. In many

sacred groves, rituals, and management are often the responsibility of specific castes. Caste dynamics can also lead to the exclusion of certain groups from participating in rituals or decision-making processes related to grove management.

These connections often span generations, with stories, traditions, and responsibilities being passed down, creating a sense of continuity and obligation towards the grove. The historical narratives and traditions associated with a grove help preserve its cultural significance. The case studies highlight how rituals and management practices have evolved but remain deeply connected to the community's history and identity. This continuity ensures that the sacred grove is not just a natural site but a living repository of cultural heritage. Beliefs in divine retribution and supernatural phenomena associated with sacred groves further reinforce their conservation and management through fear of consequences. Findings from the interpretation of the data revealed how sacred groves managed by two different Hindu caste groups or families, or *Koottukudumbam*, and socio-cultural aspects play a significant role in managing and maintaining sacred groves in Kerala.

### 5.2.2. Ecological Context

The next objective is to understand how the beliefs and cultural practices associated with sacred groves influence phyto-diversity and contribute to ecological conservation. Sacred groves are abodes of deities, and this spiritual significance leads to a protective approach toward the flora within these areas. For instance, the belief that certain trees and plants are sacred or possess divine qualities prevents their destruction or removal. The participant's narrative shows that these trees are preserved because of their sacred status and the belief that they are protected by the deities. Ritual practices and offerings made to the deities often include elements derived from the surrounding vegetation, which indirectly promotes the care and sustainable use of these resources. Cultural taboos and restrictions associated with the sacred groves protect them from over-exploitation.

### 5.2.3. Economic Context

The case study mentions that even when economic hardships forced some changes, such as the sale of sandalwood trees, such actions were not taken lightly. The participant mentioned that the community believes that the deities prevent certain trees from bearing fruit, reflecting a taboo against altering the natural state of the grove, which in turn contributes to conservation.

Some plants and trees are specifically planted and cared for due to their religious significance. Attention to these plants, coupled with ritualistic care, ensures their survival and propagation. This spiritual enforcement ensures that the groves remain protected and undisturbed, allowing biodiversity to flourish, and divine displeasure ensures that the grove's environment is preserved in its natural state.

Based on the data collected from the two case studies, the economic benefits and challenges of conserving sacred groves are significant and have a direct impact on sustainable management and local livelihoods. Some positive impacts of sacred groves often serve as a source of livelihood for those involved in performing rituals and maintaining the grove. Individuals like *Velichappadus* (oracles) and other ritual specialists may receive offerings or donations for their services, providing them with a means of income. The study also identified some challenges in maintaining and managing the sacred grove by the religious group. The regular performance of rituals and the upkeep of sacred groves can be financially burdensome for the families or communities responsible for these tasks. The cost of materials, offerings, and maintenance can strain limited financial resources, especially when traditional practices require frequent and elaborate ceremonies. One case identified awareness about the subsidies for the conservation of sacred groves. By analyzing the economic implications, it is found that society and the management and maintenance of sacred groves provide economic support to each other.

#### 5.2.4. Socio-Cultural Beliefs and Sacred Grove Conservation

The final objective focuses on how the intersections of socio-cultural beliefs and practices enhance public awareness and contribute to the conservation and sustainable management of sacred groves. Socio-cultural taboos and restrictions surrounding sacred groves often serve as powerful conservation tools. These taboos might include prohibitions against cutting trees, hunting, or even entering certain parts of the grove, all of which contribute to the protection of the ecosystem within the grove. The study finds that the shared cultural and religious practices associated with sacred groves strengthen community bonds and foster a sense of collective responsibility. When a community collectively participates in the rituals and maintenance of a grove, it builds a unified front for conservation efforts. This collective involvement ensures that the responsibility for the grove's upkeep does not fall on a single individual but is shared among the community members.

Oral traditions and stories associated with sacred groves are powerful tools for enhancing public awareness about the importance of these sites. These stories often highlight the sacredness of the groves, the presence of deities, and the consequences of not adhering to traditional practices, thereby instilling a sense of reverence and respect for the groves. Both cases revealed that cultural and religious practices in the sacred grove serve as informal educational tools for younger generations. Through participation in rituals and listening to elders' stories, young people learn about the importance of the grove, the need for its conservation, and the broader cultural and environmental values it represents. The study revealed that intersections of socio-cultural beliefs and practices significantly enhance public awareness and contribute to the conservation and sustainable management of sacred groves. By embedding conservation within cultural rituals, taboos, and collective practices, these groves are protected not only for their ecological value but also as vital cultural heritage sites. This dual significance ensures that communities remain actively engaged in the conservation of sacred groves, promoting both environmental sustainability and cultural continuity.

### **5.3. CONCLUSION**

In conclusion, sacred groves in Kerala represent a unique intersection of ecological, cultural, and socio-economic dimensions. Their conservation and management are deeply embedded in the socio-cultural fabric of the communities that steward them. By recognizing and harnessing the cultural significance of these groves, it is possible to promote both environmental sustainability and cultural continuity, ensuring that these sacred sites are preserved for future generations. This study highlights the importance of a holistic approach to conservation, one that respects and integrates the diverse cultural beliefs and practices that sustain these invaluable natural and cultural heritage sites.

This qualitative study highlights the profound impact of socio-cultural aspects such as Hindu beliefs, gender roles, caste dynamics, and historical connections on the preservation, management, and rituals of sacred groves in Kerala. Sacred groves are deeply embedded in religious and cultural practices, which shape community attitudes and actions toward these sites. Gender and caste influence who manages and participates in rituals, affecting both inclusivity and exclusivity in grove management. The study demonstrates that sacred groves contribute significantly to ecological conservation through cultural practices that promote the protection of flora and prevent over-exploitation. These practices support biodiversity and reinforce the ecological value of the groves. Economically, while sacred groves offer livelihood



opportunities for ritual specialists, the financial burden of maintaining them poses challenges. Awareness of subsidies and economic support can alleviate some of these difficulties. Finally, the study finds that socio-cultural beliefs and practices enhance public awareness and community engagement in conservation. Through oral traditions, rituals, and taboos, communities maintain a strong commitment to protecting these groves, ensuring their preservation as both ecological and cultural treasures for future generations.

## APPENDIX 1.

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## **APPENDIX 2.**

### **INTERVIEW GUIDE**

#### **MANAGING AND MAINTAINING SACRED GROVE AND IT'S SOCIO-ECONOMIC AND ECOLOGICAL IMPLICATIONS IN KERALA**

##### **Socio-Cultural and Religious Context**

1. How do you perceive the role of sacred groves in your religious and cultural practices?
2. Does your family have a specific deity associated with the sacred grove? How does this association impact your family's efforts to protect the grove?
3. Can you share any historical stories or events related to the sacred grove that have been passed down in your family?
4. How do these stories influence your family's connection to the grove and its conservation?
5. Can you describe any specific rituals or ceremonies you participate in that are connected to the sacred grove?
6. How do these beliefs influence your interactions with and attitudes toward the sacred grove?
7. Are there specific rituals or tasks in the sacred grove that are performed exclusively by men or women?
8. How do these gender-specific roles contribute to the maintenance and conservation of the grove?
9. How do different castes in your community participate in the rituals and upkeep of the sacred grove?
10. How has your family's role in maintaining the sacred grove changed over generations?
11. Are there any community-led initiatives or programs aimed at raising awareness about the importance of sacred grove conservation?
12. How do you think educating the younger generation about the cultural and ecological importance of sacred groves can be improved?
13. How has it influenced your life and beliefs?
14. Can you share any personal experiences or memories related to the sacred grove that highlight its importance to you?

15. Are there any rituals or ceremonies in the Kavu that are exclusively performed by women? By men?
16. What are the specific duties and responsibilities of different castes in relation to the sacred grove?
17. How do social dynamics and relationships between different castes influence the management and conservation of the sacred grove?
18. What traditional beliefs and myths are associated with the sacred groves in this region?
19. Is there any difference for the worshipping of the deities depending on the castes?
20. How do rituals and ceremonies conducted in sacred groves influence the local community's perception of these areas?
21. Is there any factor of fear in the nearby neighborhood?
22. What are the special rituals, when do they happen in this kavu, and what is the story behind the deity?

### **Economic Context**

23. What is the economic condition of the group of family who owns the sacred groves?
24. Do you experience any economic issues in managing the sacred groves?
25. How willing are the community members and kavu owners to participate in conservation initiatives?

### **Ecological Context**

26. Are there any specific plants or trees in the sacred grove that are considered particularly sacred or significant?
27. How do you ensure the protection and preservation of these plant species within the grove?
28. What traditional knowledge do you have about the medicinal or ecological benefits of the plants in the sacred grove?
29. What restrictions are placed on activities within sacred groves, and how are these enforced?
30. How have these restrictions evolved over time, and what factors have influenced these changes?
31. What specific plant and animal species are found exclusively in sacred groves, and how are they protected by local practices?



32. What are the traditional practices and rituals associated with the management of sacred groves in this community?
33. What modern economic pressures (e.g., urbanization, agricultural expansion, commercialization) are threatening the sacred groves?