

# DEFORESTATION IN AWKA METROPOLIS: VIOLATING AFRICAN ECO-THEOLOGY AND HUMAN WELLBEING

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## ABSTRACT

Deforestation in Awka Metropolis, Anambra State, Nigeria, presents a critical challenge; undermining African eco-theology and human wellbeing. This study investigates the environmental and socio-spiritual consequences of forest depletion, addressing the gap in knowledge on its intersection with indigenous ecological ethics. Using a qualitative methodology, data were gathered through personal communication and analysis of extant literature, including digital news sources. The research is anchored in the Gaia Theory in Igbo Perspective, which emphasizes communal harmony with nature. Data were analyzed through phenomenological and hermeneutical approaches, revealing deforestation's role in sickness, death, soil biodiversity loss, erosion, and aesthetic degradation. The findings highlight the urgent need for regulation implementation, reforestation programs, and public ecological awareness rooted in African eco-theology. The study concludes that preserving forests is essential for sustaining ecological balance, cultural heritage, and human well-being in Awka Metropolis.

**Keywords:** Deforestation, Awka Metropolis, African Eco-Theology, Human Wellbeing.

## INTRODUCTION

Deforestation in Awka Metropolis of Anambra State, Nigeria, can yield certain economic and developmental advantages, but its execution must be approached with deliberate ecological responsibility and adherence to environmental preservation standards. Ogbodo et al (2023) and Umeukeje et al (2024), elucidate that the unchecked clearing of forested areas in and around Awka Metropolis compromises critical biodiversity, disrupts local ecosystems, and accelerates land degradation. All these contribute to long-term environmental instability. Therefore, any deforestation activity within this region should be guided by scientifically informed policies that prioritize ecological balance and sustainable land use. Such an approach ensures that immediate human interests do not undermine the enduring health of the environment, reinforcing the imperative that deforestation, though occasionally justifiable, must never be conducted arbitrarily.

Sequel to the aforementioned articulations, DGB Group (2021) accentuates that deforestation in Nigeria represents a critical environmental crisis driven primarily by agricultural expansion, logging (both legal and illegal), and rapid urbanization, exacerbated by weak governance and

high population growth. The Group stress that with an alarming annual forest loss rate of 3.7%, the highest globally according to the United Nations, the consequences are severe, including biodiversity loss, climate alteration, soil erosion, and increased vulnerability to natural disasters. These environmental degradations also jeopardize local livelihoods through reduced access to clean water and arable land. DGB Group advocate for large-scale, nature-based restoration projects to combat deforestation and restore ecological balance in Nigerian communities.

Proshare (2022), Alkassim (2024) and Uwaegbulam (2025) enunciate that deforestation in Nigeria is a growing concern. According to the United Nations Food and Agricultural Organization (cited by Proshare), Africa loses nearly four million hectares of forest annually, with Nigeria experiencing significant deforestation. In 2010, Nigeria's natural forests spanned 10.9 million hectares, covering 12% of its land area. However, by 2021, the country had lost 96.5 thousand hectares, contributing to 58.5 million tonnes of CO<sub>2</sub> emissions. Notably, Nigeria had the highest deforestation rate globally in 2005 at 3.5%, with more than 55.7% of its forests already depleted due to logging, subsistence farming, and fuel-wood collection. From 2000 to 2005, the country lost 81% of its old-growth forests, largely driven by the population's dependence on wood for heating and cooking. Additionally, between 2002 and 2020, the Akure-Ofosu Forest Reserve saw a staggering 44% reduction in its primary trees, highlighting a critical environmental challenge that threatens food security. The documentations of Proshare exposit that these losses are mainly attributed to poverty and unemployment, which drive people to the forests in search of shelter and livelihood opportunities. The consequences of this rapid deforestation include increased carbon emissions, leading to climate-induced crises such as droughts and irregular rainfall.

While Nigeria has initiated tree-planting projects through its sub-national governments, these efforts have not been widely successful. The loss of forest cover in Nigeria is contributing to a rise in climate-related health issues, including respiratory problems, cardiovascular diseases, and heat stress, which are exacerbated by exposure to pollutants from deforestation and industrial emissions. Proshare (2022) proclaims that Nigeria has implemented several initiatives to reduce deforestation and its illegalities. The federal government, through the Forest Research Institute of Nigeria, has successfully reforested 6,191,363 hectares of land as part of the Green Bond Project, while distributing 6,550,056 seedlings to various state governments and institutions. Additionally, the Nigerian Erosion and Watershed Management Project, funded by the World Bank, have reclaimed 23,829 hectares of degraded land, benefiting 25,491 households. In the energy sector, Nigeria's Energy Transition Plan, announced in 2022, aims to reduce deforestation by promoting the use of cleaner cooking alternatives such as natural gas and green charcoal. This plan is designed to decrease CO<sub>2</sub> emissions and reduce reliance on wood for fuel. Despite these efforts, Nigeria still faces challenges in raising public awareness about the environmental and health impacts of deforestation, which remains a critical concern in addressing climate change.

Raji (2022) insists that the challenges facing policies against deforestation in Nigeria stem largely from structural inefficiencies, data inadequacies, and regulatory lapses. The Federal Ministry of Environment (cited by Raji) acknowledges that the nation's declining forest resources are aggravated by poor bureaucratic capacity to implement sustainable forest management policies. This is equally compounded by the widespread absence of comprehensive forest resource data across most states, which is an essential tool for constructing effective forest management plans. Furthermore, the Ministry highlights the government's persistent struggle with weak enforcement mechanisms and the lack of

supportive policy infrastructure to address deforestation's root causes. Raji maintains that although Nigeria's engagement with the UN-REDD Programme and its implementation of the Community Based REDD+ (CBR+) initiative in Cross River State mark notable efforts to reverse forest loss and promote community-led conservation, criticisms still abounds.

Amidst the prevailing ecological crisis in Nigeria, particularly in Awka Metropolis of Anambra State, this study interrogates the environmental and socio-spiritual ramifications of forest depletion, addressing a critical gap in discourse on its intersection with African Eco-Theology and human wellbeing. Employing a qualitative methodology, data were sourced through in-depth interviews and a rigorous analysis of extant literature, including digital reportage. The research is grounded in the Gaia Theory, approached from an Igbo cosmological perspective, which emphasizes symbiotic coexistence between humanity and nature. Analytical procedures drawn from phenomenological and hermeneutical paradigms reveal deforestation as a catalyst for illness, mortality, soil biodiversity loss, erosion, and the desecration of natural aesthetics. Accordingly, this work reflects human well-being through the lens of man's harmonious relationship with his environment, emphasizing that quality of life, peace, good health, inspiration, meaningful human relations, and aesthetic beauty are deeply ingrained in this balance. The study reveals that when man cares for the environment, respecting its order and preserving its integrity, the environment reciprocates by sustaining him with life-enhancing conditions. Thus, well-being is portrayed not merely as a personal or social state but as a holistic outcome of mutual care between man and his environment.

## **THEORETICAL UNDERPINNING**

This study adopts the Gaia Theory from an Igbo perspective to reinforce its arguments. The Gaia Theory, as articulated by Boston (2008), posits that Earth functions as a planet-scale, self-regulating super-organism composed of both its abiotic components and ecological systems. Conceived by J. E. Lovelock and further developed with L. Margulis in the late 1960s and early 1970s, the theory suggests that biological and ecological processes actively regulate Earth's physical parameters, such as temperature and atmospheric composition, within ranges that sustain life. Despite persistent controversy surrounding its perceived teleological implications and challenges regarding scientific testability, Gaia Theory has garnered recognition for offering a novel perspective on the dynamics of complex systems. Efforts to address criticisms include the development of the Daisyworld model, which demonstrates the plausibility of Gaian regulation without invoking purposeful design. Boston delineates that ongoing studies into biogeochemical cycles and systemic complexity may help determine the extent to which Gaian principles manifest in Earth's natural systems.

Lovelock (2009) exposes that the Gaia Theory posits that the Earth operates as a synergistic, self-regulating macro-system in which biotic and abiotic components intricately interact to sustain a dynamic equilibrium conducive to life. It asserts that the biosphere, atmosphere, hydrosphere, and lithosphere are inextricably linked, forming an autonomous regulatory network that modulates critical planetary parameters, such as atmospheric composition, ocean salinity, and surface temperature, through cybernetic feedback mechanisms propelled by the metabolic activities of life forms, particularly microorganisms. Lovelock enunciates that the theory emphasizes the emergent capacity of this planetary system, termed Gaia, to perpetuate homeostasis by mitigating destabilizing perturbations and recalibrating environmental variables toward conditions favorable for contemporary biological viability. It also suggests that Earth's persistent thermodynamic disequilibrium, perpetuated by solar influx, undergirds its complex regulatory processes. Lovelock accentuates that beyond scientific domains like

geophysiology and biogeochemistry, Gaia's conceptual architecture has incited philosophical and sociocultural interpretations regarding humanity's entwinement with planetary stewardship and ecological ethics.

Nweke and Nwoye (2016) argue that the Igbo concept of nature, environment, and *Ala* reflects a deep-seated understanding of the universe as a sacred and interconnected reality, where human beings, animals, plants, and inanimate elements form a harmonious whole. Nature is not seen as separate or subordinate to humanity but as a living domain infused with spiritual significance, demanding respect, care, and preservation. The Igbo worldview upholds a sacred ecology rooted in the philosophy of *Egbe bere Ugo bere* (live and let live), stipulating the need for balance, justice, and the dignity of all life forms. Nweke and Nwoye register that this orientation opposes exploitative tendencies and calls for a relational ethics that recognizes Mother Earth as both spiritual and communal, where the well-being of the environment is tied to the moral fabric of society. In the Igbo cosmology, respect for *Ala* is thus central to sustaining order, as any violation is seen not only as an ecological disruption but also as a moral and spiritual transgression that threatens the unity of the cosmos.

Ossai (2024) maintains that the Igbo people possess a profound spiritual and cultural attachment to nature, viewing the environment not merely as a physical resource but as a sacred domain interconnected with human existence. The Igbo cosmology is deeply rooted in the belief that natural elements such as forests, water bodies, animals, and trees harbor spiritual entities whose presence necessitates reverence and ritual. Ossai insists that traditional ceremonies, taboos, and sacred sites have historically established a system of environmental ethics that promotes ecological balance and biodiversity conservation. He argues that these practices, embedded in everyday life, serve as mechanisms for environmental stewardship, regulating resource use and discouraging exploitation through fear of spiritual consequences. As indicated by Ossai, the preservation of sacred groves, veneration of aquatic and terrestrial spirits, and integration of ecological awareness into rituals such as the New Yam Festival reflect the Igbo people's sustainable coexistence with their surroundings. This cultural orientation presents a worldview where environmental degradation is not only a physical loss but a spiritual disruption, sustaining a communal sense of accountability in protecting the natural world for future generations.

The phenomenon of deforestation in Awka Metropolis raises serious concerns when examined through the lens of African eco-theology, particularly within the Igbo worldview that venerates *Ala*, the earth goddess. According to V. Nwafor, E. Onuiké and K. Nduka (personal communication, April 18, 2025), in Igbo cosmology, *Ala* is not only the physical land but also a spiritual entity that governs morality, fertility, and communal well-being. They aver that cutting down trees and degrading natural habitats without regard for sacred ecological balance constitutes a violation of this reverence. African eco-theology frames the environment as a divine gift entrusted to human beings for stewardship, not exploitation. The unchecked deforestation in Awka represents a breach of this sacred trust, leading to disruptions not only in the ecosystem but also in the spiritual and moral fabric of society.

The Gaia Theory, which conceptualizes the Earth as a self-regulating, living organism, aligns seamlessly with Igbo beliefs about the interconnectedness between humanity and *Ala*. From an Igbo perspective, the earth is not inert matter but a sentient and reactive presence. Hence O. Nwankwo, C. Anunobi and N. Eze (personal communication, April 18, 2025), assert that when humanity lives in harmony with the earth, *Ala* ensures fertility, peace, and balance. When this harmony is broken, nature reacts through disease, climate irregularities, and social disharmony. Gaia Theory strengthens the Igbo belief that environmental desecration does not merely result

in physical degradation but invites consequences that affect the entire human condition. Thus, the theory lends scientific credibility to indigenous ecological wisdom, encouraging modern society to revisit and respect traditional environmental ethics.

Human well-being, in this context, is not an isolated or individualistic ideal but a collective and ecological state. In the Igbo worldview, peace (*udo*), health (*ahụ ike*), beauty (*ima mma*), and kinship or meaningful relationships (*umunna or igwebuike*) are all seen as fruits of a well-kept relationship with *Ala*. The Gaia Theory supports this by showing that a balanced environment contributes to psychological stability, physical health, and even social cohesion. When forests are preserved and nature is allowed to flourish, the air is cleaner, temperatures are regulated, and biodiversity is maintained, all of which support a richer quality of life. Therefore, deforestation is not just an environmental concern but a direct assault on the well-being of the people of Awka.

Furthermore, traditional Igbo practices such as sacred groves, taboos against cutting certain trees, and community festivals celebrating the earth demonstrate an implicit understanding of Gaia-like principles. These practices were not arbitrary but rooted in a deep awareness of environmental reciprocity. As urbanization and modernization threaten these practices, the Gaia Theory offers a bridge between ancient wisdom and contemporary science, calling for a reintegration of these values into environmental policy and urban planning. Reviving such practices can help reposition the people of Awka to once again live in harmony with *Ala*, thus restoring the mutual exchange of care between man and environment.

Addressing deforestation through the Igbo perspective of *Ala* and the Gaia Theory emphasizes that ecological integrity and human flourishing are inseparable. It challenges contemporary society to redefine development not as endless expansion and resource consumption but as respectful coexistence with nature. When man honors the land, the land sustains man. This reciprocal dynamic ensures that well-being is not superficial or temporary, but deep-rooted and enduring. Therefore, eco-theology and Gaia Theory together serve as urgent calls to recognize the spiritual, moral, and physical consequences of environmental abuse, and to return to a worldview that sees the earth not as property, but as partner.

## **DEFORESTATION AND ITS IMPLICATIONS**

Stanley (2025) defines Deforestation as the deliberate clearing of forested land. He exposit that it is historically triggered by the demand for agricultural expansion, animal grazing, and the procurement of wood for various human needs. This anthropogenic activity has drastically transformed global landscapes, reducing forest cover in regions such as Western Europe, North America, and China. Stanley asserts that in contemporary times, deforestation is most prevalent in tropical rainforests, where infrastructural development and slash-and-burn agriculture exacerbate forest degradation. The principal dangers associated with deforestation, as outlined by Stanley, include increased atmospheric carbon dioxide due to the release of sequestered carbon during tree burning, thereby intensifying global warming. Moreover, deforestation precipitates a significant loss of biodiversity, particularly in tropical ecosystems that host vast arrays of flora and fauna, potentially contributing to an ongoing mass-extinction event. Additionally, the removal of forest cover accelerates soil erosion and alters forest microclimates, heightening vulnerability to fire and ecological instability. Stanley indicates that although some regions, notably in North America, have seen forest recovery through conservation efforts, the long-term environmental risks of deforestation remain profound and multifaceted.

Pimm (2025) elucidates that deforestation refers to the large-scale removal of forests. He stresses that it carries profound environmental, ecological, and climatic consequences on both global and local scales. Globally, forests play a crucial role in sequestering carbon dioxide, a key greenhouse gas, through the storage of biomass. Their removal, according to Pimm, not only halts this carbon absorption but also releases stored carbon back into the atmosphere, intensifying climate change. He stresses that ecologically, tropical forests, particularly those like the Amazon, are biodiversity hotspots, home to an estimated two-thirds of Earth's species, and their destruction contributes significantly to species extinction. Pimm enunciates that on a local level, deforestation through selective logging and burning exacerbates forest flammability, promotes drought vulnerability, and increases the incidence of destructive wildfires, while also diminishing air quality, notably in regions like Southeast Asia. Furthermore, deforestation on steep tropical hillsides can lead to catastrophic landslides due to the absence of root systems that stabilize soil. While abandoned lands sometimes experience forest re-growth, fragmentation often impedes ecological recovery, disrupts genetic continuity among species, and precludes the return of many native organisms, especially where monoculture plantations replace original ecosystems, undermining biodiversity and failing to restore ecological balance.

Bodo and Gimah (2021) and Anderson (2025) illuminate that deforestation has permanently transformed wooded regions worldwide. They argue that it is propelled primarily by human activities. Among these, agricultural expansion, timber extraction, urban development, mineral exploitation, and socio-economic demands stand as the leading causes. Tropical rainforests, especially the Amazon, currently face the most acute levels of degradation, while historical patterns reveal extensive forest loss in regions like Western Europe and Eastern North America, as noted by Anderson. Over two millennia, Europe's tree cover dwindled from 80% to 34%, and North America lost nearly half its forests before the twentieth century. Bodo and Gimah expound that in contemporary times, approximately 15 billion trees are felled annually, over 41 million each day, with around 10 million hectares of forest disappearing every year, an area equivalent to Iceland's landmass.

Anderson (2025) further accentuate that the ecological consequences of deforestation are profound: Enunciating that deforestation undermines critical environmental functions, exacerbating climate disruption through increased carbon emissions and reduced sequestration. It disrupts hydrological cycles, degrades soil integrity, and fragments habitats, threatening biodiversity and endangering countless species. Indigenous communities, whose cultures and livelihoods are inextricably linked to forest ecosystems, also face severe repercussions.

## **HUMAN WELLBEING (HWB) AND ITS LINK TO A HEALTHY ENVIRONMENT**

Costanza and Fisher et al. (2007) expand the understanding of human wellbeing (HWB) by integrating perspectives from psychology, medicine, sociology, economics, and environmental science. They argue that HWB is not solely determined by material wealth but also by the degree to which human needs are met through both internal capacities and external opportunities. Their approach includes both objective elements, such as access to education and health services, and subjective dimensions, including emotional fulfillment and sense of purpose. Costanza et al. (2007) also assert that a person's relationship with their environment, natural and built, is vital to HWB, as ecological health directly supports human health and productivity. The environment provides essential services such as clean air, water, and fertile land, which are foundational for sustaining life and promoting social stability. When these environmental systems are degraded, as in the case of large-scale deforestation, the negative impacts ripple across generations, affecting nutrition, public health, and economic viability.

Therefore, HWB cannot be achieved or maintained without a conscientious commitment to environmental conservation and intergenerational equity.

Human well-being (HWB), as described by McGillivray and Clarke (2008), defies precise definition due to its inherently subjective and multidimensional nature. They argue that although it can be described through various terms such as quality of life, welfare, living standards, utility, and happiness, HWB cannot be directly observed or independently measured. These diverse interpretations often overlap yet diverge in scope, reflecting the complexity of human experience. McGillivray and Clarke (2008) emphasize that HWB encompasses material needs, emotional and physical health, social relationships, and subjective life satisfaction. It is deeply tied to how people perceive their lives in the context of family, work, recreation, personal safety, and community. They also stress the significance of needs fulfillment and empowerment, which relate to an individual's ability to make meaningful choices. Importantly, the fulfillment of these needs must occur in a sustainable environment, as exploiting natural resources such as forests jeopardizes not only ecological balance but also the future realization of HWB. Activities like deforestation, influenced by short-term material gain, disrupt ecosystems and diminish the long-term well-being of human populations by threatening biodiversity, water quality, and climate stability.

Stiglitz and Sen et al. (2009) further critique the reduction of HWB to mere income or consumption levels. They argue that while income facilitates access to goods and services, it fails to capture the full picture of human flourishing. Many determinants of HWB, such as emotional well-being, social connectedness, safety, and autonomy, are non-material and context-dependent. Furthermore, income-based assessments often ignore how resources are distributed within societies, which can mask inequalities that significantly impact well-being. The authors highlight that individuals may derive different levels of satisfaction and health outcomes from the same level of income, depending on their values, needs, and environments. Additionally, the prioritization of economic growth at the expense of environmental integrity is short-sighted, as it depletes natural resources essential to long-term HWB. Sustainable well-being, therefore, demands that economic and social development be pursued in harmony with environmental stewardship. Protecting forests and ecosystems not only preserves biodiversity but also safeguards the ecological services upon which human lives depend, making environmental responsibility an indispensable component of meaningful and enduring human well-being.

## **DATA-DRIVEN INVESTIGATIONS**

Deforestation poses a critical environmental challenge in Nigeria, with Awka Metropolis of Anambra State exhibiting acute manifestations of this crisis. Observable indices include widespread loss of forest cover, increased soil erosion, declining soil fertility, disruption of local climate patterns, and a surge in respiratory and waterborne illnesses linked to degraded ecosystems. The destruction of sacred groves and natural shrines also reflects a profound socio-spiritual dislocation, signaling not only ecological imbalance but also a rupture in indigenous cosmological relationships between humans and nature.

Agada et al (2014) conducted a decade-long (2001–2010) analysis of land use in Awka Metropolis, revealing a significant inverse relationship between urban expansion and forest cover, as demonstrated by regression and correlation analyses. Their findings show that rapid housing development has substantially contributed to the displacement of urban forests, with

satellite imagery confirming spatial disparities in tree distribution across the city. This trend of deforestation captures the environmental cost of unchecked urbanization.

Anambra State Nigeria Erosion and Watershed Management Project (NEWMAP) (2020) registers that the Nigeria Erosion and Watershed Management Project (NEWMAP), initiated by the Federal Government of Nigeria and funded by the World Bank, is addressing severe erosion problems in Awka Metropolis, particularly in areas such as the Federal High Court, Umuzocha, and Nodu in Okpuno, all within Awka South Local Government Area of Anambra State. NEWMAP enlighten that these communities face increasing threats from storm-water-induced gullies, which are directly linked to deforestation. The removal of vegetation in these areas has left the soil exposed and vulnerable, allowing storm-water to create and widen erosion gullies that damage infrastructure and endanger lives. NEWMAP's intervention aims to control these gullies and restore degraded land, thereby tackling a key consequence of deforestation in Awka.

Owing to the high rate of deforestation in Awka Metropolis and other areas in Anambra State, Nature News (2022) reports that the Anambra State government has heightened its stance against environmentally harmful practices such as indiscriminate tree felling without replanting, bush burning, and unregulated land use. Through the Commissioner for Environment, Mr. Felix Odimegwu (cited by Nature News); the state reiterates that such actions are now classified as serious offences, necessitating collective civic responsibility to uphold environmental integrity. In alignment with Governor Charles Soludo's vision of transforming Anambra into a smart and sustainable state, the administration has launched comprehensive programmes, including tree-planting initiatives, public awareness campaigns, and inter-agency collaborations, to combat environmental degradation, as recorded by Nature News. Additionally, the state partners with agencies like NEWMAP and NESREA to promote sustainable practices, enforce environmental regulations, and disseminate community-level manuals on erosion control and climate adaptation. Irrespective of the preceding report on the efforts by the Anambra State Government, arbitrary deforestation, particularly in Awka Metropolis, is still ongoing with impunity and has not decreased.

Ogbodo et al (2023) assessed the impact of deforestation in Anambra State, where Awka Metropolis is located, using open-source remote sensing data from the Global Forest Watch (GFW) platform. Analysis of tree cover change between 2000 and 2010 showed that 6.76 thousand hectares (kha) of trees were gained, representing 1.5% of the state's total land area of 47.0 kha. During the same period, 1.52 kha of tree cover were lost due to deforestation. Their study also quantified the associated carbon emissions, revealing that Awka South Local Government Area (LGA) produced the highest emissions with 19,740 tons of CO<sub>2</sub> equivalent (CO<sub>2</sub>eq), followed by Nnewi South (13,400 tons), Onitsha North (12,100 tons), Nnewi North (6,440 tons), Awka North (1,890 tons), and Onitsha South (1,480 tons), which recorded the lowest emissions. These results showcase the usefulness of the GFW platform in monitoring deforestation and related emissions.

Onyeizugbe et al. (2023) critically examine the multifaceted issue of deforestation in Anambra State, which has Awka town as its capital, using the Akpaka Forest Reserve as a case study to investigate its causes, consequences, and regulatory impacts. Their study identifies fragile administration, corruption, ignorance, insecurity, population growth, urban expansion, and unsustainable consumption as the principal perpetrators of forest reserve loss. The environmental repercussions include erosion, flooding, altered microclimates, stream siltation, and biodiversity loss. Their research also reveals that the 2006 Forest Policy Act remains unimplemented at both the state and local levels, existing merely as a legislative artifact.

Onyeizugbe et al. affirm that reserve degradation is conceptualized in three analytical phases: Input (anthropogenic drivers), throughput (deforestation process), and output (ecological impacts). This accentuates the urgent need for systemic intervention.

Anarah et al. (2024) study investigated deforestation in Awka South and identified it as a significant environmental issue. Data from 90 households revealed that 64.44% of respondents were female, with a mean age of 40.44 years. Most respondents (82.22%) were farmers, and 36.67% had only primary education. They portray that the main causes of deforestation are wood cutting for cooking (80%), followed by urbanization (27%) and population increase (15%). Reported effects included desertification (mean = 2.57), erosion (2.37), and rising surface temperatures (2.35). Awareness was relatively high, with 68.88% recognizing desertification as a major threat.

Global Forest Watch Anambra State, Nigeria (2025) records that between 2001 and 2023; Awka North experienced notable changes in its forest landscape. As of 2020, natural forests covered approximately 7.59 thousand hectares (kha), accounting for 20% of the region's land area. However, in 2023 alone, the area lost 39 hectares (ha) of natural forest, corresponding to an estimated 33.9 kilotonnes of CO<sub>2</sub> emissions. From 2001 to 2023, the region witnessed a cumulative loss of 95 ha of tree cover—a 2.9% decrease from the 2000 baseline—releasing 67.2 kilotonnes of CO<sub>2</sub> equivalent. Humid primary forest loss during the same period was minimal (<1 ha), representing only 0.48% of total tree cover loss and a 0.23% reduction in the area of humid primary forest. Net change analyses from 2000 to 2020 indicate a loss of 718 ha and a gain of 434 ha in tree cover, resulting in a net decline of 285 ha. In 2000, tree cover with canopy density exceeding 30% was estimated at 3.31 kha (8.5% of land area), while natural forests predominated over non-natural tree cover. Fire activity remained within normal historical ranges, with six high-confidence VIIRS alerts recorded between April 2024 and April 2025. Notably, fire-induced tree cover loss totaled 2 ha from 2001 to 2023, with 2023 marking the highest annual loss from fire at 2 ha—7.1% of that year's total. Consequently, 92.9% of the tree cover loss in 2023 (i.e., 36.2 ha out of 39 ha) was not caused by fire outbreak but rather by deforestation. Despite fire disturbances, no deforestation alerts were recorded between April 8 and April 15, 2025, and the total number of fire alerts from April 2021 to April 2025 stood at 173.

These afore-stated records indicate that deforestation is rife in Awka Metropolis, and it has adverse impacts on the area's ecological stance alongside the holistic wellbeing of its population. This equally showcases the urgency of reforestation and the adoption of ecologically sound practices across the milieu.

## **EXPLORING AFRICAN ECO-THEOLOGY**

African eco-theology is an evolving theological discourse that responds to environmental degradation by engaging African cultural, philosophical, and religious worldviews within Christian theological reflections. Emerging partly in reaction to Lynn White Jr.'s critique that Christian theology has promoted ecological destruction as Gottlieb (2004) explicates; African eco-theology seeks both to localize and contribute to global ecological conversations. While acknowledging the historical and ongoing impact of Western industrialization on Africa's ecological and economic landscapes, scholars like Conradie (2010) argues that such developments have severely harmed the environment and deepened poverty in vulnerable communities. However, recognizing that Africans have also become complicit in this crisis, African eco-theologians are shifting from blame-shifting to theologically investigating the

causes of and solutions to environmental degradation within African contexts as Mukaria (2021) suggests. Distinctively, African eco-theology integrates indigenous eco-religious values, rooted in the inseparability of spiritual and material realities, to promote creation care, environmental justice, and stewardship. Blasu (2020) intimates that this culturally grounded approach reject purely technocratic solutions and instead explores the African primal worldview of interconnectedness, which emphasizes harmony between human and non-human creation. Through incorporating such indigenous perspectives into Christian theological discourse, African eco-theologians aim to cultivate a renewed, contextually relevant, and theologically sound human-earth relationship.

Kanu (2021) articulates that African eco-theology is a contextual theological response to the ecological crisis, rooted in the African cultural and religious worldview, and distinct from Black theology which primarily addresses historical oppression in the American and South African contexts. Apposite to Kanu's insights, African eco-theology emerges as a dimension of liberation theology that emphasizes social responsibility toward environmental preservation, recognizing the human person as created in the image of God and situated within a community of beings deserving of dignity and care. Nwaigbo (cited by Kanu) defines it as a reflective theology aimed at safeguarding the earth and universe from further degradation. Unlike universal or technocratic approaches that may overlook cultural complexities, African eco-theology insists on locally grounded, culturally relevant solutions, as advocated by Pope Francis (cited by Kanu), who underscores the inadequacy of uniform global interventions and calls for dynamic, participatory strategies that align with the symbols, customs, and spiritualities of specific peoples. In this light, African eco-theology engages the interconnectedness of African religion, culture, and nature, drawing from Africa's symbolic and spiritual heritage to confront environmental challenges with authenticity and depth.

In line with the aforementioned articulations and in view of Afunugo's (2024) study, African eco-theology is a contextual theological enterprise that interrogates the interrelationship between African indigenous ecological consciousness and the sacred. It articulates a distinctive spiritual anthropology that perceives the environment not as an inert resource but as a living continuum of divine immanence. It transcends imported cosmological binaries by recovering the African cosmotheandric vision, where nature, humanity, and the divine are co-constitutive and dynamically intertwined. Unlike conventional eco-theologies, which often derive from Western philosophical dualisms, African eco-theology arises from ancestral epistemologies in which ecological preservation is sacralized through ritual, myth, and communal ethics. It resists exploitative modernity and theological abstractions by calling for praxis of ecological reparation rooted in the spiritual dignity of land and life.

## **DEFORESTATION IN AWKA METROPOLIS AS A VIOLATION OF AFRICAN ECO-THEOLOGY AND HUMAN WELLBEING**

Deforestation in Awka Metropolis constitutes a significant violation of African eco-theology, which emphasizes the sacred relationship between humanity and nature, embedded in the belief that environmental stewardship is integral to human wellbeing. The reduction of trees, essential for producing oxygen and absorbing carbon dioxide, has dire consequences on human health. A diminished presence of trees disrupts the natural exchange of gases, contributing to respiratory problems such as asthma, chronic obstructive pulmonary disease (COPD), and other lung-related illnesses. The resultant lack of fresh air exacerbates the suffocating urban environment, where increased heat, often referred to as the urban heat island effect, intensifies the oppressive weather. E. Okoye and C. Ezeokeke (personal communication, April 18, 2025), this elevated temperature can lead to heat-related illnesses, including heat exhaustion and heat

stroke, which cause dehydration, fatigue, confusion, and in extreme cases, organ failure. The absence of trees not only deepens the environmental crisis but also directly compromises public health, particularly among vulnerable populations, making the effects of deforestation more than just an ecological concern, but a pressing human health issue.

Deforestation in Awka Metropolis has significantly disrupted the ecological balance, leading to a cascade of environmental disasters. The removal of vegetation, particularly trees, exacerbates soil erosion by reducing the natural barriers that prevent water runoff. This degradation of the land not only increases the frequency and intensity of erosion but also heightens the vulnerability of the region to flooding, as the soil's capacity to absorb water is diminished. This is witnessed at Ifite Awka and Umuike areas amongst others. Moreover, deforestation contributes to the loss of biodiversity, weakening the resilience of local ecosystems to climatic shifts. The resultant increase in temperature and altered rainfall patterns further compound the challenges, creating a feedback loop of escalating environmental crises. As such, the unchecked destruction of forests in Awka triggers a chain reaction of ecological catastrophes, including the displacement of local species, deterioration of water quality, and the amplification of climate-related hazards such as droughts and landslides. In this regard, I. Ibegbu and G. Ikejiobi (personal communication, April 18, 2025), observe that water obtained from wells and boreholes within Awka Hub is mostly unfit for drinking.

Deforestation in Awka Metropolis not only depletes the natural landscape, undermining the aesthetic beauty that is vital for cultural and creative expression, but it also exacerbates the absence of designated spaces for relaxation and inspiration, such as natural parks and recreational areas. There is no single natural park or relative place within Awka Metropolis that offers a sanctuary for rejuvenation or a setting that activates the flow of ideas and talent. These spaces are crucial for both mental relaxation and the nurturing of creative potential, yet their lack stifles innovation and personal development. This environmental degradation constitutes a violation of African eco-theology, which emphasizes the intrinsic connection between humanity and the natural world, advocating for the stewardship of creation as essential to human flourishing. Moreover, the absence of such spaces contributes to the erosion of human wellbeing, as access to nature is integral to holistic health, cognitive function, and the preservation of cultural practices that promote communal and individual growth.

Deforestation in Awka Metropolis represents a growing environmental crisis that conflicts with the principles of African eco-theology and human well-being. African eco-theology emphasizes the sacredness of the earth, viewing nature as a divine gift and an extension of the Creator's presence. In traditional Igbo cosmology, which informs the theological outlook of many inhabitants of Awka, forests are not merely physical spaces but spiritual entities. Sacred groves, ancestral trees, and riverbanks serve as places of communion with the divine and the ancestors. Therefore, the reckless clearing of forests for urban expansion and commercial activities is a direct affront to this theological worldview. It is a desecration of what is held as sacred and spiritually significant. This destruction also disrupts the interconnectedness between the land, the divine, and the people, reflecting a violation not just of sacred beliefs but of the holistic relationship that sustains both spiritual and physical well-being.

In addition to theological concerns, deforestation severely undermines human well-being in Awka. The cutting down of trees contributes to a rise in temperatures, increased soil erosion, and the loss of biodiversity. Residents face health risks due to increased dust, poor air quality, and heat stress, especially during the dry season. In a city already grappling with infrastructural challenges, the absence of trees worsens living conditions and places strain on healthcare

systems. The ecological disruption also threatens the livelihood of local farmers who depend on a balanced climate and fertile soil. As these natural supports erode, food insecurity and poverty become more pronounced. Thus, the ecological destruction directly impacts the physical and economic health of the population, demonstrating how the violation of eco-theological principles simultaneously harms human well-being.

Furthermore, African eco-theology promotes a harmonious relationship between humans and the environment, grounded in the ethics of community, reciprocity, and stewardship. In this theology, every human action upon the environment carries moral responsibility. Deforestation in Awka betrays this responsibility by prioritizing economic gain over communal welfare and ecological balance. It reflects a departure from traditional values where environmental degradation is considered an act of moral negligence. The absence of community consultation in most deforestation activities also highlights a disconnection from indigenous governance structures that once ensured sustainable land use. This disconnect not only violates eco-theological principles but also undermines the community's social cohesion, as the environment is integral to both communal identity and individual well-being.

The destruction of trees in Awka also disrupts cultural identity and social cohesion. In many parts of Igboland, including Awka, trees serve as cultural symbols, boundary markers, and meeting points. Their removal erases historical memory and weakens the communal narratives tied to land and nature. Moreover, the loss of green spaces affects mental health, especially among children and the elderly who rely on such environments for recreation and solace. Human well-being, therefore, is not only affected in physical terms but also in psychological and cultural dimensions. The diminishing of these natural spaces directly contravenes the African eco-theological understanding of nature as a means of nurturing mental and spiritual health within the community.

Deforestation in Awka Metropolis violates both the tenets of African eco-theology and human well-being by desecrating sacred ecological spaces and undermining the spiritual principles of stewardship and reverence for nature. It also threatens human well-being by disrupting the ecological balance necessary for health, livelihood, and social harmony. Addressing this crisis requires a return to indigenous ecological ethics and a commitment to sustainable urban planning that respects both theological values and the right to a healthy environment. The restoration of the land is therefore not only an environmental necessity but also a spiritual and human imperative.

## **CONCLUSION**

This research has illuminated the complex relationship between ecological degradation and spiritual dislocation within the context of African eco-theology. Deforestation in Awka Metropolis represents more than an environmental crisis; it disrupts the sacred balance that sustains both nature and human life. African eco-theological perspectives regard the environment as a living entity with intrinsic spiritual value, and any harm to it directly undermines human well-being. The findings reflect the need for ethical ecological practices rooted in African spiritual traditions, which place environmental stewardship at the heart of community life.

Although existing literature on Igbo ecological thought is abundant, the absence of updated environmental records and the reluctance of certain government agencies and community leaders to release relevant ecological data significantly affected the depth of analysis. These practical challenges limited the development of a more thorough and balanced correlation between eco-theological values and actual deforestation trends across various parts of the metropolis.

Future studies may consider more comprehensive regional comparisons across urban centers in Nigeria and sub-Saharan Africa, examining how similar patterns of deforestation influence both ecological stability and theological worldviews. Interdisciplinary collaboration among theology, environmental studies, and cultural anthropology could offer a richer platform for contextual solutions. Engaging local communities, traditional leaders, and faith-based actors in future research may also yield practical pathways for integrating ecological restoration with cultural and spiritual renewal.

## **RECOMMENDATIONS**

In addressing the alarming rate of deforestation in Awka Metropolis, this paper makes the following recommendations:

- 1.** A theological reorientation grounded in African eco-theology is exigent in forming the Theological base of all religious institutions and individuals in Awka Metropolis and Igbo communities at large. The local church and faith-based institutions should actively incorporate ecological consciousness into their liturgies, catechesis, and sermons, emphasizing the spiritual interconnectedness between humanity and nature as preserved in African Traditional cosmologies. This theological shift should not only reaffirm the sacredness of the earth but also challenge exploitative practices that sever the symbiotic relationship between people and their environment. Such spiritual engagement can create moral pressure on legislatures and community leaders to adopt ecologically sustainable approaches in urban planning.
- 2.** Additionally, government agencies and local authorities must prioritize the development and enforcement of environmental policies that align with both scientific and cultural imperatives. Urban development projects should undergo rigorous environmental impact assessments that integrate Igbo indigenous ecological knowledge as reflected in the Gaia Theory in Igbo Perspective. Collaboration between environmental scientists, theologians, and community elders can yield context-specific strategies for afforestation and the preservation of biodiversity.

3. Public awareness campaigns anchored in both civic education and religious teachings should be launched to sensitize Awka residents on the long-term consequences of deforestation, including climate change, erosion, and public health crises.
4. Furthermore, educational institutions in Awka should embed environmental ethics and African eco-theological principles into their curricula across all levels. Nurturing ecological literacy among the youth ensures the emergence of a new generation of environmentally responsible citizens. Community-driven initiatives, such as urban green spaces, tree planting exercises, and sacred forest conservation, deserve support through grants and incentives. These grassroots actions can serve as practical expressions of theological convictions, thereby reinforcing the moral imperative to protect creation as an extension of safeguarding human wellbeing.
5. Estate managers in Awka Metropolis should enforce policies that prohibit the indiscriminate felling of trees during the construction of corporate, public, and private buildings. This practice, successfully implemented in cities like London, Vancouver, and Singapore, ensures adequate fresh air circulation and enhances natural aesthetic appeal. Integrating tree preservation into urban development plans will promote environmental health and align Awka Metropolis with global standards of sustainable real estate management.

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