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Decolonial Perspectives on Environmental Degradation and Yoruba Indigenous Religious Practice in Nigeria

[a*]Samuel Babalola [b]Goodness Ayokunle

[a]University of Ibadan, Nigeria, West Africa
[b]University of Ibadan, Nigeria, West Africa

*Correspondence: sambabalola612@gmail.com

Abstract

Climate change and environmental degradation in southwestern Nigeria pose an existential threat to the ecological matrix at the heart of Yoruba indigenous religious practice, a knowledge system that colonial modernity has long marginalised, pathologised, and dispossessed. Trees and forests, rivers, and arable land are not merely material assets but sacred milieus, home to Orisa (deities) and ancestral spirits, constituting an indigenous cosmology that encodes centuries of ecological stewardship. This paper interrogates the compounding risks to foundational Yoruba religious life, including wood-carved shrines, iconographic sculptures, harvest-related offerings, and riverine rituals through a critical analysis of anthropogenic deforestation driven by extractive commercial timber economies, altered precipitative regimes (droughts and floods), and riverine pollution and desiccation. Drawing on recent empirical research and field surveys, this study documents the declining availability of high-quality hardwoods essential to shrine and sculptural production, the disruption of planting seasons by erratic rainfall, and the existential threats confronting river deities such as Osun as water volumes recede and pollution intensifies. Crucially, the paper centres indigenous responses as forms of decolonial agency: sacred groves and their associated taboos, long functioning as indigenous conservation mechanisms, are positioned here not as relics but as living epistemic resources threatened by colonial and postcolonial land-use regimes. The paper further engages contemporary cultural revitalisation efforts, including the UNESCO listing of the Osun-Osogbo grove as ambivalent sites where indigenous sovereignty and external institutional recognition converge and sometimes conflict. The paper argues that the sustainability of Yoruba religious and ecological life demands not merely technical conservation but the decolonisation of environmental governance itself, centring traditional ecological knowledge as an authoritative framework rather than a supplement to Western conservation paradigms.

Keywords: Climate Change, Yoruba Religion, Indigenous Knowledge, Decolonial Ecology, and Deforestation.

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Introduction

The indigenous religion of the Yoruba in southwestern Nigeria is also strongly connected to the natural environment. It educates that aspects of nature, like forests, rivers, and winds, are populated by *Orisa* (deities) and ancestral spirits, recommending the custodianship of nature by taboos and rituals (Ogunade, 2009). As an example, sacred groves (*igbó ẹbọra*) are tabooed: members of a community are not supposed to cut down trees or pollute waters in shrine forests because they might suffer spiritual punishment. According to Adewoyin et al. (2020), water is also seen as the centre of good health in the traditional Yoruba worldview and has to be worshipped as a means of preventing disasters like droughts or floods. This environmental ethic has long been used to protect biodiversity in Yoruba territories, and the *Osun-Osogbo* Sacred Grove remains an example of a place where environmental ethics are still practised (Adewoyin et al., 2020).

The close connexion between Yoruba ecology and spirituality is a mirror of the worldview in which nature is not regarded as a lifeless matter but a living, divine force. Even the soil is seen as a bearer of godliness because trees, rivers, animals and even the soil carry the presence of god (Amanze, 2024). According to Ogunade (2009), it was these cosmological beliefs that led to the development of elaborate taboos and ritual practices, which served consciously or unconsciously as a means of conservation. In this respect, over the centuries, Yoruba religion has been an informal institution of environmental management, community solidarity, protection of forests and rivers, and the delicate balance of human society and nature.

Modern environmental transformation, especially climate change and intensive land use, now threatens the physical basis of these practices. According to Adeyemi and Oyinloye (2020), weather forecasting and meteorological agencies, Southwest Nigeria (the Yoruba-speaking region comprising Oyo, Osun, Ogun, Ondo, Ekiti and Lagos states) is facing an increase in erratic rainfall, extended droughts, and severe downpours. Such changes are debilitating rain-fed agriculture, rising river pollution and fuel and development-induced deforestation. Regions that were seen as divinely safeguarded are subject to increased degradation, which directly challenges indigenous religious traditions (Adeyemi and Oyinloye, 2020).

The expressions of the culture of the Yoruba people are highly evident in the festivals and rituals, which are inseparably bound to natural environments. As an example, the Osun-Osogbo annual festival honours the river god *Ọṣun* through drumming and ritual sacrifices in the Osun sacred grove. Such activities take place in a wooded grove that has been declared a UNESCO World Heritage site, where the process of cutting down trees or polluting the riparian environment is strictly forbidden (Ogunfolakan et al., 2016).

The Yoruba environmental ethic, which views nature as a living, divine force inhabited by orisha (deities) and ancestral spirits, exemplifies a relational ontology that emphasizes human responsibility as stewards or "tenants" within a sacred, interconnected cosmos (Ogunade, 2009; Bewaji, 2021). This perspective aligns with and contributes to global decolonial scholarship on Indigenous religions and the environment, where relational worldviews challenge colonial legacies of anthropocentric domination, extractivism, and dispossession of sacred landscapes (Avalos, 2024; Hernandez, 2023; Whyte, 2018). In many

Indigenous contexts worldwide—such as Native American/First Nations kincentric ecologies or other place-based traditions—sacred sites, taboos, and spiritual reciprocity serve as mechanisms of resistance and conservation, countering Western utilitarian approaches to nature (Kimmerer, 2013; Todd, 2017).

Although the Yoruba religious traditions are well documented in scholarly literature and much has been written looking at the issue of environmental degradation in Nigeria, the issue of climate change and ecological decline is redefining the nature of Yoruba religious practice in the current times, and few works have systematically explored this. This paper fills that gap by synthesising a combination of empirical data on environmental shift with its cultural consequences, thus shedding light on the adaptive capacity of indigenous customs.

This study explores how environmental degradation undermines the Yoruba religious life in three major processes: (1) loss of sacred timber, which is caused by logging practise and thus making wood rare in traditional carvings; (2) disruption of agricultural activities, whereby changes in rainfall patterns inhibit production of crops that support religious practises and offerings; and (3) disruption of watercourses which include: desiccation, pollution, and diminished flow in rivers worshipped by gods such as Osun. Young empirical research in climate and forestry and ethnographic description inform the analysis of the impact that it has on Yoruba Orisha festivals, shrines, and community practice. The paper also analyses adaptive strategies used by the Yoruba communities and suggests policy interventions that would protect the environment and the religion it supports, where it is appropriate.

Placing the Yoruba religious practice into a larger context of climate variability and ecological degradation, this study demonstrates how environmental change not only shifts tangible landscapes but also reorganises cultural and spiritual spaces. The paper also highlights the need to harmonise aboriginal ecological knowledge with modern conservation policy, hence securing the conservation of biodiversity and culture for the next generation.

Yoruba Religion and Ecology

Yoruba religion and ecology are interwoven such that neither can be properly understood without the other. In Yoruba cosmology, the natural world is not viewed as a passive context within which human action is enacted, but as a vital sacred reality wherein are divine and ancestral forces (Olabimtan, 2025). Trees, rivers, rocks, animals, winds, and even the soil are all constituted as the abode of Orisa (gods) and spirits who are proactive in determining the fate of human beings, thus creating a duty to human beings to treat the environment with respect, observe ritual prescriptions and sanctity of sacred locations (Ogunade, 2009). Within this context, the environmental care of nature goes beyond economic or ecological necessity and is a spiritual obligation.

An appreciation of the environment as a living and animated environment is evident in the sacred geography of the Yoruba religion. Some groves, springs, streams, and varieties of trees are sacred, and communities are governed by taboos which forbid their use (Onyekwelu & Olusola, 2014). According to Adewoyin et al. (2020), these regulations are socially imposed on the individuals by priests, elders, and the institutions of lineage and their violation is thought to have not only social punishment on society but also spiritual

punishment. Therefore, the Yoruba religious practice in the past has always produced informal systems of environmental protection, which preserve biodiversity and protect weak ecosystems.

Sacred groves, ritual taboos and agricultural festivals are some of the brightest examples of the amalgamation of religion and ecology. Sacred groves are called *igbo ẹbọra* (areas of forest, used to house spirits, healing or rituals, and ceremonies of certain deities) (Oyelowo et al., 2020). In these areas, hunting, agriculture or deforestation are conventionally forbidden, and it is therefore in such groves that they are able to serve as centres of biodiversity preservation amidst larger trends of ecological transformation. There are ritual taboos, which are in most cases community-specific, governing the utilisation of plants and animals as well as water bodies, thus preventing over-exploitation and ensuring a balance in the ecological system (Khan & Evi, 2008). Festivals and Harvest rituals that are traditional and seasonal strengthen the relationship between ritual worship and the cycles of nature. Ceremonial observances such as the new yam festival and rain-making rituals not only manifest piety but also structure communal agricultural activity, synchronising planting and harvesting with seasonal cycles and embedding environmental awareness within the cultural calendar (Onyekwelu & Olusola, 2014).

Ecological knowledge is also embedded in the material culture of the Yoruba religion. One of the most obvious indicators of extensive knowledge of the tree species and their inherent qualities is the purposeful use of hardwoods to carve statues and shrines. The fact that the shrines were placed near rivers or under certain trees proves that there was an ecological awareness of water, soil fertility and microclimatic conditions (Olabimtan, 2025). Moreover, the fact that specific plants were used in rituals and in medicinal activities also indicates the centuries of botanical knowledge (Omilani & Bada, 2024). This knowledge is passed through generation to generation with the help of apprenticeship, initiation, and oral tradition, which guarantees continuity of culture and literacy in the environment. Although these practices have stood the test of time, according to Olabimtan (2025), modern forces have started undermining the ecological roles of the Yoruba religion.

Commercial logging, agricultural growth and urbanisation provide economic reasons to facilitate the neglect of taboos and trespass into sacred landscapes. The changes in climate, such as unpredictable rains, droughts, and flooding, disfavour the natural cycles that rituals rely on and make offerings harder to maintain and the ceremonial calendar irregular. Sociocultural transformation is also a factor in this erosion: the movement to metropolises, the erosion of the authority of lineages, the spread of religions all over the world undermine the structures that used to protect the sacred ecologies (Babalola, 2011). The cumulative impact is not just the degradation of the environment but also the disappearance of the ecological knowledge of religious practice. However, Yoruba religion has proved very adaptable. Societies and guardians are bargaining with the new institutions and redefining traditions based on the new challenges (Adewoyin et al., 2020). An example of how traditional religious organisations may cooperate with international conservation systems is the Osun-Osogbo Sacred Grove, now recognised as a UNESCO World Heritage site. Conventional ritual practices have been modified in other societies to incorporate ecological restoration processes- like afforestation programs and community clean-up programs. These

changes explain that the Yoruba religious milieu is not passive in receiving the change of the environment but is active in the restoration and maintenance of efforts (Omigbule, 2025).

The Yoruba religious system provides a good example of how religious institutions can be used as ecological governance mechanisms based on theoretical and empirical accounts (Omilani & Bada, 2024). The environmental moral authority of Orisa worship, the community-based conservation culture of the decentralised custodial architecture, and the inherent ecological knowledge of the indigenous people offer a great resource to the current strategies of climate adaptation (Chanza & Wit, 2016). To realise this potential, modern policy institutions would have to go beyond their reductionist views of Yoruba cosmology as just superstition and instead treat it as an effective ally in environmental sustainability. This involves the respect of the indigenous custodianship, legalisation of sacred space, and the integration of traditional ecological calendars in the contemporary planning procedures-measures that are considered crucial towards the development of resilient ecosystems.

Environmental Degradation in Nigeria

Nigeria, like the majority of sub-Saharan Africa, is experiencing severe environmental issues that have increasingly existed during the last fifty years (Babanyara et al., 2010). The intersection of high population growth, lack of control in the utilisation of the natural resources, urbanisation and poor environmental management has resulted in the creation of a geographical landscape of deforestation, soil erosion, flooding and pollution. According to scholars like Bernard (2021), the condition of the crisis is the most severe in the southern rainforest and savanna belts, where anthropogenic pressure on the land and forests is most acute. These challenges do not exist as abstract phenomena in the case of the Yoruba-speaking region of southwestern Nigeria but directly influence the ecological foundation of social life and the survival of indigenous religious practice (UNESCO World Heritage Centre, 2024).

Deforestation is one of the most apparent examples of environmental degradation in Nigeria. Nigeria has been listed as one of the world leaders in terms of forest loss rates by the Food and Agriculture Organisation several times (Alamu & Agbeja, 2011). Logging, fuelwood harvesting and agricultural sprawl have severely depleted forest cover, leaving many areas in an ecologically vulnerable position (Sambe et al., 2018; Olajuyigbe, 2019). Previously dense forest cover in the southwestern states of Osun, Ogun and Ondo in Nigeria has been replaced by patchy secondary wood or farming land (Alamu & Agbeja, 2011). This depletion of forest resources is not only an ecological issue but also a cultural one since it diminishes natural resources in the form of hardwoods like iroko, mahogany, and ebony that have always been essential in religious carvings, building of shrines, and ritual practices (Alamu & Agbeja, 2011). The extinction of such species poses a threat to biodiversity as well as the material bases in which Yoruba spiritual traditions are established.

These pressures are also aggravated by rainfall changes and changing climate patterns. According to meteorological studies, southwestern Nigeria has gone through a series of extremely unpredictable rainfall patterns in the last four decades, with just and prolonged heavy rainfall being intermittent with extensive dry seasons (Okoloye et al., 2013). These hydrological extremities create flooding, resulting in the erosion of topsoil, destruction of

arable land, and displacement of rural people, and drought conditions reduce crop yields, overstrain water resources, and disrupt food security (Ibebuchi, & Abu, 2023). In societies where the religious nature is closely intertwined with the regular cycles of agriculture and the supply of staple crops with which they make offerings and host festivals, this unpredictable climatic shift affects not only material livelihood but also the ritual calendar. Further, unpredictability of weather patterns enhances rural-urban migration, and thus undermines social institutions that support Yoruba religious practices in rural settings (Onah et al., 2016).

The other aspect of environmental degradation is the contamination of rivers and waterways in Nigeria. This crisis has now become symbolised by the Osun River, which is considered to be the most sacred river in the Yoruba cosmology. After being held in high regard as a source of fertility, healing, and ritual cleaning, the river is now highly polluted with mercury, lead, and other poisons discharged through illegal gold miners and industrial effluents (Akindele et al., 2023). The changed colour and deteriorating purity of the river have been reported by environmental forensic testing and by investigative journalism, and the state authorities have made warnings against its use (Akindele et al., 2023). Other south-western rivers are reported to have similar pollution conditions, which combine with artisanal mining, urban effluents, and farm runoffs to worsen the quality of water (Titilawo et al., 2018). For a religious system that treats rivers as living deities and centres major festivals upon their sanctity, such pollution represents not only an ecological disaster but also a spiritual crisis (Bernard, 2021).

Existing environmental pressures are aggravated by soil degradation and erosion. In Nigeria, agricultural activities that are intensive and lack proper conservation techniques have led to loss of nutrients, gully erosion and reduction of crop yields (Ajayi, 2015). Smallholder farmers who use traditional farming techniques are especially prone in the region of Yoruba since their reduced ability to produce staples like yams, maize and other ritual crops not only affects household subsistence but also the offerings that are used in the rites of Yoruba. Researchers have attributed this ecological stress to more widespread socio-economic changes, such as an increase in poverty, land conflict, and intergenerational tension, all of which limit the social space required to practise traditional lifestyles (Nwokoro & Chima, 2017).

There is an issue of governance that is persistent behind these ecological dynamics. Environmental laws are often inadequately enforced in Nigeria, and agencies are not well coordinated, and institutions lack adequate capacity (Ogunkan, 2022). Political interference, corruption and lack of funds are some of the challenges that hinder the proper implementation of forestry management, pollution control, and climate adaptation policies. Whereas frameworks may work well in theory, this is not always the case in practice, so local communities have to tackle the subsequent outcomes (Osawe & Magnus, 2016). This has led to a dependence on informal or local institutions, such as taboos and sacred groves, and community regulations in most Yoruba communities to protect what is left of their environment. Nevertheless, these indigenous systems are pushed to the brink as socio-economic pressures continue to mount on them (Ogunkan, 2022).

All of them, combined, demonstrate that deforestation, climate variability, water pollution, and soil degradation are all symptoms of the scale of the environmental crisis in

Nigeria. To the Yoruba religion, which relies on forests to provide wood in the ritual, farms to provide ritual food, and rivers to perform sacred rites, these patterns constitute a progressive loss of the ecological basis of the religion. Therefore, the degradation not only poses a danger to the biodiversity and livelihoods but also to the survival of the cultural heritage. It is this dual ecological and cultural perspective of environmental change in Nigeria that helps to emphasise why interventions must be urgent, interventions that are focused not only on material sustainability but on preservation of indigenous religious traditions.

Climate Change and Indigenous Practices

Worldwide, indigenous religious practices are among the most susceptible to the effects of climate change, largely because of their deep connexion to natural cycles and sacred landscapes. Empirical evidence in Africa, Asia and the Americas suggests that changes in precipitation, loss of forests and pollution of rivers have both derailed subsistence practices and destroyed the rituals, festivals and symbolic practices that form the basis of indigenous cosmologies (Christian, 2014). In many of the cases, the communities to which the cancers are encountered perceive these ecological perturbations as spiritual reproaches, as they struggle with the material consequences of environmental volatility.

In the African setting, researchers are increasingly arguing that climate change has intensified the pressures that had been in existence, such as appropriation of land by colonisers, the influence of missionaries, and high rates of urbanisation (Botchway & Agyemang, 2012; Onah et al., 2016). These convergent forces weaken the old custodial systems that were protecting sacred sites and imposing conservation practices (Botchway & Agyemang, 2012). In the Yoruba, this has been manifested by the destruction of the sacral groves, the lack of ritual cultivars and the pollution of rivers that were part of the religious veneration. Ritual calendars used to be connected to predictable rainy and dry seasons but are now being shaken by extended droughts or unforeseen floods and rituals which rely upon bountiful harvests are now being faced by material restrictions when staple foods fail (Onah et al., 2016).

However, the indigenous traditions have also been triggered by climate change to adapt and innovate. Some priests and leaders of the Yoruba communities are more and more reinterpreting ecological crises in a religious context as either signs of divine displeasure or calls to reinvigorate taboos that have been forgotten. Some festivals have incorporated environmental elements - e.g. an arboriculture or anti-pollution festival - and allow cultural activities to directly respond to modern environmental issues (Daiyan, 2023). These comments indicate that, even though climate change poses significant threats to indigenous practices, it is also an opportunity for the traditions to reassert their positions in the current environmental discourse.

Yoruba Responses and Resilience

Yoruba religious customs have demonstrated resilience in the face of a massive transformation of the environment in southwestern Nigeria. Communities have found ways to be creative with their practices, using older cosmological frameworks in response to current ecological issues. A good example is the Osun–Osogbo Sacred Grove, where its

status as a UNESCO World Heritage Site has strengthened centuries-old taboos against farming and deforestation (Adewoyin et.al., 2020). The experience of the local custodians and global heritage institutions has shown how indigenous conservation ethics can be used in concert with the formal protection systems, thus ensuring ecological integrity and maintaining cultural continuity.

Outside Osogbo, Yoruba priests, elders and cultural organisations have redefined ecological crises in ways that support their power and modernity. Periods of drought or river pollution are occasionally interpreted as a consequence of spiritual disregard, whereby there are new attempts to maintain rituals and sacred spaces (Ogunade, 2009). Elsewhere, the concerns of the environment are embraced in religious festivals: tree-planting might be part of rituals, and anti-pollution movements are being positioned as a form of piety to water gods (Adewoyin et.al., 2020). These innovations testify to the fact that the Yoruba traditions are not fixed but are able to redefine their ecological ethics in conversation with the current ecological issues.

At the same time, resilience is expressed not only on a spiritual level but also on a social level. Regulations are still practised by community networks, especially lineage associations and custodial families, in so-called sacred groves and waterways, regardless of economic and demographic forces (Adeyanju, 2020). Through the maintenance of these local governance structures, they offer alternative conservation models that focus on moral obligation, societal responsibility and respect to the natural world (Adeyanju, 2020). Taken together, these reactions highlight the negotiative power of the Yoruba religion to adapt to the changing environment, maintaining its spiritual heritage and even becoming a part of the general sustainability discussions.

Deforestation and Wood-Carving Traditions

Trees are part of the main elements of the Yoruba religious artefacts. Hardwoods are commonly hand-carved into statues, doors to shrines, totems and ritual implements. According to Azeez (2011), locally prized species like ebony (Diospyros), mahogany (Khaya ivorensis), iroko (Milicia excelsa) and oju-ona (Heritiera utilis) are traditionally used to craft Ọrìṣà figures and twin shrines (ere ìbẹ́jì). These woods are durable and symbolically potent. However, intensive logging for commercial timber and fuel has greatly reduced old-growth stocks (Akindojutimi & Fajuyigbe, 2025). Nevertheless, timber and fuel-intensive commercial logging have significantly reduced old-growth stocks. An analysis of Yoruba woodcarvers by Akindojutimi & Fajuyigbe (2025) noted that deforestation has resulted in it becoming harder and harder to acquire quality wood, as a number of hardwood trees were cut without being replaced. The rising prices and distance involved in acquiring the remaining ebony or mahogany have become highly prohibitive, forcing the carvers to use worse or smaller logs.

The diminution of wood resources directly jeopardises religious practice. Without good quality timber, artisans find it hard to make the large doors, masks, and statues of deities, which used to be the classics in shrines (Akindojutimi & Fajuyigbe, 2025). Even extant sacred *ọ̀dọ̀-ìkù* (community shrine doors) risk remaining unrenewed. It has been reported that

Yoruba woodcarving is becoming extinct because of the lack of wood and the loss of demand (Olasupo, 2016). This inclination undermines an essential aspect of the religion, since most of the Orisa [spirits] are, in the traditional sense, represented in carved images or symbols. And as these physical representations disappear, some of the rituals may be deprived of their material points of focus. As an example, the river goddess Ọṣun of fertility is customarily served with white carved statues next to the river. Should woodcarvers be unable to provide requisite materials, even long-established ceremonial offerings may undergo transformation or discontinuation. Authorities and cultural advocates recognise the crisis (Akindojutimi & Fajuyigbe, 2025). Ethnographic interviews reveal carvers' frustrations: "government support and policies" are lacking for sustainable woodcarving. Scholars propose integrated actions, such as tree-planting programmes on economically-important species, encouragement of sound forest management, and offering woodcraft as a component of school curriculum and cultural tourism policies (Akindojutimi & Fajuyigbe, 2025). Such acts hold the capability of protecting the raw materials which are necessary for the perpetual religious artisanship.

Changing Rainfall and Farming in Yoruba Lands

Southwestern Nigeria's climate historically had two rainy seasons (long rains in April–July, short rains in September–October), which Yoruba farmers timed their planting around. Recent data show those patterns are becoming more unpredictable (Ani et al., 2021). A four-decade rainfall analysis spanning 1983–2023 corroborates the persistence of bimodality yet reveals pronounced interannual variability (Awode et al., 2025). Figure 1 (below) illustrates the average monthly cycle: heavy peaks in June–July and again in September–October, with a dry "August break" and an extended dry period from November to March.

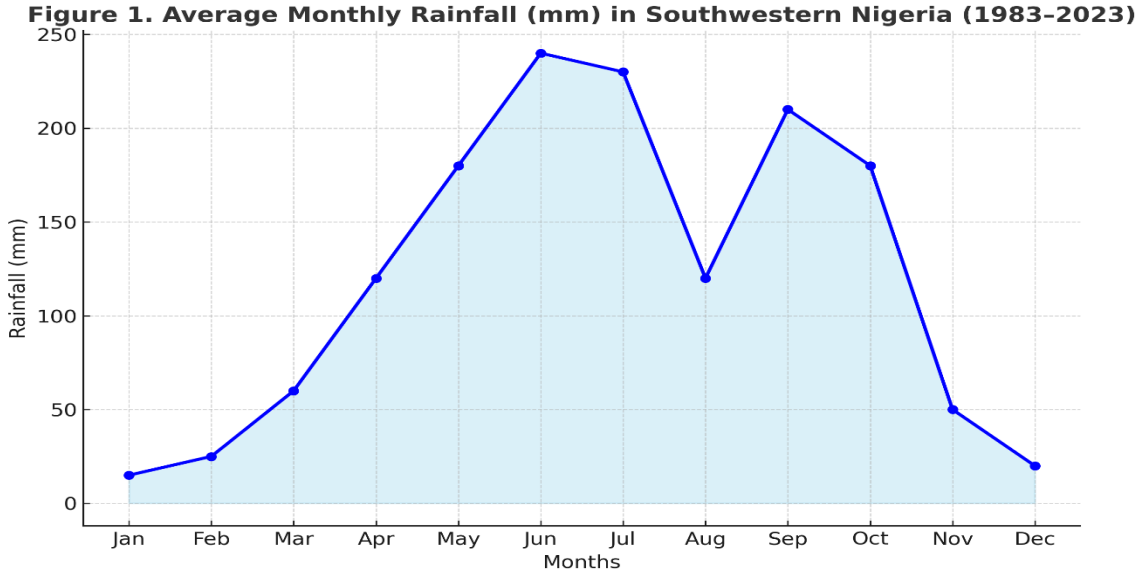


Figure 1. *Average monthly rainfall (mm) in Southwestern Nigeria (1983–2023) showing two rainy seasons (June–July, September–October) separated by a drier August, and a long dry spell from November–March (Awode et al., 2025)*

However, the rate at which the meteorological extremes occur has increased. The total interannual amount of precipitation also exhibits significant variation, with anomalously higher amounts of rainfall observed in 1995, 2009, and 2019, but 2000, 2015, and 2020 are among the driest epochs ever recorded (Oluwadare & Oluwadare, 2025). Even though there is no clear trend of an increase in aggregate data, there have been more extreme wet and dry conditions. This volatility is graphically represented in Figure 2, which shows severe spikes and troughs in consecutive years, thus sustaining the invalidity of a natural seasonal paradigm of agrarian planning.

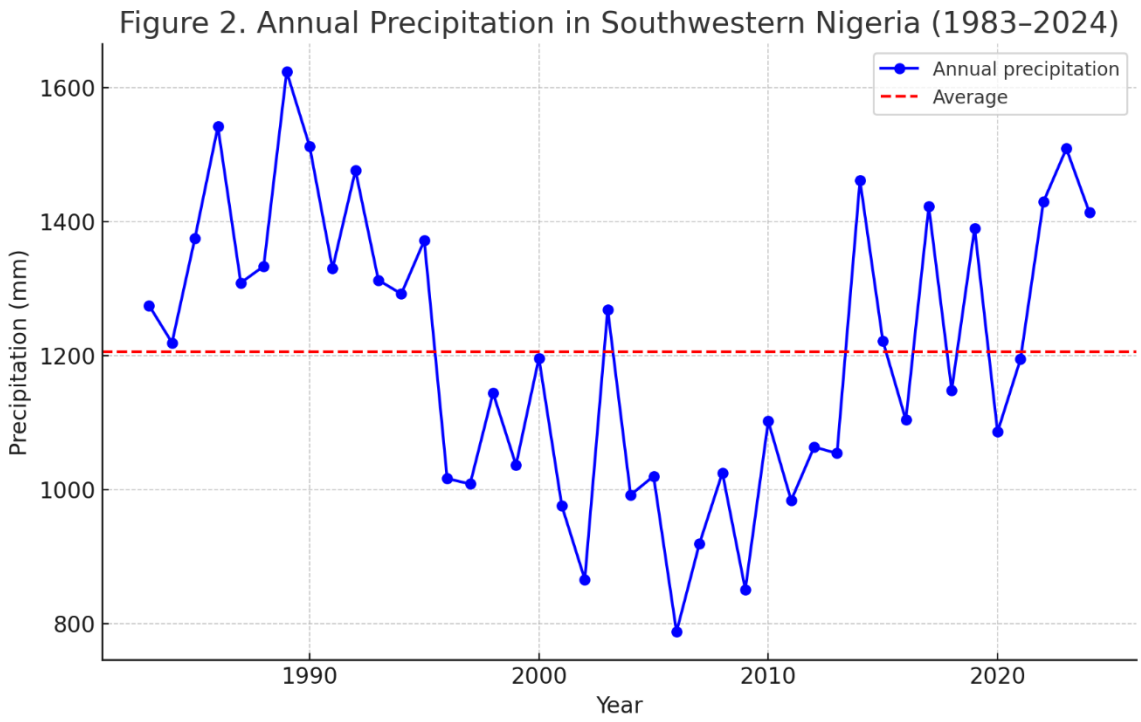


Figure 2. Annual precipitation in Southwestern Nigeria (1983–2024) illustrates large year-to-year swings. Some years are far wetter or drier than average, reflecting a more erratic climate (no clear linear trend). (Awode et al., 2025).

Such hydrological volatility imposes substantial constraints on Yoruba agronomy. Small-scale producers that practise rainfed farming are at the same time vulnerable to inundation and drought. Field reports note that "the most common experience is flooding caused by heavy rainfall," which triggers erosion and nutrient loss, while at other times, dry spells prolong planting gaps. Early or untimely arrival of rainfall threatens the survival of staple seedlings, such as yams and maize, and prolonged drought contributes to water shortage and thermal stress, which ultimately result in crop loss (Krell et al., 2021). On the other hand, when there is continuous dryness, the planting period is stretched. According to Hog farmers, the harmattan winds are becoming longer in duration, thus drying the soils to a greater extent. The net effect is more variability in crop yields: farmers are forced to always

change planting, and in most instances, change to more resistant types of crops to survive (Juana & Okurut, 2013).

The interference with agricultural production also has a direct effect on indigenous religion. Numerous feasts and sacrifices are conditional on successful harvests. Yam festivals, for example, celebrate the first harvest and honour the earth gods; failure of yams will automatically result in a disruption in ritual practices (Onipede, 2017). Likewise, palm oil and cassava products, which are common products in the Òrìṣà shrines, are scarce and become expensive during droughts. Some communities have a shortage of staple foods, compelling priests to delay or reduce the ceremony, thus undermining the tradition of the community (Onipede, 2017). Simply put, the material basis of many Yoruba rites is undermined by climate-based food insecurity. On a larger level, rural instability caused by agriculture also contributes to out-migration and economic pressure in rural regions, which in their turn can undermine local religion. When agriculture is not successful, young people can move to cities, which also lowers the number of initiated priests and followers upholding these practices (Okibe, 2024). The resultant unpredictable rainfall is, therefore, a ritual problem (wasted harvests) and a social problem (dwindling rural communities).

Rivers and the Gods of Water

In Yoruba cosmology, water is sacred (Ajíbádé, 2021). Powerful goddesses like Osun (*Ọ̀ṣun*), the patron of a major yearly festival and Yemoja, who, despite often being associated with the ocean, also controls riverine tributaries, are connected to rivers, streams, and rainfall (Ogunleye, 2015; Afolabi, 2021). These deities are believed to bestow fertility, healing, and prosperity through the purity of their waters. In line with this, communities make rain and river flow rituals: i.e., rain prayers (*Oloba*) and river sacrifices are conducted in the hope of aligning human activities with the forces of nature (Raheem, 2024; Afolabi, 2021).

These waters are now being threatened by climate change and pollution. Even the Osun River itself, the object of the Osun-Osogbo veneration, has been placed at severe risk. The Osun River is critically contaminated with mercury and lead, according to recent environmental tests by the advocacy groups, which attribute the contamination to mining runoff and illegal gold panning (Makinde et al., 2016). Authorities have warned devotees not to drink the river water at festival time. A priestess for Osun lamented that the "water has changed colour" and that "the problem is the miners in the river".[1] This pollution issue intersects with climate: during dry seasons (when rainfall is low) the river's flow weakens, concentrating pollutants and making the goddess's shrine water less accessible. If river levels drop, certain rituals (bathing in the Osun during the annual festival, for example) become logistically and spiritually difficult.

Outside the Osun basin, small streams and wells are at a greater risk of drying out or becoming salty as the level of rainfall reduces and groundwater levels fall. The Yoruba rural

[1] Priestess of Osun Grove (anonymous), interview by Goodness Ayokunle, Osogbo, Osun State, Nigeria, August 2, 2024.

communities also largely rely on riverine springs as a source of potable water and farming purposes; the resulting loss of water god apparitions is a sign of the recurrence of the drought (Christian, 2014). In traditional cosmology, such scarcity of water is a form of offence to an omitted deity whose shrine has been desecrated. In this way, modern pollution and a low flow, which is determined by climate, is a crisis that threatens public wellbeing and religion (Raheem, 2024). Ritual practice is violently impacted. Certain villages have been forced to bring in water to offer libations to water spirits, thus washing out the symbolic strength of a gift of the earth (Akindolie, 2024). The same tendencies can be observed in the dwindling piscine populations that pilgrims have always discharged into rivers as offerings. Water fidelity has also undermined agricultural rites; the rain-calling ceremonies (*Òrò òjò*) have been reduced to unbelievable levels of desperation since it has not come to pass (Raheem, 2024). Basically, the very element venerated as *omi didun* ("sweet water" of life and goodness) is becoming scarce or unsafe, posing significant challenges to Yoruba worship that relies on it.

Indigenous Beliefs, Sacred Sites, and Conservation

The Yoruba religious beliefs have built-in prescriptions to environmental stewardship, which, on observance, could help in alleviating some of the ecological degradation. The indiscriminate felling of ẹpẹ́ (sacred trees) and over-hunting in the precinct of the shrines is also prohibited by tradition (Babaloa, 2011). Some of these sacred groves have been preserved as sacred and are not allowed to be disturbed at all, protecting the local biodiversity. Indicatively, the groves of the god Osanyin, who is considered the spirit of medicinal plants, contain a large number of therapeutic plant species (Osunwole, 1998). Where communities disobey these taboos, elderly guardians will make sense of subsequent hydrological or agrarian disasters as supernatural punishment, thus affirming an implicit ethic of conservation.

Babaloa (2011) suggests that such practices are, however, fading. The economic needs and the lack of land have forced the people to cut down trees or practise farming in groves which were once under protection. Some of the shrines, which formerly stood deep in forested terrain, are now found in cropland (Adeyanju, 2020). Thus, the collective idea of sacred commons in the Yoruba territory is shrinking. Comparative studies of sacred groves have found that most of the sacred groves in southwestern Nigeria have been extensively modified, degraded, and deforested to the point of ecological instability. With the demise of these groves, the spiritual taboos defining their limits also disappear (Adeyanju, 2020). Analysts worry that without the statutory protection, it is unlikely that sacred forests will be able to stand the pressure of logging or even development (Adeyanju, 2020).

Despite this trend, there are notable successes. The most renowned instance is the Osun-Osogbo Sacred Grove located outside the Osogbo town in Osun State. It is a grove of 75 hectares, worshipped as the shrine of the goddess Osun, that the local people have kept, and which has been declared a UNESCO World Heritage (Babalola, 2014). Its persistence today is an indication of the compatibility of the indigenous practice with the current conservation models. Sculptures and shrines were not added to the grove until the twentieth century, but the main forest was left mostly untouched. Pilgrims come to Osun's annual festivals, and local custodians continue to impose logging and agricultural bans within

the grove (Ogunfolakan et al., 2016). Practically speaking, the entrenchment of the grove in the religion of the Yorubas, in addition to the protection of heritage laws, makes it a source of ecological resilience.

Yet, minor groves and streams do not have the status of their more exalted counterparts. The academics promote the development of community-based conservation programmes to include more Yoruba sites to be formalised as protected monuments and to involve traditional leaders in the planning processes (Adewoyin et al., 2020). Prior to this, educational campaigns often led by civil society groups give early warning of the Yoruba belief in nature being alive with spirits, and thus they use these cultural beliefs to strengthen anti-pollution campaigns and reforestation efforts (Ogunade, 2009). Tree-planting ceremonies have also been introduced in some of the festivals as offerings, hence reflecting modern climate issues. The latter trends are a symbolic synthesis of belief and practice in the face of approaching ecological disasters.

The Yoruba Case as a Decolonial Approach in Global Indigenous Environmental Scholarship

While this study centers on the Yoruba religious-environmental nexus in southwestern Nigeria, these practices exemplify a decolonial Indigenous environmental ethic that resonates with and contributes to global scholarship beyond African contexts. Decolonial approaches to Indigenous religions emphasize relational ontologies that challenge colonial legacies of anthropocentric domination, extractivism, and dispossession of sacred landscapes, positioning nature not as inert resource but as kin, sentient, and reciprocal (Whyte, 2018; Kimmerer, 2013; Todd, 2017).

In Native North American and First Nations traditions, for instance, kincentric ecologies view land, waters, and non-human beings (such as fish or plants) as relatives demanding ethical care and reciprocity, resisting settler-colonial exploitation and reframing environmental crises as violations of kinship obligations (Kimmerer, 2013; Todd, 2017). Similarly, Indigenous climate change studies advocate "Indigenizing futures" by decolonizing the Anthropocene through place-based relational knowledge that prioritizes sovereignty, stewardship, and multispecies justice over Western technocratic fixes (Whyte, 2018). These perspectives parallel Yoruba cosmology, where humans are "tenants" on divine earth, sacred sites like groves and rivers embody spiritual reciprocity, and environmental degradation signals ruptured relations with orisha and ancestors—prompting adaptive responses such as ritual reinterpretations, community clean-ups, and hybrid conservation (e.g., UNESCO recognition of Osun-Osogbo).

By centering Yoruba-specific mechanisms such as, taboos protecting biodiversity, orisha-mediated ethics of care, and resilient agency in the face of deforestation, pollution, and rainfall variability, this analysis offers an African Indigenous contribution to pluriversal dialogues on decolonial environmental ethics. It underscores how local cosmologies can inform global resilience strategies, countering universalist Western models with diverse, relational alternatives that foster epistemic justice and sustainable human-nature relations.

Systemic Threats to Yoruba Religious Culture

Indeed, the available empirical evidence proves the fact that climate change is already changing Yoruba homelands. Statistical results indicate increased variability in rainfall and a tendency towards extreme events, and thus correspond to climate projections of West Africa on a global scale. In practice, such climatic changes can be seen as increased floods and droughts. These dynamics pose a systemic threat to the Yoruba religious culture that is based inherently on stable and reciprocal relations to the land and water worlds. With erratic changes in the precipitation patterns, the chronology of cultural practices such as harvest festivals, rain-making ceremonies, and offerings to water is broken. Similarly, as discovered by Omoyajowo (2025), the destruction of many sacred places is caused by deforestation and riverine pollution.

These pressures increase the historical pressure that is being experienced. Christianity and Islam have long taken followers out of the indigenous belief systems in Nigeria, which tend to label traditional practices as backward (Akewula & Kamorudeen, 2023; Amobi, 2024). The notion of environmental change now adds a new dimension: Devout practitioners are now faced with the extinction of material cultural artefacts, including the woodcarving traditions and natural shrines. A recent cultural survey indicates that there is a significant erosion of interest in traditional sculpture by younger Yoruba carvers, and even among the children of carvers, in favour of more direct economic benefits (Ayanwale, 2025). Without specific interventions, this tendency may accelerate the loss of intangible heritage such as specialised carving skills or grove-maintenance practices.

However, there is a decolonial approach, which suggests certain remedial paths. Yoruba religion reflects a holistic worldview, which is supported by modern scientific investigation: the environment is sacred and must be preserved. This ontology, according to Bewaji (2021), could be strengthened by institutional empowerment of indigenous custodians and religious groups to manage lands, instead of putting them in the hands of extrinsic conservation organisations. Examples include the local priests and government joint management of the Osun grove, which has succeeded in maintaining the integrity of the grove, unlike the suboptimally managed reserves elsewhere. The idea that the Yoruba traditional monarchs can be recognised as valid stakeholders in climate change adaptation programmes, including through the reforestation of sacred trees, is consistent with decolonial principles of self-determination (David 2024).

At the same time, the empirical and engineering methods are still inevitable in treating root determinants. In Osun River, pollution mitigation requires the implementation of mining laws and the distribution of resources to reduce the problem, but not the ritual purification. Forestry work must involve planting culturally important taxa, such as Diospyros and Khaya species, systematically, as a way of replenishing wood for artisanal carving (Azeez, 2011). Some programmes have been expressed: e.g., domain experts promote environmental sustainability measures that will be modelled for craft communities, including partnerships between sculptors, foresters, and non-government organisations that can help in reforestation (Omilani & Bada, 2024). In the case of agriculture, the extension systems may teach agrarian practitioners climate-resilient practices, which in many cases often overlap with the followers of Yoruba spirituality (Mustapha et al., 2024). In fact, Ndlovu et al. (2020)

posit that the rite of passage usually appeals to the favourable harvests, but the supportive interventions, including irrigation systems and drought-resistant crops, are necessary to support food security on which the rites are based.

Lastly, there is the question of continuity and faith, which should be questioned. Will the Yoruba religion renegotiate its cosmological standards with reference to nature to suit the requirements of climate change? A faction of priests has embarked on translating ecological degradation as an emanation of the discontent of *Olódùmarè* (the supreme deity), urging ecological action as part of piety (Adewale et.al., 2024). Others emphasise traditional proverbs like "*Ẹni tó ba omi jẹ, kì í wẹ̀ nínú rẹ̀*" ("One who pollutes water will not bathe in it themselves") to campaign against river dumping. In these ways, the faith itself is becoming a platform for environmental stewardship. As a respondent in a Yoruba religious community put it, "Protecting our river is protecting Osun herself,"[2] thus framing conservation in explicitly religious terms.

It is thus possible for Yoruba religion to survive and even aid climate resilience if given support. In the absence of targeted interventions, both natural systems and traditional practices are vulnerable: rivers may dry or become contaminated, shrines may collapse due to material shortages, and festivals risk becoming merely ceremonial echoes. This paper identifies several key policy areas of concern, such as the need to promote sustainable livelihoods among carvers and farmers, the need to protect sacred sites through the legal system, and the need to engage indigenous belief-holders in the process of climate adaptation planning. Through these measures, Nigeria will be able to maintain a rich cultural heritage and, at the same time, use it to protect the environment.

Conclusion

Forests, rivers, and fertile land are the threads that create the cultural background of the indigenous religion of the Yoruba people. These elements of nature are not just resources but the living symbols of the deities and ancestors, the foundation of ritual practices and a part of spiritual existence. However, as shown in this paper, climate change and environmental destruction continuously weaken these threads. Empirical evidence based on climate records, forestry surveys and ethnographic reports suggests that southwestern Nigeria is getting drier, experiencing heavier floods, extensive deforestation and causing alarming levels of river pollution. All these processes undermine Yoruba religion. Carvers no longer have access to sacred hardwoods, farmers are no longer able to count on predictable rains to make their ritual harvests, and communities have to perform their water ceremonies in rivers which are either shrinking or are polluted (Akindojutimi & Fajuyigbe, 2025).

Should these trends remain unmoderated, numerous cultural traditions may gradually recede into the annals of history. Regardless, there remain substantive reasons for cautious optimism. Yoruba cosmology, in itself, encodes a conservation ethic that foregrounds

[2] Osun Priestess Aduke Alabi, interview by Samuel Babalola, Osogbo, Osun State, Nigeria, July 15, 2024.

concord between human society and the natural environment. Sacred groves, taboos, and ritual practices historically functioned as mechanisms of environmental protection, and these can still provide a foundation for sustainable management today. Regions inhabited by Yoruba peoples have demonstrated resilient agency by safeguarding ecological sites such as the Osun-Osogbo Sacred Grove, by adapting ceremonial festivals to emergent ecological contexts, and by integrating arboricultural initiatives and anti-pollution efforts within religious rites. These instances illustrate that Yoruba religion is not only vulnerable to ecological perturbations but is also capable of generating substantive, adaptive responses.
To ensure the safety of the Yoruba religious practices in terms of environmental degradation, a two-fold approach is required in future. On the one hand, it is essential that government policymakers and environmental experts actively involve and support indigenous custodians, thus recognising their powers and their ecological knowledge as an essential part of climate response models. Conversely, the Yoruba communities themselves should continue reworking their traditions in a manner that is sensitive to the demands of the environmental crisis. Nigeria can preserve a large cultural heritage and, at the same time, enhance its climate resilience by embracing the integration of traditional ecological knowledge with modern scientific practices and policy facilitation. This kind of practice means that worship of Yoruba gods is still relevant in the form of living forests, flowing rivers, and productive farmlands, thus safeguarding the spiritual legacy and environmental sustainability for new generations.

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