

TRADITIONAL RELIGIOUS PRACTICES AND ENVIRONMENTAL SUSTAINABILITY: SACRED GROVES AS SANCTUARIES FOR ENDANGERED SPECIES IN IGBOLAND, NIGERIA

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Executive Summary

Igboland Nigeria's species endangerment causes ecological imbalance, biodiversity loss, and harm to the local communities that depend on these species for traditional customs and livelihoods. This paper studies how Southeast Nigeria's traditional sacred groves served as sanctum for endangered species. This paper adopted Environmental Ethics Theory to determine how sacred groves prevent extinction in the traditional environment of southeast Nigeria. The work employs ethnographic methods of observation and interview to study two communities in southeast Nigeria, focusing on traditional religious practices and their role in environmental sustainability. Specifically, it examines how sacred groves serve as sanctuaries for endangered species in the region. The research discovers that ecological deterioration, biodiversity loss, and deforestation result from southeast Nigeria's abandonment of traditional religious customs and environmental sustainability concerning sacred groves. The findings shows that reverence of sacred groves in the Traditional Religious Practices of Southeast Nigeria fosters environmental sustainability by preserving biodiversity and maintaining natural habitats, as these groves are protected from deforestation and exploitation due to their cultural and spiritual significance. This cultural practice inherently supports conservation efforts, demonstrating a sustainable model of land use and resource management rooted in indigenous traditions. The paper recommends that conserving biodiversity and shielding essential ecosystems from deforestation and degradation, upholding traditional religious practices and keeping holy groves as sanctuaries in Southeast Nigeria can support environmental sustainability. These religious and cultural customs promote reverence for the natural world, which motivates nearby people to take part in conservation and environmentally friendly agricultural initiatives.

Keywords: Environmental Sustainability, Biodiversity, Endangered Species, Sacred Groves, Ecology.

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Introduction

Khan, Khumbongmayum, & Tripathi (2008) write that, sections of virgin, very diverse forest known as sacred groves have long been guarded by the locals due to taboos and cultural and religious beliefs that the deities live there and shield the villagers from various disasters. Igboland of Nigeria has a long history of protecting forest areas for spiritual and religious purposes, known as sacred groves. For ages, local people have relied heavily on these grooves as part of their cultural and religious rituals. They are frequently guarded by stringent taboos and laws since they are traditionally believed to be the homes of deities, spirits, and ancestors. In spite of increasing deforestation and changes in land use, these limits have guaranteed the preservation of these natural areas. Thus, the sacred groves are important for preserving the region's ecological balance and biodiversity in addition to their cultural value. According to Cardelus, Scull, Baimas-George, Lowman, Eshet, (2013), sacred woods were places that the Igbo forefathers designated as holy places, places that were closely guarded by taboos, customs, and beliefs. They however wrote that sacred groves are located around the globe, not only in the Igbo community. Some of their locations include Ethiopia, Ghana, India, Ethiopia, Japan, and Morocco.

Many endangered species have found refuge in sacred groves in Southeast Nigeria. The untouched and safeguarded nature of these groves offer a refuge for flora and species that are endangered elsewhere due to human activity. These groves are home to a variety of rare and endangered plant, animal, and insect species that are not found in other areas. This is especially crucial because Nigeria is under growing pressure from urbanization, logging, and agricultural growth, all of which have significantly degraded and destroyed ecosystems. Therefore, the sacred woods serve as essential havens for the preservation of the region's biodiversity.

Both national and international environmental groups now acknowledge and promote the importance of sacred groves in conservation efforts. Given their significance as both hotspots for biodiversity and locations of cultural history, efforts have been made to preserve and document these areas. Since the preservation of sacred trees greatly depends on the ongoing respect for customs and beliefs, community involvement is essential to these activities. Through the integration of contemporary conservation methods with traditional ecological knowledge, the efficacy of these sanctuaries in safeguarding endangered species and their ecosystems in Southeast Nigeria can be improved.

Sacred groves are important locations for religious ceremonies and activities since they are frequently thought of as the homes of gods and ancestor spirits. The Igbo people consider these natural sanctuaries to be endowed with strong spiritual powers, which

makes them indispensable for carrying out rituals, sacrifices, and offerings to please the gods and ancestors. By ensuring the community's health, fertility, safety, and overall prosperity, these customs strengthen their ties to their spiritual past.

Additionally, sacred woods are essential to the survival of Igbo customs and oral histories. The transmission of cultural information from elders to new generations, as well as initiation ceremonies and festivals, frequently take place there. By offering a place for the sharing of proverbs, songs, and stories, the groves help to preserve the Igbo people's rich cultural heritage. These areas are further integrated into the socio-cultural fabric of the community by serving as venues for traditional justice administration and conflict settlement.

In terms of ecology, sacred groves help Igboland conserve its natural resources. The indigenous flora and animals are often preserved because of the respect shown for these areas, which shields the groves from exploitation and deforestation. Local community values as well as customary knowledge, abilities, and practices were acknowledged by Wild and McLeod (2008) as essential to the survival of local ecosystems, cultures, and resources. The spiritual and cultural qualities ascribed to the groves have resulted in this ecological stewardship, which illustrates a happy coexistence of the human race with the environment. The preservation of these groves is essential to maintaining biodiversity and the cultural customs that rely on these hallowed areas.

Sacred groves are essential sources of traditional medicine in Igboland, playing a crucial role in the healthcare practices of the community. Numerous herbal treatments used to heal ailments and illnesses are made from the raw materials found in these groves, which are rich in numerous plant species. The Igbo people have accumulated a wealth of information about the medicinal benefits of the plants that grow in these grooves over many years. The community is guaranteed to keep the abilities required to use their natural surroundings for health and healing through the oral traditions and apprenticeship that transmit this ethno-botanical knowledge. In this situation, traditional healers known as *Dibias* are extremely important. They are skilled in making and using herbal remedies made from the sacred groves. Frequently, the *dibias* perform ceremonies and call upon the spiritual forces thought to reside in these trees in order to improve the effectiveness of their healing practices. In Igbo culture, where physical, spiritual, and psychological well-being are intertwined, the holistic approach to health is emphasized by this spiritual side of treatment. The use of these natural treatments is indicative of a thorough knowledge of the ecosystem in the area and its medicinal possibilities.

Furthermore, the viability and well-being of the community are inextricably related to the maintenance of the sacred groves. Medicinal plants that may otherwise disappear due to deforestation and environmental degradation are guaranteed to remain available as long as these places are protected. The Igbo people protect their resources for basic healthcare as well as their cultural legacy by keeping the groves intact. By highlighting the mutually beneficial relationship between the community's health practices and their reverence for the natural world, this ecological stewardship illustrates how Igbo society is entwined with environmental and cultural protection.

In Igbo communities, sacred groves are important cultural landmarks and markers of collective identity that are ingrained in the people's social and spiritual fabric. These groves often have connections to the community's history and mythology. As such, they are valued as living archives of cultural history and communal memory in addition to being beautiful natural areas. A sense of continuity and belonging among community members is fostered by the stories, rituals, and customs associated with these groves that are passed down through the years. The sacred groves are also essential to community celebrations and rituals, which are important ways for people to express their cultural identities. These occasions, which frequently include the entire community, bring people together to pray, celebrate, and reaffirm their common ideals. For example, the people in the community may congregate in the sacred grove on festival days to carry out rituals, offer offerings, and ask the spirits or deities they believe to be present there for blessings. In addition to strengthening social ties and fostering a sense of community, these events serve to uphold the grove's position as a cultural centrepiece. Additionally, the communal duty to preserve and care for the holy groves fosters collaboration and community connection. These places have taboos and rules that are enforced by community agreement, demonstrating a common desire to protect their sacredness and ecological fulfilment. Since they understand how important it is to them to preserve a critical component of their natural and cultural heritage, community members feel a sense of pride and identity from this stewardship duty. Sacred groves represent the close ties that exist between the people, their culture, and their surroundings and serve as emblems of the community's distinctive customs and common history.

Natural holy places are of great importance to international organizations like UNESCO and others because of their distinctive cultural, spiritual, and ecological qualities. These locations are important storehouse of biodiversity and natural heritage, and they are often endowed with profound religious and cultural value for indigenous and local groups. Organizations seek to maintain the interwoven cultural and natural legacy, promote sustainable development, and increase awareness and respect for many cultural traditions across the globe by designating and safeguarding these sites. This

pledge emphasizes the overarching objective of preserving the world's cultural heritage for next generations. Ray, Chandran, & Ramachandra (2014) note this fact and write that international organizations like UNESCO and the World-Wide Fund for Nature are becoming increasingly interested in the role of these natural sacred sites. Sacred groves fall under the category of sacred natural sites (SNS), which is defined as "natural areas of special spiritual significance to peoples and communities" by the International Union for Conservation of Nature and Natural Resources (IUCN).

Biodiversity and Endangered Species in Sacred Groves

Many of the species of plants and animals found in Igboland's sacred groves have important ecological, cultural, and medical significance. One common kind of plant found in these groves is the *Milicia excelsa*, or iroko tree. Many African societies, notably the Igbo, hold the Iroko tree in high regard and at times identify it with ancestral spirits and deities. This big hardwood tree is a great source of timber because of its resilience to rot and long lifespan. But in holy groves, these trees are shielded from harm and allowed to grow to remarkable heights and ages, adding to the forest's richness. Khan, Khumbongmayum, & Tripathi (2008) noted that for human survival, ecological processes must remain in a condition of balance, which is maintained by biodiversity. Thus, the sacred groves, which are rich in species, have enormous ecological significance. They are also crucial to the preservation of the natural world's plants and animals. Furthermore, a number of endangered and unusual species can only be found in sacred woods, which may be their sole natural sanctuary.

The African mahogany, or *Khaya senegalensis*, is another important plant species that is frequently found in Igbo sacred forests. The therapeutic benefits of this tree are highly valued in addition to its quality timber. Traditional medical practices employ various African mahogany components to cure illnesses like fever, gastrointestinal problems, and skin disorders. Future generations will be able to access these valuable natural resources thanks to the preservation of this tree in holy groves. The African mahogany also contributes to the biological richness of the groves by giving a range of species habitat and food. Among the animal kingdom's inhabitants of certain of Igboland's sacred woods is the African Grey Parrot (*Psittacus erithacus*). These extremely smart parrots have a reputation for being able to mimic human speech. They are frequently connected to knowledge and communication and are seen as important in many African cultures. These birds, who would otherwise be in danger due to habitat degradation and the illegal pet trade, can find refuge in sacred groves. These groves are crucial for maintaining the diversity of birds since they are home to the African Grey Parrot.

The sacred groves of Igboland are also home to a variety of monkey species, including the Mona Monkey (*Cercopithecus mona*). Because they disseminate seeds, these monkeys are essential to the ecosystem and help the forest regenerate. In sacred groves, monkeys are essential for seed dispersal and forest regeneration because they eat fruits and then excrete the seeds at different areas. By enabling the emergence of new plants away from the parent tree, this natural mechanism lessens competition for resources and contributes to the preservation of plant diversity. Monkeys often leave behind nutrient-rich excrement while they go through the forest, which increases the chances of seeds germinating. They travel in a way that ensures seeds are dispersed over large regions, promoting the ongoing regeneration and ecological balance of these sacred groves. They do this by climbing and jumping across the forest canopy.

They have cultural significance as well; they are frequently mentioned in local folklore and are regarded as clever and agile symbols. These monkeys are threatened by habitat destruction and hunting in other locations, therefore sacred grove conservation helps assure their existence. The sacred groves help to preserve Igboland's cultural history and biodiversity by protecting these species.

Role of Sacred Groves in Environmental Sustainability

All over the world sacred grove vegetation is characterized by unique ecological traits. For instance, Rajendraprasad (1995) writes that in India's Kerala sacred forests, there are several tree tiers, shrubs, climbers, herbs, parasites, epiphytes, and wild cousins of domesticated plants. Sacred trees, according to Frese and Gray (1995), are a kind of nature that stand for life and the sacred continuity of the material, cosmic, and spiritual realms. A tree is often used to represent a god or other holy creatures, or it might represent everything that is holy. Trees are sometimes associated with cultural beliefs in heaven or the afterlife, and they represent certain deities or ancestors, act as mediators or as a link to the religious realm. Kanu (2021) notes that in ancient Igbo-African civilizations, people saw trees and woods as an extension of themselves. Therefore, to treat them disrespectfully is to treat oneself disrespectfully, and to exploit them would be to wage war on oneself because of the potential repercussions. They were not only revered but also engaged with in a variety of ways as fellow human beings. Hughes and Chandran (1998) wrote that the emergence of sacred trees and plants in ancient societies may be attributed to their intricate spiritual links with their biophysical surroundings. They were the earliest temples dedicated to the gods, and as such, they were held in high regard.

Numerous ecological services that these groves offer are crucial to the preservation of the environment, and they are frequently shielded from harm by taboos and spiritual beliefs. Initially, they serve as repositories of biological diversity. Numerous plant and

animal species, some of which may be uncommon or endangered, can be found in these groves. These places are traditionally protected against activities that could otherwise result in habitat destruction and the extinction of species, such as farming, logging, and hunting. Hence, sanctified groves play a crucial role as safe places for biodiversity, supporting the region's ecological resilience and equilibrium.

Climate management in Igboland is another important environmental service that sacred groves provide. Since trees and plants take up carbon dioxide from the atmosphere and store it as biomass, the thick vegetation in these groves is essential to the process of sequestering carbon dioxide. This procedure lowers the atmospheric concentration of greenhouse gases, which helps lessen the effects of climate change. Additionally, the groves' canopy cover contributes to the regulation of nearby temperature and humidity levels, resulting in the creation of microclimates that may be advantageous for human habitation and agriculture. Sacred groves also improve the quality and conservation of water. Groundwater recharge and surface runoff are both facilitated by the vegetation in these groves, which contributes to the maintenance of the hydrological cycle. In these groves, the roots of the plants and trees stabilize the soil, lowering the possibility of landslides and preventing erosion. This is especially crucial in places where there is a lot of rainfall. Sacred groves help to keep surrounding bodies of water clean and free from siltation by preserving the health and structure of the soil. This can be crucial for the local communities that rely on these water sources for drinking, agriculture, and other needs.

Sacred groves in Igboland are important for culture and education in addition to the environment. They contribute to maintain the Igbo people's intangible cultural legacy by acting as locations for customary ceremonies, rites, and other cultural traditions. The groves are firmly ingrained in the belief systems of the community members, who frequently identify them with gods, spirits, or ancestors. The local community considers the preservation of these groves to be both an ecological and spiritual duty, which supports conservation efforts considering their cultural significance. Furthermore, because sacred woods are living archives of conventional ecological knowledge and methods, they provide instructional possibilities. Ultimately, Igboland's sacred trees offer a variety of provisioning services that sustain local livelihoods. They are sources of non-timber forest products, fruits, nuts, and other medicinal plants that are essential to the health and financial stability of the surrounding populations. Because of the cultural rules controlling the groves, which encourage conservation and prohibit overexploitation, these resources are frequently extracted responsibly. The groves enhance the general resilience and sustainability of the communities that safeguard them by promoting traditional medicine. It was on this backdrop that Khan, Khumbongmayum, & Tripathi (2008) assert that sacred woods are the perfect location

for conserving biodiversity. In some of the sacred groves, numerous species of plants and animals that are endangered in the forest are still well maintained. It has been noted that the sacred groves include large populations of a number of medicinal plants that are absent from the forest. Moreover, sacred forests usually house a concentration of rare, endangered, threatened, and unique species. Ray, Chandran, & Ramachandra (2014) equally write that the area of a sacred grove undoubtedly contributes significantly to the services and functionality of ecosystems. A big, complete grove is an example of a healthy forest ecosystem, which offers important ecological functions like temperature control, nitrogen cycling, and soil, water, and biodiversity preservation.

In Igboland, sacred groves are extremely important from an ethnobotanical standpoint since they help to preserve the region's biodiversity and cultural legacy. Numerous plant species, some uncommon, beneficial, or otherwise noteworthy, use the groves as reservoirs. The transmission of important ethnobotanical activities is ensured by the traditional knowledge linked with these plants, which includes their applications for food, medicine, and rituals. The preservation of ecological equilibrium and the provision of resources for long-term subsistence depend heavily on this biodiversity. Furthermore; sacred groves serve as cultural havens, protecting customs and beliefs that are essential to the Igbo people's identity. Because of the social ties and cultural values that are reinforced by the rites and ceremonies conducted there, these places are revered, which promotes a sense of community and continuity. Since logging, hunting, and other exploitative activities are prohibited in these groves, they often function as unofficial conservation zones that support the preservation of the ecosystem. In summary, the holy groves of Igboland are essential for maintaining the cultural and spiritual fabric of the communities that guard them, in addition to their environmental value. Ethnobiology, the study of the interactions between humans and the plants and animals in their immediate surroundings, is incredibly insightful. Vartak and Gadgil (1973) carried out some fascinating ethnobotanical research in Maharashtra's sacred forests in India, which revealed some of the plant's benefits to the local population.

Ekwu Arikpo Sacred Grove in Ezimo

Ekwu Arikpo Sacred Grove in Ezimo, Udenu Local Government Area of Enugu State Nigeria, plays a crucial role in preserving the biodiversity of the community, particularly the *Bridelia Ferruginea* plant. Sacred groves, such as *Ekwu Arikpo*, are protected areas with cultural and spiritual significance, where traditional practices often prohibit the felling of trees or hunting of animals. This cultural protection has allowed *Bridelia Ferruginea*, a species known for its medicinal properties, to thrive. The preservation of this plant is essential as it is a valuable resource for traditional medicine in the community. *Bridelia Ferruginea*, is commonly known as *Ola* in Igbo language

and *Ede* in Ezimo dialects. Branches appear in the lowest portions of the stem, which is often twisted. It has rough, gray, and often scaly bark. It may be bright crimson in color and has spines rather often. The leaves can be simple, rotating spiral, broadly elliptic, hairy, and tiny to medium in size. They have an acute apex and a plummy veined inner border. The fruits ripen in July, while the creamy-yellow, sweetly perfumed blossoms bloom from February to August. Nnamani, Akah, Okoli, Ezike, and Kenne (2020) state that *Bridelia Ferruginea* is used in traditional African medicine to treat rheumatic pains, oedema, burns, bruising, boils, dislocation, fever, headaches, and stiffness. Additionally, they wrote that fresh stem bark is utilized in Ezimo, to stop bleeding from newly cut wounds. This is achieved by applying a fresh stem bark paste to the wound.



Figure 1: *Ferruginea* Shrub



Figure 2: *Ferruginea* Stem

In Ezimo community, the *Ekwu Arikpo* sacred grove acts as a living pharmacy, where the knowledge of medicinal plants is passed down through generations, preserving both the biodiversity and the cultural heritage of the area. The Ekwu Arikpo Sacred Grove also serves as a natural laboratory for the study and conservation of *Bridelia Ferruginea* and other medicinal plants. Ethnobiology, the study of how humans interact with the plants and animals in their immediate surroundings, is a highly insightful field of research. In the Maharashtra sacred grove of Western Ghats India, Vartak and Gadgil (1973) carried out some fascinating ethnobotanical research that demonstrated some of the plant's benefits to the local population. This means that researchers and ethnobotanists can study the diverse flora within the Ekwu Arikpo grove, that will lead to the discovery of new uses for these plants in traditional and modern medicine. The preservation of the grove ensures that these plants are not lost to deforestation or agricultural expansion, which threatens many medicinal plant species. This conservation effort supports the broader goal of sustainable development by promoting the use of natural resources in a way that benefits both the environment and the local community.

Moreover, the existence of the sacred grove contributes to the cultural identity and continuity of the Ezimo people. The grove is not only a source of medicinal plants but also a place of spiritual significance. The traditional beliefs and practices associated with the grove reinforce the community's connection to their environment, promoting

a sense of responsibility for its preservation. This cultural reverence for nature has helped to maintain the grove's biodiversity, including the important *Bridelia Ferruginea*, and has fostered a sustainable relationship between the community and their natural resources. Ekwu Arikpo Sacred Grove is a vital ecological and cultural sanctuary that has significantly contributed to the preservation of *Bridelia Ferruginea*. By protecting this sacred space, the people of Ezimo have safeguarded a critical resource for traditional medicine, maintained biodiversity, and upheld their cultural heritage. The grove's preservation is a testament to the value of indigenous knowledge and practices in conserving natural resources and promoting sustainable development. This relationship between the community and the grove highlights the importance of integrating cultural traditions with modern conservation efforts.

Threats to Sacred Groves

Human activities, which have been more intense due to urbanization, economic pressures, and rapid population expansion, are the main causes of the demise of sacred groves in Igboland, Nigeria. Once valued for their spiritual significance and as hotspots for biodiversity, these groves are currently being more and more invaded by commercial logging, urbanization, and agricultural growth. The cultural foundations that formerly safeguarded these hallowed places have also been undermined by the departure from traditional beliefs and practices brought about by modernity and the rise of new religions. Furthermore, insufficient legal safeguards and governmental regulations heighten their susceptibility, resulting in noteworthy ecological and cultural detriments. According to Khan, Khumbongmayum, & Tripathi (2008), globally, a variety of human activities have changed the composition and dynamics of many ecosystems. The decline in biodiversity has been one of the most noticeable consequences of environmental disturbance. Tiwari, Barik and Tripathi (1998) observed that holy groves are constructively protected by taboos and belief, and the groves are deteriorating as a result of the degradation of these two things. The current state of holy groves is somewhat problematic since it has been seen that religious taboos and beliefs that were essential to their maintenance are eroding over time for a variety of reasons.

Urbanization – A research on the state of several holy groves in the Himalayan area by Saxena, Rao and Maikhuri (1998), revealed that these groves are now being abused because traditional groups are being pressured by economic factors to abandon the community-oriented protection that these trees formerly provided. Sacred groves are seriously threatened by urbanization in Igboland. As urbanization picks up speed, growing towns and cities are encroaching more and more on these holy areas. These groves are frequently destroyed or degraded due to the need for land for housing, business development, and infrastructure projects, which undermines the Igbo people's

spiritual and cultural heritage. Loss of traditional knowledge and practices exacerbates the effects of urbanization on sacred groves. The younger generation may lose touch with traditional values and practices, such as respect for holy groves, as more people move to cities and take up contemporary lifestyles. The taboos and social conventions that have traditionally shielded these places are being undermined by this cultural transformation. Furthermore, legal and administrative changes brought about by urban expansion frequently disregard the customary ownership and maintenance of sacred groves, which facilitates the taking over of these lands for development. Moreover; there are environmental ramifications to the urbanization-related loss of sacred groves. These groves frequently act as hotspots for biodiversity, protecting a range of uncommon or endangered plant and animal species. Destroying these habitats may cause local ecosystems to become unstable and biodiversity to decline. Likewise, holy groves give vital ecological benefits to the surrounding areas by regulating the climate and conserving water. Therefore, the removal of these groves jeopardizes Igboland's natural sustainability in addition to endangering cultural and spiritual values.

Agriculture - As the population grows and economic pressures mount, the need for agricultural land rises, resulting in the encroachment and deterioration of these sacred sites. Owing to the necessity of expanding their agricultural lands to fulfill the demand for food, farmers occasionally invade these groves and clear them to make way for crops. This threatens the Igbo people's cultural legacy in addition to causing the loss of hallowed places. For instance, in their discussion of the deterioration of holy groves, Kushalappa and Bhagwat (2001) state that the main threats to the preservation of groves in Karnataka's Kodagu districts are human settlement and the conversion of sacred forests into coffee farms. The weakening of customs and traditions frequently makes agricultural development into sacred groves worse. In many Igbo communities, the younger generation may see sacred groves as untapped resources for agricultural expansion rather than fully appreciating their traditional significance. The taboos that formerly safeguarded these groves disappear as industrialization and economic need impose their preferences on traditional beliefs and rituals. The spiritual and cultural significance of keeping these places intact may be overshadowed by the short-term financial gains from agricultural use, which could result in their destruction and conversion to farmland.

Environmental effects of agricultural expansion-related loss of sacred groves are also noteworthy. These groves protect a variety of plant and animal species that might not be found elsewhere, making them hotspots for biodiversity. A loss of biodiversity, disturbance of regional ecosystems, and a decrease in environmental resilience might result from clearing these lands for agricultural purposes. Additionally, by serving as organic erosion barriers and preserving regional hydrological cycles, sacred trees

frequently play significant roles in soil fertility and water conservation. Because of this, turning these groves into farms may have far-reaching ecological effects on Igboland, affecting not only the region's cultural landscape but also the sustainability of the ecosystem. Bhagwat & Rutte (2006) observed that people may have been forced to use these locations for daily needs like gathering food and fuel due to the ensuing population growth. It seems that the groves were not originally intended for any particular use, yet their presence in the landscape may have led to the development of other uses.

Climate Change – Plieninger, Quintas-Soriano, Torralba, Mohammadi Samani, & Shakeri, (2020) note that in tackling the climate change-related problems the communities face in their immediate socioeconomic and agro-ecological setting, the local community is concerned about the worldwide phenomena of climate change and the significance they identify with the preserved holy grove. Their opinions on the changes in the local weather, agro-economic variables, and natural resources like water and biodiversity have all been taken into consideration while evaluating this. The sacred groves of Igboland are becoming more vulnerable due to the growing effects of climate change, which include increased temperatures, changed rainfall patterns, and extreme weather. For these groves to preserve their distinctive ecosystems, particular climatic conditions are frequently necessary. Climate and precipitation changes have the potential to upset the delicate equilibrium in these settings, which could result in a decline in biodiversity. For example, some plant species that are essential to the local populations' spiritual activities might find it difficult to adapt to changing conditions, while invasive species might establish a footing and further disrupt the ecology. Apart from environmental hazards, global warming intensifies additional human-caused stresses on holy groves. People may be forced to extend their farms into these protected areas as a result of shifting agricultural patterns brought about by variations in soil fertility and rainfall, which would result in deforestation. Furthermore, the groves may sustain physical harm from an increase in the frequency of extreme weather events like floods and storms, which could destroy important natural features and holy trees. This affects the cultural practices and beliefs associated with these places in addition to endangering their natural integrity. The customary knowledge systems and cultural legacy connected to sacred groves are also impacted by climate change. The elders and caretakers of these locations have important ecological information that has been passed down over the years; this expertise is frequently connected to the preservation of biodiversity and the management of regional resources. The cultural connections to the land may be weakened when climate change affects the environment and makes this knowledge less relevant or even obsolete. The identity and cohesiveness of Igbo communities are at risk due to this loss of knowledge and cultural estrangement because the sacred groves are essential to their spiritual and cultural lives.

Christianity - During the colonial era, Christianity was introduced in Igboland, which further affected the destiny of sacred trees. Missionaries frequently attempted to convert the local populace to Christianity by viewing indigenous religious practices—such as the veneration of holy groves—as paganism. As a result of new converts being urged to give up their native beliefs, the customs and rites held in these trees decreased. As a result, a great deal of sacred woods was abandoned or used for Christian religious purposes, which resulted in the extinction of native biodiversity and ecological expertise. Hence, the combined influences of Christianity and Westernization have been instrumental in changing Igboland's cultural and spiritual environment, with holy groves suffering as a result of these larger social and theological shifts. Bhagwat & Rutte (2006) remarked that sacred groves have deteriorated as a result of religious conversion in several nations. Furthermore, the institution of sacred groves is becoming less significant to the indigenous populace's younger generations as westernized metropolitan cultures undermine local customs in many nations. Sacred groves in Igboland were preferred places for church construction by colonial rulers and their Christian missionaries because they were important to the indigenous religious customs that they wished to eradicate. They wanted to subvert indigenous beliefs and install Christianity as the prevailing faith; therefore, they built churches on these sacred groves. The physical eradication of the sacred areas was accompanied with a symbolic conquering of indigenous traditional religion by this calculated placement. Encouragement or coercion of the local populace to convert from their ancient religion to Christianity further aided the conversion process by establishing the new faith thoroughly in the community and lessening the sacred groves' cultural value.

Government Policies affection Sacred Groves - Land use regulation is one important government policy that affects Igboland's sacred groves. Nigerian policies concerning land distribution, urbanization, and agriculture frequently overlook the cultural value of sacred groves as the government controls almost all of the lands. Sacred groves are susceptible to being used for other purposes since they are not clearly protected by the law. According to Ormsby (2011), under British rule, forest that had been communal resources were taken over by the government, kept out of the hands of the people, and exploited for state purposes like building railways. Environmental conservation policies in Nigeria, including those in Igboland, aim to protect natural resources and biodiversity. However, these policies sometimes conflict with the traditional management of sacred groves. For instance, while government policies may promote large-scale conservation projects, such as the establishment of national parks, they may overlook the small, community-managed sacred groves. Additionally, government-led conservation initiatives often impose regulations that may not align with the traditional practices of local communities, potentially leading to the erosion of indigenous knowledge and cultural practices. Government policies on cultural heritage and

preservation are critical in protecting sacred groves as cultural sites. However, the implementation of these policies is often inadequate. While Nigeria has laws aimed at protecting cultural heritage sites, the lack of specific recognition for sacred groves means they are frequently neglected. Moreover, there is often limited funding and resources allocated to the preservation of these sites, resulting in inadequate protection measures. The government's focus tends to be on more prominent cultural heritage sites, overlooking the importance of sacred groves to local communities.

Conservation Efforts

Role of Local Communities in Managing Sacred Groves - For these groves to be preserved and to continue existing, local communities are essential to their management. This position is firmly anchored in customs and beliefs that acknowledge the groves as the homes of gods, ancestral spirits, and organic protectors. Aniah & Yelfaanibe (2016) remarked that worldviews rooted in Africa often center on the complex interrelationship between nature and mankind. Worldviews in African communities are extremely similar to the endogenous development framework (EDF), which emphasizes the connectivity between the material and non-material worlds. Communities cherish sacred groves because they hold them in high regard and believe it keeps them in harmony with the supernatural realm and preserves their cultural legacy. Maintaining customs and taboos related to sacred woods is one of the main responsibilities of the local communities. Activities including farming, hunting, logging, and even entering the grove without authorization are frequently forbidden by these regulations. Enforcing these taboos contributes to the preservation of rare and endangered species, ecological balance, and the richness of the groves. The implementation of these regulations is frequently overseen by community leaders, such as elders and spiritual leaders, who make sure that the groves' sacred character is upheld and that breaches are dealt with effectively.

Sacred groves require constant care and upkeep, and local communities are essential to this effort. They do tasks including clearing space for new growth, maintaining the routes leading to and from the groves, and planting new trees. The groves' continued health and accessibility for cultural and spiritual purposes are guaranteed by this guardianship. The community's strong dedication to conservation is further reinforced by their active participation in the maintenance of these sites, which cultivates a sense of ownership and responsibility. The transfer of information and customs about sacred groves is another important function played by local communities. In order to preserve the cultural value of the groves over time, elders and caretakers of these sites transmit tales, customs, and rituals to younger generations. Maintaining the continuity of cultural practices and promoting a sense of identity and belonging among community

members depend significantly on this information transmission. It also aids in spreading awareness among the general public of the significance of protecting these sites of ecological and cultural significance. When it comes to defending sacred groves against outside forces like industrialization, urbanization, or agricultural growth, local people frequently stand up for their protection. Aniah & Yelfaanibe (2016) viewed that it is customary for nearby communities to create regulations that serve as a check on activities that might devastate or disrupt the environment around holy trees. The cutting down of trees and the slaughter of animals in these hallowed locations are forbidden in communities with holy groves and shrines.

In order to get legal protection for these locations, encourage sustainable practices, and increase public knowledge of their significance, they might interact with governmental bodies, non-governmental groups, and other interested parties. Local communities in Igboland are essential to the administration and conservation of sacred groves because they serve as stewards, guardians, champions, and enforcers of tradition. This ensures that the groves will be preserved for future generations.

The Role of government in managing Sacred Groves in Igboland – Regarding the preservation of India's sacred groves, Chandrashekara (2011) notes that as part of its "Intensification of Forest Management" initiative, the Indian government has introduced the "Protection and Conservation of Sacred Groves" scheme. The Kerala Department of Forests and Wildlife (KFD) launched the 'Protection and Conservation of Sacred Groves' initiative in Kerala as part of this Central Government supported scheme. Government can be a key player in developing policies and providing legal protection for sacred groves. The government can aid in preventing deforestation, land encroachment, and illicit activities that endanger the groves by passing laws that identify and safeguard these areas. The legal framework ought to acknowledge and honor the customs and beliefs of the nearby populations, guaranteeing that the groves continue to be overseen by the individuals who have traditionally defended them.

Cooperation between contemporary conservationists and traditional guardians might be facilitated by the government. By giving resources for conservation efforts, such as funding for initiatives that encourage biodiversity conservation or training in sustainable land management techniques, the government can assist these caretakers. This collaboration can uphold indigenous knowledge systems while enhancing holy grove protection. There is a responsibility on the part of the government to inform and educate the people about the significance of sacred groves. Campaigns to raise awareness of the ecological, cultural, and spiritual value of these places can inspire everyone in society to treat them with care and to take precautions to keep them safe. Education initiatives in schools and communities help ensure that future generations

continue to respect and conserve these groves by instilling a feeling of pride and responsibility in their preservation.

Furthermore, by promoting sustainable tourism in sacred groves, the government may strike a balance between environmental preservation and the prosperity of the surrounding areas. The government can guarantee the preservation of the groves' ecological and cultural integrity while simultaneously giving the locals a means of income through the creation of eco-tourism projects. It is important to impose regulations to manage the number of visitors, guarantee polite conduct, and guard against environmental harm.

In summary, the government of Igboland plays a variety of roles in the management of sacred groves, including public education, legal protection, working with traditional grove custodians, and developing sustainable tourism. The government can ensure that these important locations remain a dynamic part of Igbo history for future generations by adopting a proactive strategy to protect them for their ecological, cultural, and spiritual worth.

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