Article

# Sacred Groves and Natural Sites Conservation for Tourism in Local Communities in Nigeria

Joy N. U. Ejikeme 1,\* and Uche Uwaezuoke Okonkwo 2

- <sup>1</sup> Humanities Unit, School of General Studies, University of Nigeria and Nsukka
- <sup>2</sup> Department of History and International Studies, University of Nigeria, Nsukka; ucheokonkwo2007@ya-hoo.com

\*Corresponding author: joy.ejikeme@unn.edu.ng

**Abstract:** The purpose of this study is to examine the potential of the sacred groves and natural sites for tourism in local communities in Nigeria. Three communities in Inyi town were chosen as case studies: Umuome, Enugwu-Inyi, and Alum, using a purposive sampling technique. An ethnographic data collection method was adopted, using in-depth interviews and direct observation. Grove locations were located and mapped using a geographic information system (GIS) throughout the research area. The secondary data was obtained from scholarly journals. The findings showed that the sacred groves and natural sites had exceptional value for cultural and eco-tourism. There are not many works that have studied the tourism dimension of the sacred groves in the study domain. The implication of the study is that tourism aids in the preservation of the sites' integrity. The research helps the government and policymakers to adopt a policy that promotes tourism in the sacred groves. This research is important to researchers at the universities and research institutions that are seeking to carry out a related research. Conclusively, utilizing the area for tourism is a superior conservation alternative.

Keywords: conservation; sacred groves; natural sites; heritage tourism; local communities

# 1. Introduction

Nature worship has been in human society since the dawn of time, and it may be found in traditional societies' culture. religious and traditional beliefs, cultural mores, and behaviours all contribute to environmental and biodiversity conservation [1]. This made them to reserve certain areas of nature's landscape as sacred grove. Sacred groves can be traced back to hunter-gatherer societies, which saw the environment as an inextricable element of their lives [2]. According to [3], a sacred grove is a forest in which villagers perform some rituals to communicate with the spirits and ancestors. Sacred groves are forest tracts where there is no human interference in form of deforestation thus the vegetation is intact [4].

Sacred places are unique sites or areas with one or more characteristics that designate them as exceptional, usually in a religious or spiritual sense [2]. They are artistic representations of man's interaction with nature, combining natural and cultural aspects. These are thought to be the ancestral and forebears' homes, as well as the homes of natural spirits and deities. Many rare, endangered, and unique species have been saved as a result of the isolation of such forests [5]. It is a home to a variety of creatures who seek refuge in the forests [6]. Majority of them house gods, which aid in the protection of the local people against various disasters. Several therapeutic plants not found in other forest have been discovered in abundance in sacred groves. Sacredness, religious beliefs, and taboos all contribute to the long-term use and conservation of the area's flora and fauna [7]. The sacred groves ecosystem's physical and biological components aid in climatic regulation, local hydrological regulation, nutrient cycling, and soil fertility maintenance, as well as providing aesthetic and picturesque value to the area [8].

However, in "Glimpses of Indian Ethnobotany" Sacred groves are characterized as places of worship where all types of flora, including shrubs and climbers, are protected by the grove's presiding deity, and removal of any material, even dead wood from a twig, is forbidden [2]. The Boabeng-Fiema Monkey Sanctuary (BFMS) and Tafi Atome Monkey Sanctuary Grove and Cultural Village, both located in Ghana are visited by tourists as a destination. Then, the sacred groves of Mawphlang, Mawsmai, and Lalong in India [9]. [2] notes that the performance of ceremonies and events in these sacred groves attract tourists/visitors. The number of annual visitors, the size of the sacred grove, and manner of site administration signify different stages of tourist growth. In 2005, Tafi Atome attracts 1,820 foreign and 1,030 Ghanaian. BFMS received 6,500 tourists in 2002 [10]. The sanctuary's Visitors Center compiles and displays quarterly revenue, which are shared with the community at Tafi Atome [9]. Tourist revenue is handled fairly, with some going to the community and the rest to the sanctuary visitor's center. Thus, sacred groves and natural sites provide powerful tool for ensuring biodiversity conservation through community participation and tourism promotion. The Osun-Oshogbo grove, a UNESCO World Heritage Site, is one of the most renowned sacred groves in Nigeria. Ubiniukpabi grove, which is affiliated with Chukwu shrine in Arochukwu, Abia State, Ohia-Udowerre sacred grove in Ndiowu, and Okija shrine in Ihiala, Anambra State, are among the other important sacred sites. These areas have been an attraction for both local and international tourists.

The researchers support thier argument by examining the three sacred groves in Inyi town. The sites have been neglected and abandoned by many people due to religious fanaticism, causing traditional beliefs to disintegrate. This put the groves on the verge of extinction. For effective management of the area, tourism is a choice. As a result, the researchers conducted a comprehensive study of the area in order to document the sacred groves for cultural and eco-tourism. The research was guided by four research questions: (1) What are the ownership/management practices in the study sites? (2) What are the problems and challenges facing the sacred sites? (3) What is the importance of the sacred groves to the host communities? (4) What are the potentials of the sacred groves and natural sites for tourism. The objectives of the study are to document the sites; to examine the ownership and management practices of the study sites; to examine the problems and challenges facing the study sites; to investigate the importance of the sacred groves to the host communities; and to assess the potential of the sacred groves and natural sites for tourism. The host communities' importance of the sacred grove to them was x-rayed in the discussion.

The report included several recommendations for transforming these areas into sustainable tourism. The findings of the research will be extremely useful to the government and policymakers. Additionally, the study helps the Nigerian Urban and Regional Planning Authority choose the locations of the groves in the area's land use planning strategy. In terms of society, it will alter how people view the preservation of the sacred groves. If designed for tourism, it will generate income for the host community and provide jobs. The documentation from the locations could be used to contrast the cultures of other places.

## 1.1. Brief Literature Review

Humans and plants have always been associated with one another. They regarded extreme weather events like rain, thunderstorms, floods, heat waves, etc. as gods or ultimate powers and were terrified of them. As a result, the idea of praising natural forces developed over time [6]. In order to appease the divine power, people started to worship in the forest lands and to build or designate trees as holy. [6] claims that this idea of designating a tree as holy or a region of forest land as holy progressively gave rise to sacred groves. These forests are sacred as they are dedicated to some specific god or goddess [6]

For those who live in cities, rural areas, and forests alike, trees are strong, all-encompassing symbols of life, growth, and vigor. They can represent the persistence of human

society and history. They are frequently enormous and terrifying, bridging earth and heaven, determining life and death, combining male and female traits and containing both good and malevolent spirits, including ancestors' souls [11]. In many religions, it is believed that nature is the dwelling place for gods. For instance, the Germans, Britons, Finns and Celts worshipped under specific trees in their pre-Christian history [12]. Sacred groves are more commonly recognized as a traditional sort of community-based conservation, safeguarding locations that are particularly significant to the locals in terms of their culture and religion [13]. They are inherited property of the surrounding communities from their ancestors often perceived as fetish places, good grounds for making traditional sacrifices and staging of religious prayer camps. The groves are protected from any degrading activities such as bush fires and cutting of trees. Albeit, some community sacred groves have bylaws for its protection whilst others rely on the authority of the traditional elders for protection and conservation of the unique biodiversity [14].

Sacred natural sites are considered an additional pillar for biodiversity conservation, next to the protected areas network [15]. For [4], sacred groves act as primary network of conservation spots harboring biodiversity that cannot be found in the entire ecosystem. All over the world they occur in form of different features and scales for example pilgrimage routes ,waterfalls, a single rock, tree, springs, entire mountain range, lakes, forest patches and caves [4]. [7], notes that every sacred natural site has its own unique myths, lore and legends attached to it and this makes it distinct. Sacred groves and natural sites are maintained through complex traditional institutions that sometimes do not require governmental involvement [16]. Sacred groves serve important ecological and socio-cultural functions by preserving virgin forests, being important refuge for rare and useful local biodiversity, and sources of herbs for medicinal, social and religious purposes. Evidence shows that sacred groves in Ghana act as reservoirs in the conservation of some important fauna groups and/or species across a landscape matrix that is largely devoid of forest habitat [16].

However, sacred groves are sources of rivers and streams that can be accessed by members of the community downstream. Kenya's Hurri Hills in Marsabit is an example of this scenario. Rivers have their source here making the cultural landscape a water tower that has a national significance. Birds and other mammals have their home in the sacred groves [4]. [17] highlight the significance of the sacred forests to the national economy and even to the health sector where health facilities are far away and the only source of medicine is the sacred forests. Sacred groves benefit the neighborhood both directly and indirectly, which explains why they are preserved [15]. First, sacred groves are a fundamental component of the cultural and traditional beliefs and practices of local communities [18], offering a feeling of place-based relationships forged over centuries [19]. Additionally, holy groves could benefit economies and household food security [3]. The Convention on Biological Diversity (CBD) and the UN Permanent Forum on Indigenous Issues have both acknowledged the need to conserve sacred natural areas [20].

In sacred groves, Nigerian rituals, initiations, celebrations, and ceremonies take place, including the picking and enthronement of monarchs.[21]. They accommodate secrecy and privacy, which characterize the worship of deities in many traditional communities [22]. They serve as graves for children and "wicked people" in some places (i.e., those who died mysterious deaths). [23]. Many individuals visit Nigeria's holy places in search of esoteric treatments for issues including strange ailments, homelessness, unemployment, and infertility. [24]. Of example is Osun Osogbo Sacred Grove, a UNESCO World Heritage Site in southwest Nigeria. It has been the subject of studies conducted in the country, but little attention has been given to lesser-known sacred places [25], [26]. The Osun Osogbo Sacred Grove and Idanre Hills are both well-known tourist attractions. Each year, thousands of tourists and pilgrims attend OOSG's Osun festival. With government and corporate support, particularly from top communications and brewing businesses, this worldwide festival has grown to be a multi-million dollar event [27]. The annual visitor turnout at the Orosun event in Idanre Hills varied

from 600 to 8,700 people between 2005 and 2013 [28]. Since 2009, the state government has pushed ecotourism in the Idanre Hills grove by hosting the "Mare Festival," an international mountaineering, musical, and cultural festival. The yearly celebration supports the Idanre people's culture and tradition while also raising awareness of the grove and bringing in more visitors [28]. According to [29], economic incentives such as job growth, tourism, and income production support local communities' desire to safeguard and preserve sacred forests. Additionally, Ghana is home to numerous sacred trees that could draw travelers or investors. These groves have already been developed in some places. For instance, the UNESCO-CIPSEG Project created the sacred Kpalvogu grove as an ecotourism destination. [30]. The ultimate purpose of assessing sacred groves' potential, say specialists from the Ghana Tourism Authority, is to develop and make them a desirable tourist destination by maximizing the prospects generated from them [31]. The proposal's tourist component could result in significant economic benefits for the District Assemblies and neighboring towns through income generation if the grove is implemented correctly. One method for achieving the government's Sustainable Development Goals (SDGs) may be the establishment of sacred groves as potential tourist destinations [34].

The study area is not an anomaly, so the Nigeria Tourism Authority should use these tactics to preserve holy grove tradition everywhere. The country's economy has benefited considerably from tourism, which has had an impact on employment, living standards, the availability of lodges (accommodation), and the cost of land, all of which can help communities thrive [32]. Tourism is the activity of people or a person traveling away from his or her home for business or pleasure [33]. The term "tour" comes from the Latin word "tornus," which means "a method for creating a circle." Tourism also is a collection of activities performed by a person or a group of people who travels to a location outside of his or her normal environment for less than a year and whose primary purpose of travel is not to engage in a compensated activity within the destination [33]. Aggressively, Tourism is the most effective way of conserving the sacred groves as it offers additional protection. It is the sum of the phenomena and the relationships arising from the travel and stay of non-residents, in so far as it does not lead to permanent residential status and not connected to any earning activity by the travelers [34]. Tourism comprises the activities of persons travelling to and staying in places outside their usual permanent places of residence for not more than one consecutive year for leisure, business and other purposes. Based on this broad definition, tourism industry includes all socioeconomic activities that are directly or indirectly involved in providing services to tourists

It is encouraging that sacred groves might someday be conserved as parks, natural gardens, or eco-tourist attractions. This could help preserve their biodiversity, offer a place to enjoy yourself, and bring in money for the locals [36]. According to [37], ecotourism activities in sacred groves include photography, pleasure walking, cycling, jogging, sport fishing and cultural tourism, movements of persons for essentially cultural motivations such as study tours, performing arts and cultural functions, travel to festivals and other social events, visits to sites and monuments, travel to study nature, folklore or art, and pilgrimages. Ecotourism is seen as a component of natural resources management through creating diversified livelihoods for local people [38]. They noted that ecotourism generates income for local communities while conservation goals of protected areas are achieved.

Eco-tourism defines the purposeful travel to natural areas to understand the culture and history of the environment, ensuring that the integrity of the ecosystem is not altered [39]. Sacred groves development also promotes cultural and religious tourism. All of the aforementioned travel modes will be impacted by the comprehensive and sustainable development of alternative tourism. Religious tourism places a specific emphasis on protecting, reviving, and developing religious and historical sites in order to increase visitor flows. People frequently used pilgrimages as a motivating factor, and they were often

connected to significant historical occasions, religious festivals, and the value of monasteries and cathedrals from various religious views [40]. All of the aforementioned travel modes will be impacted by the comprehensive and sustainable development of alternative tourism. Religious tourism places a specific emphasis on protecting, reviving, and developing religious and historical sites in order to increase visitor flows. People frequently used pilgrimages as a motivating factor, and they were often connected to significant historical occasions, religious festivals, and the value of monasteries and cathedrals from various religious views [41]. For them, in addition to prayer and meditation, the participants of religious tourism are interested in going for sightseeing. The pilgrims seek the sense of life, contact with God and with other people. They feel the need to experience something special in a famous place. Cultural Tourism in the other hand, is a type of tourism that involves having experience and in some cases participates in a vanishing lifestyle that lies within human memory e.g. costume festivals, folk performances, arts and crafts etc [42]. Cultural tourism has increased people's awareness of sacred trees, which has led to chances for both individuals and governments to make money [22]. Making sacred sites into tourist attractions, as in the case of Osun Osogbo sacred groves in Nigeria, boosts tourism and revenue [9].

In Nigeria, the major challenges to tourism development are security, infrastructural amenities, promotion and awareness, funding and financing, attitude and destination image. The infrastructures for instance, such as road network and various means of transportations, the international and domestic airports, telecommunication and internet access, tour guide and efficient road signs & symbols, hotel accommodation and other axillaries services and perceived destination image, all have positive relationship with the overall tourism performance. For Nigeria today these essential requirements are lacking or in bad condition [43]. Similarly security of lives and properties is fast deteriorating, obvious cases of armed robbery, kidnapping, assassination, suicide bombing and other related crimes have negative relationship with tourism performance most especially on tourist satisfaction and repeat visit [44]. Virtually, all parts of Nigeria is facing one form of security challenge or the other ranging from kidnapping in East, hostage taking in the South-South, armed robbery in the West and Boko Haram terrorism in the North [43]. The government of Nigeria is only paying lip services to the issue of tourism development without any commensurable commitment in terms of enabling environment and direct investment in the sector. In the global economy, even countries with poor level of infrastructure and facilities are said to be able to attract investors to their country for tourism development which implies that with enabling environment, Nigeria is set to take her rightful position in Africa [43]. Tourist facilities, which include a variety of basic traveler services and interpretive facilities, can both contribute to making the sacred site experience meaningful to the visitor and enhance the host community's economic base [2]. Moreover, tourism development disturbs local people living near the heritage site [45]. Unfortunately, Nigeria's tourism, which is said to have a favoured sector position in the economy due to its wealth of natural and cultural resources, receives only lip service [33].

In Nigeria, there are tourism-specific factors that inhibit its growth and development. Among the tourism specific factors is the dearth of synergy among the various stakeholders in the industry, and the absence of reasonable engagement with tourism destinations by Destination Management Organisations (DMOs) [46]. Destination management organizations (DMO) are generally seen as the qualified promoters of a holistic tourism industry in a domain, who ensure the lessening of tourism's negative impacts on the environment and local communities as well as the sharing of opportunities for a vibrant exchange among peoples [46]. [46] notes that there is no strong DMO's in Nigeria's domestic tourism at the moment. It can be argued that there is a very weak culture of tourism in Nigeria, which may be due to a number of factors. No tourism destination can be sustainable and competitive in the long term without vocal and practical inputs from the local communities and residents in its tourism planning and management. Stakeholders involvement is vital not only in tourism destination management, but in Tourism destination marketing as well [45].

DMOs are in charge of making local communities aware of the socioeconomic contributions of the tourism sector and should engage local communities and closely monitor the attitudes of residents in regards to tourism development. This way, a culture of tourism can be created right from the local community level.

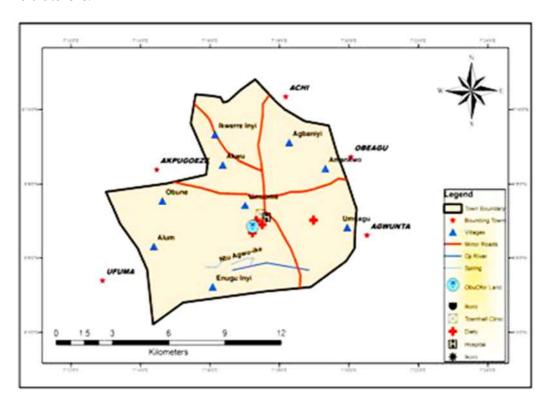
Major threats to sacred groves includes dwindling traditional values, development interventions, commercial forestry, encroachment, invasion by exotic weeds, fuel wood collection and economic development [7]. [47], contend that sacred groves are gradually fading out as a result of recent modernization efforts, people's changing aspirations, conflicts among the sacred grove managers, etc. Traditional rules support conservation by limiting activities within sacred forests [48]. The fact that only elders are allowed to visit the sacred groves play a very important role in the conservation of biodiversity [4]. Sacred groves remain untouched due to the sacred aspect attached to them and this makes them rich reserves of biodiversity which is intertwined with various aspects of religious, cultural, and indigenous practices as well as taboos that are attached to the sacred groves [7], [49]. Serious punishments were imposed on anyone who damaged the sacred forests and it was more serious as compared to a person being taken to a modern court of law [50]. In most cases, the entire community serves as a watchdog to prevent encroachment and illegal admission, either by its members or by visitors who would desecrate such areas [22].

## 2. Materials and Methods of Research

Ethnographic research method for data collection and qualitative approach were used. Qualitative is especially important in behavioral sciences where the main objective is to discover the underlying motives of human behavior [2]. In-depth interview and direct observation were the instruments used to elicit information from the subject matter. Elicit information means to obtain information from someone. To make the respondents to react on questions asked with open mindedness. Residents of the three communities were interviewed in semi-structured, open-ended interviews. Observational field work through the Ajana, Isiugwu and Iyingwe Sacred Groves is to screen natural features of the destinations and determine its potential for tourism. In each community; ten people were interviewed, totaling 30 people. Participants were in a conducive environment during the interviews and the first author recorded their responses using tape recorder and note book. Each interview lasted 45 mins. All the recordings were transcribed, interpreted and used for data analysis. Four key themes emerged from the interviews: description of the sacred groves, its ownership and management practices, and importance of the groves to the communities and its characteristics for tourism. Key informant and snowball sampling methods were used to choose the interviewees. The snowball method entailed first discovering a sacred grove community, then having community members accompany the researcher to the next sacred grove village [51]. Grove administrators (Chief Priest), community leaders, and grove committee members were key informants. In order to avoid gender prejudice, both men and women were chosen for the interview. These groups of people were familiar with the sacred groves under investigation because majority was grove devotees. Host community members with various occupations were sought to provide a variety of perspectives. Teachers, farmers, artists, and herbalists were among the participants. During the fieldwork, photographs were taken and the location/coordinates were obtained using a GPS device. The investigation was carried out in two phases: February to May, 2021, was the identification of the sacred groves; September to November, 2021, was the main interview process. Secondary sources include scholarly publications and articles on the study theme.

The research was conducted in Inyi in Oji River Local Government Area of Enugu State, Nigeria. Inyi is about 20 kilometers from Oji Urban, 41 kilometers north east of Enugu, and 68 kilometers west of Onitsha. Other towns in the area include Achi, Awlaw, Akpugoeze, and Ugwu-oba. The population of the study area is 126,587 according to the 2006 Nigerian census. The town has an area of approximately 110 square kilometers. It is made up of 9 (nine) communities, which include Amankwo, Obule, Enugwu-Inyi, Alum, Agbariji, Umuagu, Akwu, Nkwere

and Umuome (see fig 1). Inyi has a favourable climate for farming. It is blessed with numerous rivers and streams. Inyi had a long reputation for two main crafts, carving and pottery. The crafts are extensively used during festivals as souvenir as well as for household utensils.



**Figure 1.** – Map of Inyi (the study area) showing the nine (9) communities. Scheme 2021. 0. Results.

Observational field work showed that each sacred grove is situated at the community's entrance having large village square. The informants said that the village squares are used for community gathering and meetings. The Chief Priests said that the three sacred groves are described in line with the shrine. This is because they are dedicated to a particular deity. *Ajana, Isiugwu* and *Iyingwe* were shrines inside the groves studied. Thus, sacred groves studied were "Ohia Aronshi Ajana (Ajana Sacred Grove), Ohia Aronshi Isiugwu (Isiugwu Sacred Grove) and Ohia Aronshi Iyingwe (Iyingwe Sacred Grove). In Inyi dialect, deity is referred to as "Aronshi", shrine is referred as "Ulo Aronshi" (meaning abode of the deity) and the sacred grove is referred to as "Ohia Aronshi" (meaning forest of the deity). The host communities believed that the deities were the ancestral spirits sent to serve as guardian angels to them. Thus, they were community property. In this section, the sacred groves were discussed giving their descriptions, its characteristics/features, ownership and management practices, then problems and challenges of the sacred groves. The results were gotten through ethnographic method using in-depth interview with key informant and direct observation.

### 2.1. Description of the Scared Groves

## 2.1.1. Ajana Sacred Grove

Ajana Sacred Grove is the headquarter of all the sacred groves and shrines in Inyi. Thus, it is owned by the entire Inyi people. It is situated at Umuome community. Ajana means earth mother in control of the affairs of Inyi town. It is located in the latitude 06.1268635"N and longitude 007.297355"E. Physically, Ajana Shrine was represented with *Akpu Ejima* (twin Akpu tree) and a single Akpu tree (Cotton Tree) (Ceiba Pentandra) (L.) Gaertn. The Chief Priest of Ajana deity is Chief Emmanuel Ndibe Onwe fondly called "Eze Ajana". Before the call, he was a business man who resides in Lagos. The grove is about 50sqkm and 3km from Nkwo Inyi Market centre. A tarred road leading to Achi town cut across Ajana sacred grove.

The sacred grove has three major sections, which include Obu Ajana with Osu (effigies that represents human sacrifice), Okpu ofo, and Ishi Ajana. Minor ones were *Aro Ajana, Agwu, Uru Agwu, Okoro Ajana, Ngwu, Ngene,* and *Ndichie*. Sacrifices are performed in these sections as directed by the deity through the Chief Priest. The effigies are carved in human figures. Some wore caps, cloth stripes, tie wrappers, and have wooden guns, ofo, and matchets. *Obu* Ajana is the reception place where Eze Ajana host meetings and receive visitors. Hanged animal skin of antelope, goat, lion and cow were also found there. *Ishi Ajana*" was demarcated with weaved palm frond and strip of coloured clothes (yellow, red, and white). Only men enter *Ishi Ajana* for sacrifice. *Okpu Ofo* is where *Ofo* tree (*Detarium Senegalense*) is. The *Ofo* tree is an emblem that links *chukwu okike* (God the creator) with man. The *Ofo* stick when collected and consecrated by the Chief Priest is a symbol of authority.

The sacred grove village square is called *Ezi Ocha* with *Ikoro* Ajana at the centre. *Ikoro* is a big native wooden cultural gong used for communication. The groves host a lot of plant and animal species. Python (Pythonidea) and tortoise (Testudinidae) are regarded as totem animals in Ajana sacred groves. The sacred grove has taboos that help in the management of the area (see section 2.2). Ajana festival is celebrated annually in October since October is the last month of the year in Inyi cultural calendar. It is like Christmas celebration for Christians.



**Figure 2. Obu Ajana** (Photo taken by the first author in September, 2021). Source: Researchers Fieldwork, 2021



Figure 3: Osu Ajana (nine effigies) (Photo taken by the first author in September, 2021) Source: Researchers Fieldwork, 2021

# 2.1.2. Isiugwu Sacred Grove

Isiugwu sacred grove is situated in Umuola Enugwu-Inyi. The Chief Priest is Mr Cyril Agwuna, who was a resigned primary school teacher. The grove is located in the latitude 06.120815"N and longitude 007. 300985"E. The sections of the deities were *Ekwo Omumu*, *Agwu*, *Ngwu*, *Ngene* and *Ajana*. These sections have functions and different sacrifices performed by the Chief Priest. For instance "Ekwo Omumu" According to an interview with the Chief Priest, is a place where women seeking for the fruit of the womb perform sacrifice. If the woman conceive and gave birth, the child is named "Udekwo", which means that Ekwo has answered their prayers. The totem animals were tortoise (Testudinidae), python (Pythonidea), black ash coloured snake (*Orime akpu*), and cobra (Serpentes). A festival is celebrated in honour of the Isiugwu deity annually on October after three native weeks outing of Ajana festival. The celebration lasts for four days.



**Figure 4.** The entrance of Isiugwu Sacred Grove (**Photo taken by the first author in September, 2021**) Source: Researchers, Fieldwork 2021.

## 2.1.3. Iyingwe Sacred Grove

Iyingwe sacred grove habour the chief shrine in Alum Inyi. The Chief Priest is Ezi Roland Atuadu, who was inaugurated in 2021 to replace late Chief Anyagbakoba, who died on January 2019. The shrine was represented by "Ube Mgba" (Canarium schwein-

*furthiiss*) and Ogirisi tree (castor oil bean)(*Ricinus communis*). The main grove is in Umuachaogu village, located at latitude 06.113678"N and longitude 007.284433"E. A branch is in Umuochie village square. The branch is called *Agwu ukwu* deity or *Odundu nwa Iyingwe located* at latitude 06.11774 "N and longitude 007. 28877 "E.

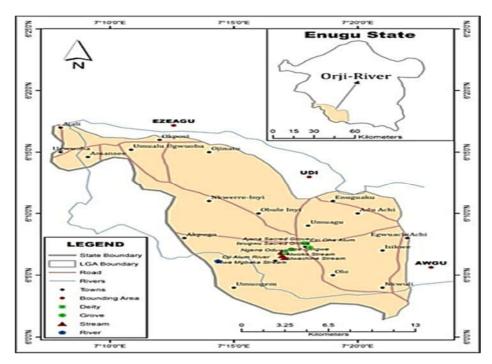
Iyingwe sacred grove has three streams; these includes; *Nwaomaocha, Ike Nwoko* and *Nwoko*. These streams were practically worshipped by the host communities. Tap water was circulated to the entire village from Nwoko and *Nwaomaocha* streams. Nobody kills the aquatic animals in the streams. Anybody that does performs sacrifice to the deity or face his wrath. Iyingwe grove has Monkey Sanctuary that habours Mono monkeys (Cercopithecus Mono). They are black and white in color with red lips and bare buttocks. Mono monkeys, tortoises, alligators, and pythons were totem animals in Iyingwe. The Inyi people call it "*Enwe Ike Nzu*" (Monkey with a bare buttock). These monkeys identify themselves with anybody from Alum Inyi.

Palm wine tappers tap palm wine in Iyingwe sacred grove because part of the area is swampy that grows thousands of raphia palms. Cultural materials were found inside the grove which include; potsherd, bodysherd and a macthet. The Iyingwe festivals come in two seasons. "Iyingwe Okochi" (dry season) and "Iyingwe Udummiri" (wet season). Iyingwe sacred grove habour some vegetables, economic trees and medicinal plants.



Figure 5: Mona Monkeys (Cercopithecus Monoa) (Photo taken by the first author in September, 2021).

Source: Researchers Fieldwork, 2021



**Figure 6:** Map showing the location of the three Sacred Groves Source: Researcher's Fieldwork 2021

#### 2.2. Ownership and Management Practices

The sacred groves, according to all of the respondents, are owned by the locals and held in trust by the Chief Priest. Traditional laws and taboos aid in the administration of the sites. Traditional rules support conservation by limiting activities within sacred forests [48]. The extraction of forest resources in the groves and its environment is strictly prohibited especially timber exploitation. Mature trees are cut with authorization to build a community hall (obu), but not for personal gain. This is consistent with Jagdale's findings (2021). Until they are necessary for religious activities, including temple construction and maintenance, worship, funeral rituals, and temple rites, sacred trees are not felled or hacked.

The three sacred groves have a direct and lasting religious significance, as well as contributing to society's social fabric. Due to modernization, the leaves and fruits could be collected but no harm should be introduced like uprooting them said the respondents. Some species were protected by totemic believe and living sacrifice. This was in agreement with the study of [52], they assert that species protection is secured using taboos, religious beliefs or by dedicating the species to one or more deities. The interview section, revealed that deities are offered cows, goats, sheep, and chickens as living sacrifices. They scavenge the sacred sites and villages. The totem animals and living sacrifices should not be killed or hurt in any way. If this occurs, you must bury them as human beings. The respondents mentioned that small animals like squirrels and birds could be hunted within the buffer zones.

Another management mechanism by the respondents was setting apart Eke day (second native day) as a special day for the worship of the deities by the devotees. In the morning of every Eke day, women among the worshippers help to keep the place neat. It is forbidden to get water from the streams from 4:00 p.m. on Nkwo day till the end of Eke day. It was also a taboo to kill any aquatic animals like fishes, reptiles etc. People do not enter the streams on foot wear.

In an interview with Chief Priests revealed that using the areas as toilet was highly prohibited. No one enters the groves with torch night. Only men enter the inner chamber of the three groves. The informants revealed that women were not appointed as Chief Priests by the gods. When pressed further, they stated that women are the weaker sex to act as their mouthpiece. Women during their menstrual cycle do not visit the sacred

groves, even to fetch water from the streams in Iyingwe sacred grove. If they do, they would face the wrath of the gods for defiling the ancestor. One of the elderly women interviewed said, "We cannot consult the gods directly; we have to pass our problems through our husbands".

However, non-members are not allowed by the ancestors to access the grove without permission from the Chief Priests. Such visitors are accompanied by the Chief Priest to offer sacrifices depending on the kind of problem sought. The sacrifices include sheep, goats or cows, fowl (pure black or white). With permission, tourists and researchers took photographs during the festivals. Death meets anyone that violates the taboos, restrictions, and bye laws that guide the groves.

## 2.3. Problems and Challenges Facing the Sacred Groves

The three sacred groves have shrunk in size, indicating that customary regulations governing the area are eroding or that people place less value on the area. There is evidence of encroachment within the three sacred groves. Residential buildings were very close to Ajana and Isiugwu Sacred Groves. Farmlands are seen close to the three groves. Despite the warning by town crier always, people still go on to farm around the groves. This resulted from the grove's lack of a clear boundary. The respondents said that the boundary is only known by the devotees. Secondly, towns were sparsely inhabited in the past, and there was plenty of space for farming, but that as the population has grown, people require more land to farm. In some part of the groves, the terrain are bushy and not maintained. This made some tourists to entertain fear in visiting the groves. [53], note that some of them are sometimes harmful as some visitors to those places in the past had complained of the harmful nature of such heritage sites. There is need for security check within and around the groves environment. Also during the ethnographic study, the researcher was denied access to some points for security reasons.

People sneak inside the groves area for timber lumbering without permission especially strangers. If the defaulters are caught they will pay a fine of N100, 000.00 and also meet the Chief Priest for cleansing. Erection of electric poles and power lines leads to cutting of tall trees in the sacred groves. Thus, urbanization and deforestation causes the disappearing of these sacred groves. As a result, visitors can freely access the grove. This supports the finding from the study by [47]. that urbanization is another cause of people encroaching on sacred groves. The three sacred groves were split during the investigation as a result of walkways, roads, and power line extensions, among other things. For instance, the Achi-Inyi tarred road demarcates Ajana Sacred Grove into two.

The three sacred groves are being destroyed as a result of agriculture, grazing pressure from a growing livestock population and fuel wood exploitation. During the dry season, numerous bushfires make it difficult to manage the sacred groves. People also use bush fires to clear land for cultivation and animal hunting. When offenders are caught, they are made to pay fine. The living sacrifices such as goats, sheep, cows, and hens or cocks that are dedicated to the deity roam about and litter the entire town. They become a menace to entire host communities and the groves since they can enter people's farms in search of food. During the dry season, the only supply of water is the streams, so they drink from them, contaminating the water and making it dangerous for humans to drink.

In an interview section with community leaders, a shift in aims has resulted in a complete lack of cooperation among community members. In the study area, the belief in a new religion has made the management of the area porous. The widespread of Christianity encourage erosion of the sacred groves. To them traditional belief system is fetish and mere superstitions. According to the respondents in the study by [11], the spread of new faiths, primarily born-again "Christianity," is the biggest threat to holy groves. These religions pose very serious risks to the survival of sacred groves. Some of them have the challenge of extinction and misinterpretation from the general public, hence hampering their relevance to the human society [53]. According to [11], the community's sacred grove was destroyed by religious extremists who believed their destiny was tied to the trees there. This was consistent with the findings of [54] in the district of Ohaji West in South Eastern

Nigeria, where religious fanatics had felled sacred trees on the pretext that the groves held the key to the youth's destinies.

Dead wood collection, tree lopping for timber and fuel wood, wild edible fruit collection, tender branch and green leaf fodder collection, and cow grazing are all examples of human activities that have intensified. People in the cities rely on the medicinal plants on these sacred groves, thereby putting pressure on these plants where they are easily seen. Some of the people debark and remove the roots of plants. How will such a tree survive? According to the aforementioned, this study agrees with [47] that one of the reasons why people invade sacred forests is poverty. This is in line with the findings of [3], who postulated that poverty in south-western Nigeria is an unfortunate circumstance that makes it impossible for sacred groves to thrive and be maintained. They assert that poor people who live adjacent to sacred trees would be compelled to loot the groves' resources in order to meet their fundamental household needs, such as fuel wood, vegetables, medicinal plants, etc.

## 3. Discussion

From the results in the study area, sacred groves are connected with their belief systems. This was evident in their management practices and characteristics. The groves have been conserved and survived against the forces of destruction due to the strong bond between sociocultural values attached to the sacred groves. In an interview wFrom the result, the sacred groves are not individually owned. It is a common property resource. The entire sacred groves have village square where the festivals and meetings in the communities are held. *Ikoro* gong in *Ajana* sacred grove shows unity in communication within the community; carved on demand by the god. Here the importance of the groves to the society was discussed. Secondly, the potentials of the sacred groves were discussed.

Religiously, in the study area, the sacred groves habour deities that are mediators between men and god. Sacrifices are made to appease the god through the shrines, which is a physical representative of the deity. The deity is for the well-being of the communities, families and individuals said the respondents. The Chief Priests emphasized that the deities are the secret behind the good agricultural produce they experienced every year in the study area. They also help the community members not to experience untimely death like accident. This was evident in setting out a special day of the week (Eke day) for the worship of the deities. The cultural objects found in the places of worship in the groves show an interaction between nature and religion. Hanged animal skin of antelope, goat, lion and cow in the reception center of Ajana signifies types of animals used for sacrifice. These are of interest to tourists.

To be at peace with the deities, totem animals were dedicated to them. Totemism means an image of. The totem animals in the groves were protected as the reincarnate of their forefathers. The host communities also believed that some living beings in their communities have the ability of changing into these animals, which killing of them is forbidden. When people see the totem animals especially the Mona monkey near their homestead they hail them by calling them exalted names like "Papa Nnukwu" or "Nnam Ochie" (meaning our grandfather or great grandfather). This shows the degree of honour they gave to these animals. No matter how we look at it, the ecological benefits remains that these animals are indirectly prevented from going into extinction. All the sacred groves have living sacrifices as goats, sheep, cows and hen/cock which roam around the community. Killing of any of them attracts the wrath of god because the living sacrifices represent human beings.

From an ecological standpoint, sacred groves in the study area acted as natural habitats for biological variety. They are regarded as scenic that provides pleasure to tourists and visitors. Bird watching is available in such areas. Tourists saw varieties of birds and their cry/sound brings the soul closer to nature. Animal species like giant squirrels which have disappeared from most parts of the communities are found in these sacred groves. Small farmers, herders, and hunter-gatherers depend on the diversity of species, genetic varieties, and ecosystem services for their livelihoods and cultural lives [8]. Protected areas provide a

breeding ground for birds that control insects and mammal pests on farmland [55]. This shows that the environment influences their worldview. The sacred groves are home to medicinal plants that are significant not only in village communities' primary health care but also in modern pharmacopeia. The ecological implications of these practices rest mainly on environmental protection and conservation. Interview with the Chief Priests revealed that this could be evident on the terrestrial name given to their deities that are perceived as representatives from the ancestral world. Iyingwe sacred grove has water bodies that promote purification and stabilization of the environment. In addition, the general use of oku (earthen wares) to feed the gods is a good example of the impact of ecology on the philosophy and life of Inyi people. The circulation of tap water to the entire villages by the government promotes community development.

Festivals set aside in honour of the deities unite the communities together. It was a time for renewing their covenant with the deities. Thanking the god for the bountiful farm harvest and protection throughout the year. The festivals draw sons and daughters of the land home. It is always groovy as there are lots of activities that feed the tourists eyes. There is always masquerade display, dancing troupes' performance and exchange of gifts. Special meals prepared include tapioca (ncha), rice, and fufu with oha soup. They gave part of the food to the Chief Priest to feed the god/ancestor before serving it to the visitors and friends. Traditional crafts like pottery plates, pots and bowels, local mats, hand fan, weaved bags; carved wooden mortar and pestle are displayed at the festival venue. Tourists and others buy the products as souvenir which when taking home reminds them of such visit. No serious farm work is done during the festival season. Men come out with special apparels and women took time to decorate their body with *uli* (indigo dye). The youths and children dress in good looking clothes. In the morning of the festivals celebration the Chief Priest performs sacrifices to his god and took time to pray for people. In the afternoon he moves to the arena (village square) for celebration with his entourage beating sweet drum. At times marriage proposals are done during the season as people looked different and beautiful. The festivals are glorious moment which attracts visitors and tourists from different places. This increased the standard of living of the host communities. People make sells of their farm produce and crafts at that period, thereby increasing the local economy.

For the host communities, the forest provides a source of income. Since the host communities rely on the presence of a healthy biota for their survival, the loss of these places poses a threat. People collect forest resources for consumption as well as selling for money. The forest is also a source of raw materials for the making of traditional crafts, etc. Palm wine is made from Raphia palms found in the Iyingwe Sacred Groves, is sold in the market and served on various occasions. People travel to Nkwo Inyi to purchase the authentic palm wine, *Ngwo*. Thus, the collection of forest resources helps to alleviate poverty and sustain their livelihoods. This improves food security in the town. Herbalists collect medicinal plants from the sacred groves, which they make money by administering medical help to their patient.

The streams are good places for the survival of aquatic plants and animals. *Uziza* (African pepper) (*Piper guineense*) and *Utazi* (*Goncronema latifolium*) leaves are like carpet grasses covering the entire place. These leaves are used as vegetables and condiments (when dried) during cooking. The streams are source of drinking water to entire communities and environs. The circulation of tap water to the entire villages by the government promotes community development.

### 3.1. Conserving the Potentials of the Sacred Groves for Tourism

Conservation is the protection of cultural property from decay and damage. From the findings, the area studied promotes conservation in spite of the challenges. The three sacred groves encourage cultural and eco-tourism. Both were service sectors that generate significant economic activity for the sites. Tourism will help to rehabilitate and preserve the sacred groves' cultural resources and values. The groves' flora and wildlife, religious rites, worship centers, the Mona monkey sanctuary, cool, cold water streams, aquatic animals, cultural objects, evergreen foliage, the groves' history, and festivals in honor of the deities all add to the locations' tourism potentials. The sacred groves have these unique tourism potentials that can absorb visitation. Harnessing them as tourist products is a good idea. Presently, there is no tourism development going on in the area. Tourist visit the groves and use tourism services within the Inyi town which are close by.

However, the following factors influence the choice of potential tourism resources for development: they must be known beyond the host or local community; they provide experiences that can be consumed; they are unique and interesting; they are robust and therefore can absorb visitation; they are accessible and they are close to a large population or a major tourism destination or gateway to a major city or cities [56]. The sacred groves in the study area are known beyond Inyi town. Tourists travel far and near to consult the deities and also witness the festivals. The groves are situated within the center of Inyi town and close to urban centres like Oji, Enugu and Anambra urban areas. The three groves are accessible by road. An international tourists enters aircraft from Lagos (45min.) to Enugu airport then with a car to Inyi town. Inyi town has basic infrastructures like good tarred roads and power supply. There are good hotels where tourists that visit the groves could go and relax. There is communication network everywhere in Inyi town. Boreholes with tap water are all around the town. The study area has numerous rivers and streams that serve as recreational area as they visit the groves. For instance, Iyingwe sacred grove is close to Oji Alum river, tourists usually go there to watch wonders of nature. To cap it all, Inyi people are known for their hospitality. They have different dishes that attracts tourists and visitors to think of coming next time.

[57] also suggested that the development of the tourism industry had to be ensured by the three following factors such as economic sustainability: creating the prosperity to all levels of the society and achieving the performance value for all economic activities; social sustainability: respecting human's rights and equality for all people; environmental sustainability: protecting and managing the resources, especially the non-renewable resources, and valuable ones for human's life. [58] Confirmed that it was impossible to study the system of tourism by each of its separated components to develop the sustainable tourism. Sustainability implies permanence, optimum use of resources, including biological diversity; minimization of ecological, cultural and social impacts; and maximization of benefits for conservation and local communities [42]. It is the process of development that satisfies the needs of the present and future generations. For [33], sustainable development is "development that usually meets with the needs of the present generations and not jeopardizing the future of generations' ability to meet their own needs," according to the Brundtland Commission's study. The environment, being the major source of tourist product, should therefore be protected in order to have further growth of tourism and economic development in the future. According to [59], the concept of sustainable development is regarded as the guiding principle to develop policies from local to national levels. Policies aimed at enhancing people's economic and social well-being should not damage the environment, according to the concept [33].

Tourism planning requires sustainability because its growth usually brings increasing pressure on the natural, cultural and socio-economic environments of the destination [42]. The sacred groves under study should be harnessed as cultural and eco-tourism sites. Mass tourism is not good for tourism development on these sacred groves. [60], notes that initiation of mass tourism in environmentally fragile or protected areas is neither desirable nor legally feasible. Mass tourism activities has contributed to environmental degradation and loss of the socio-cultural milieu of many destinations once regarded as pristine and serene [61].

Policies are primarily developed as a mechanism for managing the tourism industry's growth. The thrust of the National Tourism Policy is to establish sustainable tourism by leveraging heritage diversity as the foundation for marketing and promoting domestic and international tourism within the confines of the World Tourism Market, and to place

Nigeria as a major tourist destination in Africa through international tourism development and domestic tourism promotion. Nigerians will be encouraged to spend their vacations in Nigeria. Sustainable tourism is tourism attempting to make as low impact on the environment and local culture as possible, while helping to generate future employment for local people [62].

Many tourists like to experience another culture apart from their own. Each grove's history depicts the reality of the area under investigation from a wider perspective. Tourists enjoy the stories and, on sometimes, bring a tape recorder to record them. People travel far and near to consult the groves deities. The host communities believed the deities protect them amid calamities.

The documentation could be used in comparing such culture from another culture. The sacred groves has a unique tourism potentials that characterise culture of a particular group of people.

The monkey sanctuary attracts visitors and tourists, whose species, Cercopethecus mona mona, were only found in Iyingwe sacred grove in Alum Inyi. The monkeys were still well protected from harm or death, even with the new Christian/Islamic religion. If you kill any of them, you will face the consequences. In observation, the mother monkeys carry their young ones on their bellies. Tourists take delight in watching these monkeys and the entire groves. Other animals like birds, squirrels, and rabbits are seen too. The sacred groves are seen as a natural zoo, which attracts adventure tourists. Tourism exposes the sacred sites to funding and conservation support. For [63], tourism offers individuals with an alternate and/or supplemental means of living, which encourages them to conserve a resource.

Tourists are attracted to the cultural elements found in sacred groves and shrines. Pottery products, cowries, and coloured clothes found give information to tourists. Osu and Ofo Ajana are two good cultural materials that attract the curiosity of tourists. *Osu* Ajana are effigies that represent the nine villages in Inyi. An effigy is a crude representation of a person, group, or object. Tourists see the "Ofo" tree, which is very rare in Igboland and was only identified in the Ajana grove in Inyi.

During their visits, tourists are exposed to a variety of new plants and animals. This broadens their understanding. With the approval of the Chief Priest, tourists were allowed to take some fruits home with them as a reminder of their visits. The uniqueness of flora for touristic attraction has been confirmed recently elsewhere by Wuerthner and Hang et al., as previously highlighted by Cobbina et al., in Ghana [64]–[66]. Since fishing and collecting aquatic animals from the water bodies are prohibited, it satisfies tourists' eyes. Different types of birds are found flying everywhere. The sacred groves are good for bird watching. This view was what some tourists admired most, watching the variety of birds. Tourists watch the birds early in the morning, about 6 a.m., when they come to search for food. It makes them easier to find and observe.

The festivals attract both local and international tourists. There are activities like masquerading, drumming, and cultural dance performances. Inyi people who live in different parts of the country return home for the festival. During the celebrations of these festivals, products are always in demand. There is a lot of fanfare as people relax and make merry with their friends and relatives. It offers opportunity for participant observation. For instance, prices of goods are always high during the preparation and celebration of these festivals. Both the festivals and other ceremonies are held at the village square.

In an interview, the researchers asked the respondents "Would you encourage the groves development as a tourist centre"

"They answered yes, that tourism development would create the economic opportunities they are looking for by boosting the local economy they emphasized that it will raise the standard of their living and offers job opportunities to them. It also exposes the study area globally and brings infrastructural development"

Therefore, the implication is that harnessing the sacred groves for tourism is a good option for the sustainability. Traditionally and over the past two centuries, sacred groves have experienced environmental protection via cultural belief, byelaws and occasionally

external scientific or management interventions from NGOs and International Organizations such as GACON and UNESCO under CIPSEG Project of 1992 [67]. Therefore, tourism can contribute to the groves preservation and development as a sustainable destination by developing them as tourism sites. The groves studied should be developed as cultural and eco-tourism. Ecotourism helps in community development by providing the alternate source of livelihood to local community which is more sustainable. Cultural tourism creates an avenue where tourist's visit to witness cultures of a destination in another area of interest. Some of these cultural festivals are held to enlighten and teach the younger generation the valor and selflessness of their forebears in ensuring the progression of the society [39]. The sacred groves studied have features that could feed the different types of tourism.

#### 3.2. Recommendation and Conclusion

In the study area, the three sacred groves have substantial features and marketable tourist potentials that are viable for tourism development. This ranges from the vegetation to the cultural observances and performances. The researchers suggest a round-table discussion by the stakeholders for effective development and management of the sacred groves for eco-tourism in the study area. The stakeholders here are the host communities, tourism experts, and government officials at all levels. It is essential to involve all stakeholders, and particularly the local community members, in the planning process for sustainable tourism. Without their help, no sustainable tourist business can succeed.

Stakeholders are participants in a decision-making process. Any strategy for managing three sacred groves should engage them at all stages. In an organization, a stakeholder is a person or group that has the potential to influence or is impacted by the accomplishment of the organization's goals [68]. An awareness campaign targeting other relevant stakeholders would go a long way towards strengthening the sustainability of the sites in the study area. This category involves the local school students (primary and secondary) within the area. The programmes will help people understand the importance of harnessing the area for tourism. Such publicity could be in the form of workshops, seminars, adverts, radio jingles, billboards, the internet, handbills, or documentaries. The publicity also brings potential tourists.

Even though many enter the groves, very few of them penetrate the inner sanctuary of the sacred grove. One of the respondents said that it helps to protect the area from deterioration. The visitors to the shrine are restricted from entry to some points in the shrine. However, limitations on some places, notably for women, need to be loosened for tourism to succeed. For security of the area, warning signals either verbal or written should be made available to protect human encroachments to such points. Tourists must be guided through the area's landscape by a qualified guide. Each sacred grove should have a signboard with the rules and regulations posted at the entrance.

The government should provide the financial support needed for the tourism development in these sacred groves. Since the present conditions of the sacred groves have been assessed, the encroached areas should be recovered through local community initiatives. In harnessing the area for tourism, the sacred groves should be surveyed to show a clear boundary. Barb wires with pillars should be used to demarcate the area from the rest of the forest, the buffer zones should be mapped. Some specific areas like Monkey Sanctuary should have direction. However, when the boundary is set, it will help to reduce the encroachment. In safeguarding the life of the tourists and sites, security guard has to be employed. Security is a vital components that gives the tourism industry the desired cover especially when considering the life of tourists [69]. They suggest that for foreign tourists to visit Nigeria, the security force that is the Nigerian Police Force, has a crucial role to play in promoting tourism by getting rid of violent crimes and armed robbery.

The native taboos should be integrated with contemporary norms while building tourist destinations. For the management and documentation, the officials from the tourism board should team with locals in organizing the festivals in honour of the deities. The

festivities should take place on a specific day not alternating it. The history and cultural artifacts uncovered within the environment of the three groves should be documented and kept in an ethnographic museum. One invests in tourism by building the infrastructure necessary for the sector's expansion. The key element in promoting the industry's growth is its infrastructure, which consists of public transportation, amusement parks, and related services. Thus, to protect the sacred groves and yet make the visitor experience more meaningful, well-designed tourist facilities should be built for the comfort of the tourists and visitors.

In sacred areas where some level of tourism development is appropriate, guidelines for sustainable tourism are needed. Guidelines help to combat the potential errors associated with a rapid pace of development and help to defend the protected areas from the variety of pressures that can damage them [70]. Protecting the environment and achieving successful tourism development are inseparable

The researchers also suggest that a well-focused promotion and marketing policy should be implemented that would embrace tourism development in the sacred groves. To enable the tourism industry to make the largest possible contribution to the Nigerian economy, such policies and programs must emphasize the importance of the sector in terms of wealth creation, individual initiative, self-gainful occupation, conducive operating environment, and dynamic competitiveness [69]. Although ecotourism provides enormous socioeconomic benefits, it is disappointing that the industry currently receives little attention when formulating and coordinating federal and state fiscal policies. This has led to the decline of several protected areas, most notably forest reserves, national parks, game reserves, and sanctuaries [69].

Conclusively, the groves have exceptional tourism potentials. They should be developed as cultural and eco-tourism sites. The sacred groves play an economic, religious, socio-cultural, health, psychological, and educational roles to the host communities and society at large. Tourism development in the three study sites will create job opportunities, increase local income, protects their culture, structural transformation and brings infrastructural development to the host communities and Inyi town in general. In Nigeria, tourism has the potential to absorb a high percentage of teeming millions of people who are not gainfully employed [69]. The tourism development to the sacred groves will bring global recognition to Inyi town. As a result, utilizing the area for tourism is a superior conservation alternative. Thus, tourism is perceived as a strategic medium for cultural and traditional heritage promotion in the international arena by bringing the custodian country to the international limelight.

## References

- [1] S. Singh, M. Youssouf, Z. A. Malik, and R. W. Bussmann, "Sacred Groves: Myths, Beliefs, and Biodiversity Conservation-A Case Study from Western Himalaya, India," *Int. J. Ecol.*, vol. 2017, p. 12, 2017, doi: 10.1155/2017/3828609.
- [2] D. Monteiro and M. S. Dayanand, "Development of a Tourist Attraction-A Case Study of the Sacred Grove, Holiyechirai in Goa," *Int. J. Eng. Manag. Res. Page Number*, vol. 6, no. 5, pp. 372–382, 2016, [Online]. Available: www.ijemr.net.
- [3] O. J. Oyelowo, A. M. Aduradola, S. A. Onadeko, and D. A. Agboola, "Socio-Economic Contribution of Selected Sacred Groves in South-Western Nigeria," *Int. J. Nov. Res. Civ. Struct. Earth Sci.*, vol. 1, no. 1, pp. 36–45, 2014.
- [4] E. V. A. Wahu, "Assessing Contribution of Sacred Natural Sites to Climate Change Effects on Dryland Ecosystemcase Study: the Gabbra Community, Marsabit County," University of Nairobi, 2017.
- [5] S. G. Gawade *et al.*, "Plant Diversity in Sacred Groves of Dapoli: A Comparative Study of Four Life Forms," *Int. J. Curr. Microbiol. Appl. Sci.*, vol. 7, no. 12, pp. 2502–2520, 2018, doi: 10.20546/ijcmas.2018.712.285.
- [6] P. E. Jagdale, "Role of sacred groves in conservation of Biodiversity," J. Emerg. Technol. Andin. Res., vol. 8, no. 9, pp. 721–728, 2021.
- [7] M. L. Khan, A. D. Khumbongmayum, and R. S. Tripathi, "The sacred groves and their significance in conserving biodiversity an overview," *Int. J. Ecol. Environ. Sci.*, vol. 34, no. 3, pp. 277–291, 2008.

- [8] A. B. Kumar, "Sacred groves and biodiversity conservation," Nat. Resour., vol. 34, no. 4, p. 54, 1998.
- [9] A. Ormsby, "Perceptions of Tourism at Sacred Groves in Ghana and India.," *Recreat. Soc. Africa, Asia Lat. Am.*, vol. 3, no. 1, pp. 1–18, 2012.
- [10] P. J. Fargey, "Boabeng-Fiema Monkey Sanctuary-An Example of Traditional Conservation in Ghana," *Oryx*, vol. 26, no. 3, pp. 151–156, 1992, doi: 10.1017/S0030605300023589.
- [11] C. Nlemuonwu, E. U. Philip, and A. A. Obafemi, "Perceived Ecological Relevance of Sacred Groves in Omuma Local Government Area of Rivers State, Nigeria," *Am. J. Soc. Humanit. Res.*, vol. 3, no. 5, pp. 73–88, 2022.
- [12] N. I. Sinthumule, T. Mugwena, and M. Rabumbulu, "The Conflict between Preserving a 'Sacred Natural Site' and Exploiting Nature for Commercial Gain: Evidence from Phiphidi Waterfall in South Africa," Sustainability, vol. 13, p. 10476, 2021.
- [13] J. Bulkan, "Social, cultural and spiritual needs and values.," in *Sustainable Forest Management: From Concept to Practice*, J. Innes and A. Tikina, Eds. Earthscan, 2017, pp. 241 256.
- [14] B. M. Tiimub *et al.*, "An Exploration of the Tourism Values of Northern Ghana . A Mini Review of Some Sacred Groves and Other Unique Sites," *J. Tour. Sport. Manag.*, vol. 4, no. 1, pp. 568–586, 2021.
- [15] C. Rutte, "The sacred commons: Conflicts and solutions of resource management in sacred natural sites The sacred commons: Conflicts and solutions of resource management in sacred natural sites," *Biol. Conserv.*, vol. 144, no. October, pp. 2387–2394, 2018, doi: 10.1016/j.biocon.2011.06.017.
- [16] T. B. Nganso, R. Kyerematen, and D. Obeng-Ofori, "Review of Biodiversity in Sacred Groves in Ghana and Implications on Conservation," *Curr. Trends Ecol.*, vol. 3, no. 24-27 March, pp. 1–10, 2008.
- [17] F. Mgumia and G. Oba, "Potential role of sacred groves in biodiversity conservation in Tanzania.," *Environ. Conserv.*, vol. 30, no. 3, pp. 259–265, 2003.
- [18] G. B. Adesiji and F. D. Babalola, "Sacred forests: Indigenous knowledge and cultural beliefs for conservation of forests in Ifo Local Government Area of Ogun State, Nigeria. African," *J. Sustain. Dev.*, vol. 2., no. 1, pp. 117-134., 2012.
- [19] J. Liljeblad and B. Verschuuren, *Indigenous Perspectives on Sacred Natural Sites: Culture, Governance and Conservation*, 1st ed. Routledge, 2019.
- [20] B. Verschuuren, R. Wild, J. McNeely, and G. Oviedo, *Sacred Natural Sites: Conserving Nature and Culture*, 1st ed. Washington, DC: Erthscan, 2010.
- [21] K. S. Daniel, A. U. Udeagha, and D. E. Jacob, "Socio-Cultural Importance of Sacred Forests Conservation in South Southern Socio-Cultural Importance of Sacred Forests Conservation in South Southern Nigeria," *African J. Sustain. Dev.*, vol. 6, no. 2, pp. 252–268, 2016.
- [22] S. Adeyanju *et al.*, "Drivers of biodiversity conservation in sacred groves: A comparative study of three sacred groves in southwestern Nigeria," *Preprints*, no. September, pp. 1–19, 2021, doi: 10.20944/preprints202109.0001.v1.
- [23] S. A. Bhagwat and C. Rutte, "Sacred groves: potential for biodiversity management. Frontiers," *Ecol. Environ.*, vol. 4, no. 10, pp. 519-524., 2006.
- [24] T. G. Yusuf, "A micro analysis of tourists, other participants and tourism activities at Osun Osogbo Sacred Grove, Nigeria.," *J. Econ. Sustain. Dev.*, vol. 7, no. 7, pp. 96–104, 2016.
- [25] G. . Osegale, E. . Omisore, and J. T. Gbadegesin, "Exploratory survey on the maintenance of Osun-Osogbo sacred grove, Nigeria.," *African J. Hosp. Tour. Leis.*, vol. 3, no. 2, pp. 1–22, 2014.
- [26] O. O. Oyeleke, B. G. Ogunjemite, and N. A. Ndasule, "Assessment of collaborative and multi-level management of Osun Osogbo Sacred Grove, Nigeria: A world heritage site," *Int. J. Dev. Sustain.*, vol. 6, no. 7, pp. 439–450, 2017.
- [27] A. Ogundiran, "The Osun-Osogbo grove as a social common and an uncommon ground: An analysis of patrimonial patronage in postcolonial Nigeria.," *Int. J. Cult. Prop.*, vol. 21, no. 2, pp. 173–198., 2014.
- [28] F. O. Adigun, F. Abolade, and D. I. Adegboye, "Patronage pattern of Idanre Hills as eco-tourism centre.," *Res. Humanit. Soc. Sci.*, vol. 6, no. 12, pp. 35–42, 2016.

- [29] J. C. Oyekwelu and J. A. Olusola, "Role of sacred grove in in-situ biodiversity conservation in rainforest zone of southwestern Nigeria.," *J. Trop. For. Sci.*, vol. 26, no. 1, pp. 5–15., 2014.
- [30] Z. Ziegler, "Jachie and Jaagbo Groves of Ghana.," Sacred Land Film Project., Ghana, 2019.
- [31] C. Osei-Bonsu, "CEO Ghana Tourism Authority: Interview Tourism chapter from The Report: Ghana 2016. UNESCO World Heritage Centre. Mole National Park.," 2016.
- [32] B. O. Adetola, O. Olaniyi, and C. O. Olojede, "Impacts of Tourism on Host communities of a Proposed World Heritage Site: Idanre Hills in Ondo State, Nigeria Impacts of Tourism on Host communities of a Proposed World Heritage Site: Idanre Hills in Ondo State, Nigeria," *African J. Agric. Technol. Environ.*, vol. 9, no. 1, pp. 145–159, 2020.
- [33] N. E. Napoleon, "Tourism Development in Nigeria: Issues and Challenges," Glob. Sci. J., vol. 9, no. 7, pp. 3529–3542, 2021.
- [34] B. McGuigan, "The Definition of a Leisure Traveler.," *Travel Tip, Leaf Group*, 2018.
- [35] N. Dabour, "Problems and Prospects of Sustainable Tourism Development in the OIC Countries: Ecotourism," *J. Econ. Coop.*, vol. 24, no. 1, pp. 25–62, 2003, [Online]. Available: http://www.sesric.org/files/article/127.pdf.
- [36] M. B. Bicknell, R. S. A. Collins, N. P. Pickles, C. R. McCann, and E. al. Bernard, D.J., "Designing protected area networks that translate international conservation commitments into national action.," *Biol. Conserv.*, vol. 214, pp. 168–175, 2017.
- [37] B. M. Tiimub, R. A. Kuffour, R. W. Tiimob, C. A. Kuuyeni, E. L. Tiimob, and E. N. Tiimob, "Sacred groves as potential ecotourism sites at Tolon and Diare in Northern Region, Ghana," *J. Sustain. Tour. Entrep.*, vol. 1, no. 3, pp. 195–215, 2020.
- [38] S. W. Dejene, H. Seyoum, and R. U. Ready, "Ecotourism Potential and its Role for Sustainable Development and Livelihood in Awash National," *Int. J. Sci. Res.*, vol. 3, no. 12, pp. 792–796, 2014.
- [39] F. Alisa and Z. Ridho, "Sustainable Cultural Tourism Development: A Strategic For Revenue Generation in Local Communities," J. Econ. Trop. Life Sci., vol. 4, no. 2, pp. 47–56, 2020.
- [40] B. Chrysanthi, P. Panoraia, and L. Dimitrios, "Religious Tourism in Greece and regional development: The case of Samos Island," in 55th Congress of the European Regional Science Association: "World Renaissance: Changing roles for people and places", 25-28 August, 2015, pp. 1–26.
- [41] K. Rejman, P. Maziarz, C. A. Kwiatkowski, and M. Haliniarz, "Religious tourism as a tourism product," *World Sci. News*, vol. 57, pp. 562–575, 2016.
- [42] T. A. Monisola, "Harnessing Tourism Potentials for Sustainable Development," J. Sustain. Dev. Africa, vol. 14, no. 1, pp. 119–133, 2012.
- [43] M. M.-N. Ndanusa, Ih. Yoshifum, and I. Md. Aminul, "Challenges to Growth in Tourism Industry of a Developing Country: The Case of Nigeria," *Asian Soc. Sci.*, vol. 10, no. 19, pp. 282–290, 2014, doi: 10.5539/ass.v10n19p282.
- [44] R. Johnson, "Identifying competitive strategies for successful tourism destination development.," *J. Hosp. Leis. Mark.*, vol. 31, no. 1, pp. 37–45, 2001.
- [45] N. Paresashvili and T. Maisuradze, "Destination Management Role in Develoing Tourism in Georgia," *Int. Sci. Pract. Conf.* "World Sci., vol. 4, no. 8l, pp. 46–50, 2016.
- [46] D. U. Okure, "Destination Management Organizations As The Missing Link In Nigeria's Tourism Development," ZIKJournal Multidiscip. Res., vol. 4, pp. 70–82, 2021.
- [47] I. C. Ezekwe, V. O. Wekpe, and S. Nwaogu, "Remnants of the Old Stock: A Review of the Physical Conditions and Threats to Sacred Natural Sites in Etche South-South, Nigeria.," *J. Geogr. Thought Environ. Stud.*, vol. 13, no. 1, pp. 31–47, 2015.
- [48] A. Ormsby, "Analysis of local attitudes toward the sacred groves of Meghalaya and Karnataka, India," *Conserv. Soc.*, vol. 11, no. 2, pp. 187–197, 2013, doi: 10.4103/0972-4923.115722.
- [49] A. Garg, "Typology of sacred groves and their discrimination from sacred sites.," *Curr. Sci*, vol. 104, pp. 596-599. Gerdén, 2013.
- [50] M. J. . Sheridan, "The environmental and social history of African sacred groves: a Tanzanian case study.," *Afr. Stud. Rev.*, vol. 52, no. 1, pp. 73–98, 2009.

- [51] G. Poreku, "Sacred Groves and Biodiversity Conservation in the Tolon District, Northern Region, Ghana." United Nations University Land Restoration Training Programme [final project] http://www.unulrt.is/static/fellows/document/Poreku2014, pp. 1–44, 2014.
- [52] J. C. Onyekwelu and J. A. Olusola, "Role of sacred grove in in-situ biodiversity conservation in rainforest zone of southwestern Nigeria," *J. Trop. For. Sci.*, vol. 26, no. 1, pp. 5–15, 2014.
- [53] E. A. Nwankwo and M. U. Agboeze, "Safety Issues at Selected Shrines / Sacred Groves in Eastern Nigeria," *Int. J. Asian Soc. Sci.*, vol. 6, no. 1, pp. 2226–5139, 2016, doi: 10.18488/journal.1/2016.6.1/1.1.80.92.
- [54] G. . Chima, I. . Ezekwe, C. . Ogbonna, and P. . Inya, "Cultural manifest and latent ecological uses of sacred groves in the Ohaji West Area of Imo State, Nigeria," *J. Assoc. Archit. Educ. Niger.*, vol. 2, no. 2, pp. 126–132, 2009.
- [55] B. Makimilua Tiimub, R. Amankwah Kuffour, R. Wonnsibe Tiimob, C. Ankrah Kuuyeni, E. Laatman Tiimob, and E. Nyannube Tiimob, "Sacred groves as potential ecotourism sites at Tolon and Diare in Northern Region, Ghana," *J. Sustain. Tour. Entrep.*, vol. 1, no. 3, pp. 195–215, 2020, doi: 10.35912/joste.v1i3.244.
- [56] P. U. Okpoko, E. E. Okonkwo, and C. Diminyi, *Understanding Tourism*, First Edit. Nsukka: University of Nigeria Press Limited, 2008.
- [57] H. X. Phan and V. T. Vo, "Some issues for sustainable tourism development in Vietnam.," *Sci. J. Van Lang Univ.*, vol. 5, pp. 21–32, 2017.
- [58] Mai. V. T, "Systems thinking approach as a unique tool for sustainable tourism development: a case study in the cat ba biosphere reserve of Vietnam.," *Proceedings of the 54th Annual Meeting of the ISSS, Waterloo.* Canada., pp. 1-19., 2010.
- [59] M. Mrkša and T. Gajić, "Opportunities for sustainable development of rural tourism in the municipality of vrbas.," *Econ. Agric.*, vol. 61., no. 1, pp. 163–175, 2014.
- [60] J. Urry, "The Tourist Gaze: Leisure and travel in contemporary societies, theory, culture & society." Sage, London, 1990.
- [61] D. Datta and S. Banerji, "Local tourism initiative in an eastern Himalayan village: sustainable ecotourism or small-scale nature exploitation?," *Bull. Geogr. Socio-econimic Ser.*, vol. 27, no. 27, pp. 33–49, 2015.
- [62] A. Oloidi, "National Tourism Polict in Nigeria: Issues and the Way Forward.," in Beyond Rhetoric and Idealism: Propelling a Pragmatic and Sustainable Tourism Industry in Nigeria. 4th Biennial Multidisciplinary Conference Proceedings of the Association for Tourism Development in Nigeria (ATDiN), 2020.
- [63] A. Ormsby, E. Studies, and E. College, "Perceptions of Tourism at Sacred Groves in Ghana and India," *Recreat. Soc. Africa, Asia Lat. Am.*, vol. 3, no. 1, pp. 1–18, 2012.
- [64] G. Wuerthner, "Preserve the sacred lands of the Greater Yellowstone Ecosystem.," The Wild life News., 2020.
- [65] W. Hang, L. Lee Saiful, and A. Abdullah, "Framework to develop a consolidated index model to evaluate the conservation effectiveness of protected areas.," *Ecol. Indic.*, vol. Volume 102, no. July, pp. 131–144, 2019.
- [66] R. P. Cobbinah, R. Black, and R. Thwaites, "Biodiversity conservation and livelihoods in rural Ghana: Impacts and coping strategies.," *Environ. Dev.*, vol. 15., pp. 79–93, 2015.
- [67] [United Nations Environment Programme] UNEP, "Keeping Track of Our Changing Environment: From Rio to Rio+20 (1992–2012). Nairobi: United Nations Environment Programme." 2012.
- [68] O. Geiger, "The impact of stakeholder relations on the sustainability of tourism development: An Indonesian Case Study,"
  The Arctic Unniversity of Norway, 2017.
- [69] A. S. Bankole and G. Odularu, "Achieving the Millennium Development Goals: issues and options for the Nigeria's tourism industry Opiniones y ensayos," *PASOS*, vol. 4, no. 3, pp. 429–436, 2006, doi: 10.1108/eb058468.
- [70] P. F. J. Eagles, M. E. Bowman, and T. C.-H. Tao, *Guidelines for Tourism in Parks and Protected Areas of East Asia IUCN The World Conservation Union*. Canada: IUCN, Gland, Swizerland and Cambridge, UK, 2001.