AFRICAN INDIGENOUS ECOLOGICAL SPIRITUALITY AND ECOLOGICAL CRISIS

Ikechukwu Anthony Kanu

Department of Philosophy and Religious Studies Tansian University, Umunya, Anambra State

Abstract

This piece focused on Igbo-African eco-spirituality which is an indigenous and traditional form of responding to the devastating realities of climate change, mass extinction, biodiversity loss, and the disruption of ecosystems. It calls for a re-thinking of the foundational beliefs regarding the preservation of the environment, and the need to create a welcoming space for indigenous voices so as to open the opportunity to benefit from a genuine exchange among cultures. This research deepens the understanding of the spiritual dimension of nature, which is a shift from the dominant paradigm which is legalistic, consumerist, materialistic and profit oriented. The method of investigation employed is Igwebuike, which is an indigenous holistic approach to the conservation of the environment that understands reality as interconnected and interrelated.

Keywords: Igbo, African, Ecology, Spirituality, Indigenous, Ecological Crisis, Eco-Spirituality

Introduction

Chinua Achebe, an Igbo-African scholar and the founding father of modern African literature in English has a status that is based on his cumulative publications in creative writing. His unparalleled accomplishment is his first novel *Things Fall Apart*. In this piece, he creates a space for the authentic African subject and his or her world and reverses the colonial gaze so as to reveal the essential humanity of the African that the colonial story either deliberately elided or was incapable of articulating. His purpose of writing this novel was to help the Igbo society regain belief in itself and put away the complexes of the years of denigration and self-abasement. The novel takes its title from a verse in a poem *The Second Coming* by an Irish Poet, W. B. Yeats, who describes an apocalyptic vision in which the world collapses into anarchy as a result of an internal flaw in humanity.

Turning and turning in the widening gyre The falcon cannot hear the falconer; Things fall apart; the center cannot hold; Mere anarchy is loosed upon the world Taking from the ominous tone of W. B. Yeats, Achebe describes the experience in the Igbo society of Nigeria at the time when it was colonized by the British. The intrusive presence of the British colonial masters caused the traditional Igbo 'world' to fall apart. As it fell apart, traditional structures fell with it, not excluding her indigenous pattern of relationship with the environment. This was followed by a concurrent replacement with what we may refer to as dominant approach, which is consumerist, profit oriented, materialistic, mechanistic, secularistic, etc. This becomes very important as one discovers that the environmental challenges emerging in places like Africa came to be with the advent of colonialism which altered traditional patterns of relationship with the environment.

This piece begins from an evaluation of the impact of the dominant approach towards the preservation of the environment, which Adler (2001) avers has deficiencies that will not be able to continue the trend of environmental improvement, and sometimes, its legalistic nature, stand as the greatest obstacles to continued preservation of the environment. Schalkwyk (2011), Delaney (2009) and Ruether (1992), therefore, hold that there is a need for a new humanism that is capable of articulating relegated perspectives in the service of an integrated vision of the environment and life that is sustainable outside of the dominant approach of the modern man. In the contention of Pope Francis (2015):

A consumerist vision of human beings, encouraged by the mechanisms of today's globalized economy, has a leveling effect on cultures, diminishing the immense variety which is the heritage of all humanity... New processes taking shape... need to be based in the local culture itself. Merely technical solutions run the risk of addressing symptoms and not the more serious underlying problems. (no. 144).

The consequences of this approach on the environment have led to quests for alternative approaches towards the human relationship with the environment. It is to these quests that this paper adds voice as it focuses on *Igbo-African Eco-Spirituality: An Indigenous Response to Modern Ecological Crisis*.

Theoretical Framework

This research is based on the *Igwebuike* conservation theory which is an indigenous holistic approach to the understanding and preservation of the environment. It holds that reality is interconnected and interrelated. *Igwebuike* is an Igbo proverb and a typical Igbo name. Beyond the linguistic expression is a deeper meaning, which provides an ontological horizon that presents being as that which possesses a relational character of mutual relations (Kanu 2016; 2021). Literally, *igwebuike* means *there is strength in number* or *number is power* (Kanu

2017). However, beyond the literal sense, it means *otu obi* (one heart and one soul) – *cor unum et anima una*. As a conservation theory, it understands the exploitation and mismanagement of any dimension of the environment as having consequences on the entirety of reality.

Ecological Crisis and the integrity of natural systems

The world is currently experiencing the severe consequences of the mismanagement of the environment, which is posing a serious threat to existence as the exploitation of nature is finding expression in deforestation, desertification, extinction of species, forced migration, bush fire, air pollution, soil erosion, oil spillage, ozone layer depletion, greenhouse gas increase, extreme energy, water pollution, natural disasters, metals and solid minerals depletion, etc., (Gwamna 2016). In the face of the foregoing, Chiras (1989) sums up the concerns in these words: "Together, the problems of overpopulation, depletion, and pollution have created an ecological crisis – a threat to the integrity of natural systems of which humans are part, and, therefore, a threat to the survival of human life." (p. 5)

Africa's experience of this mismanagement of nature include the pollution of the air, water and soil caused by industries, motor vehicles exhausts, heavy metals, nitrates and plastics, industrial waste, etc. The result of these pollutions is climate change visible in global warming which has led to rising temperatures of the oceans and the earth surface, melting of polar ice caps, rise in sea levels and also unnatural patterns of precipitation such as flash floods, excessive snow or desertification (Kanu 2021). Coupled with these is the problem of overpopulation which puts pressure on resources such as water, fuel, food, etc. Thus, there is the high consumption of resources that go with excessive plastic wastes or garbage and the inappropriate dumping of the same which ends up as pollutants of the environment. There is also the pollution of the air with toxic substances and noise which impair the normal functioning of the ecosystem by spreading tropical diseases, extreme weather condition, crop failures, death of living organisms, loss of species, and, therefore, of bio-diversity (Kanu 2021).

The ozone layer which prevents harmful ultra violet radiation from reaching the earth is fast depleting. However, in the face of its depletion, the lives and survival of organisms and human beings is put in danger. The likely consequence of global warming, according to Emiola (2013) is that more people might get sick or die from heat and stress related problems due to excessive heat waves in the daytime and warmer temperatures in the night; Nnamani (2005) adds that there is the fear about severe droughts, erratic climate conditions as

well as increase in natural disasters like earthquakes, tidal waves, hurricanes, tsunami, tornados, flood, erosion, etc.

There is also the problem of deforestation. Forests that should be natural sinks of carbon dioxide which produces fresh oxygen as well as helps in regulating temperature and rainfall are reducing fast in space and number (Kanu 2021). Deforestation has led to the damaging of the habitat, biodiversity loss, aridity, etc. As a result of the disappearance of tropical rain forests, ecosystems preserved in these thick forests are facing extinction. Human activities such as digging of the soil and cutting down of plants have led to erosion which washes soil nutrients away (Ehrenfed 1978). There is also the reduction of the quality and quantity of land, the pilling of sediments inside streams, lakes, brooks and other bodies of water, etc., which is not healthy for inhabiting organisms.

The Quest for Alternative Approaches

In other to determine the importance of an alternative approach, the researcher engaged in two surveys. In the first, some enlightened persons from the five states considered predominantly Igbo in Nigeria were interviewed regarding the impact of international environmental laws in the form of agreements among indigenous people. This would help determine its relevance to the local people, the level of its awareness and impact among indigenous people.

Results

The participants (No: 30) were slightly skewed in gender towards male. However, participants represented a range of ages and distribution across the 5 states dominated by the Igbo.

Table 1: Participants' Gender and Location

Characteristic	Category	Number of participants (No:30)
Gender	Male	19
	Female	11
States of	Enugu	6
participants in Igbo	Anambra	6
land	Imo	6
	Ebonyi	6
	Abia	6

Table 2: The Major themes in participants' responses on the international multilateral agreements/laws on the protection of the environment

Theme	Sub-Theme	Theme Dimensions	#Cited
1. What are the views of the Igbo on the multilateral environmental agreements/laws¹ aimed at preventing environmental deterioration?			
Awareness of the agreement	Complete Ignorance	• Have not heard of these multilateral environmental agreements before	25
S	Partial knowledge	• Know there are such documents but don't know the content	5
Involvement in environment		Africans are not major players in the damaging of the environment	18
al degradation	External	• The West and China is a major player in the damaging of the African environment through the activities of multinationals in oil drilling, falling of trees, disposal of toxic wastes	12

-

¹ Ramsar Convention on Wetlands of International Importance Especially of Water Fowl Habitats 1971; Convention Concerning the Protection of the World Cultural and Natural Heritage 1972; Convention on International Trade in Endangered Species of Wild Fauna and Flora 1973; International Convention for the Prevention of Pollution from Ships 1973-1978; United Nations Convention on the Law of the Sea 1982; Vienna Convention for the Protection of the Ozone Layer 1985; Montreal Protocol on Substances that Deplete the Ozone Layer 1987; Basel Convention on the Control of Trans-boundary movements of Hazardous Wastes and their Disposal 1989; Convention on Biological Diversity 1992; United Nations Framework Convention on Climate Change 1992; United Nations Convention to Combat Desertification in those Countries Experiencing Serious Draught, Particularly in Africa 1994; Convention on the Law of the Non-navigational uses of International Watercourses 1997; Kyoto Protocol 1997; Cartagena Protocol on Biodiversity 2000; Stockholm Convention on Present Organic Pollutants 2001; Minamata Convention on Mercury 2013; Paris Agreement 2015; Rotterdam Convention on Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade 1998.

Indigenou s Concerns	Less Immediate	• The issue of climate change is not the immediate concern of the Igbo-African people	27
	Immediate	• It is an immediate concern that should be attended to as soon as possible	3
Commitme nt to the agreement	Lack of spiritual depth	 Agreements without a spiritual background among the Igbo-African people often attracts less commitment 	15
	Lack of commitment from those who should know	• The major players in falling of trees and destruction of the environment are done by those who should know	8
	Lack of awareness	• Lack of awareness affects commitment to the multilateral agreements	7
Communic ation	Mode	• The mode of communicating these multilateral agreements is not very effective	20
	Concept	• The conceptualization of the agreements is not accommodative of diversity	10

From the above table, the issues bordering on lack of spiritual depth and awareness, and also the mode of communicating these international laws suggests that there is need to begin from what the people know (their religio-cultural norms on the environment) and then proceed to what they do not know (multilateral agreements bordering on the environment); thus, the need for an indigenous approach.

Having studied this at a general level, the researcher then went further to survey the perspectives of 35 scholars of Igbo-African background to know their positions on the need for an indigenous approach.

Table 3: Perspectives on the need for an indigenous alternative approach to the preservation of the environment

Theme	Sub-Theme	Theme Dimensions	Cite d
Given the ecological crisis, what is your perspective about the need for an alternative approach to the preservation of the environment that is indigenous to the Igbo people?			
Ideologies that call for concerns	Discarding cultural practices	Completely doing away with the Igbo traditional practices in some communities	
	Changing interests	More interest in making money than in preserving the environment Desire to be like the Whiteman	2
		Revive the practice of tomism	2
Bringing back	Spiritual practices	Return of shrines/traditional religious practices	5
	Agriculture and food	Local dishes should be encouraged as they have low emission	1
good old practices		Revive traditional farming methods	3
praetices		Use of local an inorganic fertilizers	1
		Sensitise and encourage people to be friendly with the natural environment	4
		Encourage tree planting	6
Alternative	Landscaping / planning of the environment	Planning of the community – place for building and places for residential and industrial	2
		Communities should carve out reserves, relaxation parks and gardens in communities	1
		Governments' involvements in housing projects to build residential houses and preserve some areas	1
approaches		Better management of waste	3
	Waste management	Provide water collectors in some compounds	1
		Forestation and ruralisation	5
		Make rules and regulations for the preservation of the environment set up a task force (from the indigenous people) to ensure enforcement	1

Extract from responses

Table 4: How the Igbo concept of nature as interconnected and holistic reality promote respectful relationship with the environment

Theme	Sub Theme	Theme Dimensions	Cited
How does the Ig	bo concept of nature	as an interconnected, interrelated and	1
holistic reality	promote a respectful 1	relationship with the environment?	
		The belief helps to enhance	2
		ecological order in the society	
	Order	The concept reminds man that	
		though he ranks high in nature, he	2
		is still part of nature.	
Relationships		The belief that any disruption in	
Relationships		the inter relatedness of realities is a	4
		disruption of the environment help	1
	Relationships	people respect the environment.	
		Because realities commune, they	
		always feel the need for cordial	6
		relationship with one another	
	Respect for culture	The concept promotes respect for	
		deities, which help people in a	
		community to strive to meet	3
		expectations such as respecting	
		sacred places	
		Communal agreements/Oath-	
		taking facilitate respect for	1
Practices		agreement including those related	
\		to respecting the environment	
\		The concept helps to preserve what	
		community considers sacred and	4
		hand them over to the next	
		generation	
		The concept facilitates the	6
		honouring of sacred spaces, places	
		and animals.	
	Interconnectedness	The concept helps to create	1
Understanding		consciousness of the importance of	
		the environment for medicine and	

food	
There is reciprocal understanding	
of the relevance of man to the	3
environment and the environment	
to man	
Increases understanding that for	
human beings to connect to nature,	2
they need to respect the	_
environment	
The concept increases the desire to	
preserve what environment brings	1
through nature	

The responses of the respondents show a very strong interest among the Igbo-African people to return to the traditional approaches for the management of their environment.

Towards an Indigenous Approach

The current environmental crisis is partly the consequence of human activities, and has been traced to the dominant consumerist, materialistic and hedonistic approach towards the use of the environment; which comes with an understanding of the environment as a property. This has consequences not only in the west but also on the poor countries in Africa. Thus, Francis (2015) insists that the "warming caused by huge consumption on the part of some rich countries has repercussions on the poorest areas of the world, especially Africa, where a rise in temperature, together with drought, has proved devastating for farming" (no. 51). Pope Francis (2015) describes the mismanagement of the ecosystem as a sin against humanity. In the contention of Hufnagel (2018 & 2020) and McDonagh (2004 & 2010), it is the horror of extinction; Taylor (2019) refers to it as the major human dilemma of our time; for Tubi (2020), it is an ecocide.

Given the several human efforts to grapple with the challenges of ecological crisis in the last twenty years and more by environmental experts and international organizations or conferences on environmental protection, shows that there is need for alternative perspectives or approaches (Melnick et al., 2005; Tarusariran. 2017). These measures, in spite of the availability of the will to achieve them have not been able to solve the problem at hand but only addressed the symptoms rather than the main issues, implying that there might be need to go deeper and wider than some of the present measures can go (Sponsel 2014; Crockett 2014 & Bonfiglio 2012; Crockett 2014; Sponsel 2014).

There is, therefore, the need for a perspective that understands the environment as that which is not only material but non-empirical in value. This will involve solving ecological issues from the particular religious, cultural and philosophical experiences of particular peoples, Pope Francis (2015) teaches that:

There is a need to respect the rights of peoples and cultures... Nor can the notion of the quality of life be imposed from without, for quality of life must be understood within the world of symbols and customs proper to each human group (no. 144).

The African people have related with their environment in a spirit of respect, solidarity and complementarity. Ogungbemi (2007) avers that:

In our traditional relationship with nature, men and women recognize the importance of water and air management to our traditional communities. The ethics of not taking more than you need from nature is a moral code. Perhaps this explains why earth, forest, rivers wind and other national objects are traditionally believed to be both natural and divine. (p. 36).

The African people need to relate to their environment within their categories which are guided by earth-based spiritual traditions and practices. Scholars such as Udodora (2011), Mbiti (1976; 1975), Thompson (1970), Calder (1968) and Gbenga (2006) observe that all religious traditions whether elementary, preliterate or advanced, are environmental friendly. The African perspective is sacralized, which is a manifestation of the consciousness and experience of the sacred in the ecosystem which serve as a sustained source for African communities' and individuals' practical struggle for the healing of the earth's ecology and for humanity's sustainable living from the earth's resources (Taylor 2009 and Schalkwyk 2011). This sacred dimension centers on "having a reverential attitude toward the environment in taking care of it while dwelling within its premises" (Suganthi 2019, n.pg.). It holds that the preservation of the environment depends on the spiritual awareness of men and women and an attitude of responsibility towards the ecosystem, which include tending, dwelling, reverence, connectedness, and sentience (Suganthi, 2019; Agbo 2010; Gaudalli 2017 and Nnamani 2013).

Igbo Indigenous Religion and Environmental Preservation

Igbo indigenous religion refer to the religion of the Igbo people that captures their concept of God, divinities, spirits, the human person and the relationships among these forces. As this religion relates to environmental preservation, the following will be discussed.

i. Sacred animals

Among world religions, animals belong to an important class of nature that feature prominently (Durkheim 1995). Gods were named after animals- like the goddess *Epona* in ancient Celtic religion whose name means Horse (Durkheim 2008). Among the Igbo, different communities and families hold different animals as sacred with whom they have an affinity (Kanu 2015, 2021; Aniako 1978, 1984, 2002). There are times the sacred animals are treated as property of some deities, the python for instance, is considered to belong to the deity Idemili (Achebe, 1982). Particular animals are considered sacred because the supernatural reveals himself in them. And because spirits dwell in them, these sacred animals possess great powers and are respected. Some sacred animals in Igbo-African traditional society include:

- a. *Eke* (**Python**) is called *Nne anyi* (our mother) when it visits Igbo homes and must not be killed. It is a symbol of ancestral spirits, wisdom, earthly bliss and benefaction (Rim-Rukeh et al 2013; Eneji, et al 2009 and Adibe 2008).
- b. *Ikwikwi* (Owl) is a symbol of vigilance. When it moves or makes a sound, it is believed that it is communicating a message from the ancestors. To kill it is to shut oneself out of communication with the ancestors (Kanu 2015).
- c. *Udene* (Vulture) is a mystical symbol of the spirits; and it is a ritual consumer of the spirits. When a sacrifice is offered, and a vulture does not come to eat it, it is interpreted that the sacrifice has been rejected by the spirits (Kanu 2015).
- d. *Icho-Oku* (Parrot) is a symbol of surveillance, sight and proclamation. According to Adibe (2008) "The feather is regarded as the power of insight in the spirit world" (p. 214).
- e. *Mbekwu* (Tortoise) is a mystical symbol of wisdom and discernment. It is capable of manoeuvring all traps and obstacles. Its shell is used by diviners in mystical religious rituals (Kanu 2015).

ii. Sacred Trees and Forests

Sacred trees/plants in Igbo traditional societies were the first temples of the gods and places of worship (Hughes and Chandran 1998). According to Frese and Gray (1995), sacred trees:

Are a form of nature that represent life and the sacred continuity of the spiritual, cosmic and physical worlds. A tree is usually used to symbolize a deity or other sacred beings, or it may stand for what is sacred in general..., serve as mediators or as a link to the religious realm (p. 26).

Beyond the spiritual, Eliade (1958 & 1959) and Dafni (2006) aver that these sacred trees symbolize life, youth, immortality, wisdom, etc., and express what the spiritual man and woman consider real and sacred. Gupta (1980) adds that they are worshiped because of their long life and the protection that they offer the

human person. Thus, Ede (1985) observes among the Igbo that they also possess human attributes. These human attributes are conferred on them because they are understood as a part of the human family and vessels for the manifestation of spiritual beings (Mbiti 1970; Nwala, 1985; Nnabuchi 1987 and Adibe, 2008).

There are also sacred forests among the Igbo which were set aside as sacred sites and strictly protected by customary laws, beliefs and enforced taboos. They are not just limited to the Igbo world but are found all over the world including Ethiopia, Japan, Morocco, India, Ghana, etc. (Cardelus et al 2013; Hughes and Chandran 1997; Malhotra et al 2007; Bhagwat 2009 and Manikandan et al 2011). These forests, remain the storehouse of the life gas oxygen in Igbo traditional society. They also improve the soil stability and act as soil binder, thus, preventing erosion. They were regarded as abodes of the spirits and deities and places for worship, sacrifice, etc. Examples of these forests are: Ofia Udike (dedicated to *Udike*); Ofia Aro (dedicated to Aro deity); in Abatete, Ofia Omaliko (dedicated to Omaliko deity); in Nnobi, Ofia Idemili (dedicated to Idemili deity); in Umunnachi, there is Ofia Okpimodu (dedicated to Okpimodu deity) (Kanu 2015). It is forbidden to go inside these woods, cut them down or collect its fruits. Due to lack of human activities monkeys and other animals often live in these forests, and are considered sacred. Some Igbo sacred trees include: alligator pepper, ogirisi, oji, yam, kola nut, omu, udara, ofo, etc. (Kanu 2021).

iii. Market days

Generally, a market is a specific and authorized place where people assemble at regular intervals to buy or sell goods and services based on needs and under specific conditions (Good 1970; Scott 1970; Kotler 1967, 2006'; Kotler and Fox 1995; Shaw 1912; Coutant 1936). Among the most powerful religious and social elements in Igbo religion, history and culture are the Igbo market days which include- *Eke, Orie, Afo* and *Nkwo*. Unlike the English calendar which has 7 days in a week, the Igbo calendar has 4 days in a week. These four days represent the four cardinal points: *Eke*- East; *Orie*- West; *Afo*- North and *Nkwo*- South (Kanu 2021). There are particular deities that are worshiped on different market days, during which some water bodies are not fetched, for such days are sacred to the deity (Kanu 2015).

- a. *Eke* market day is regarded as *Isi Mbido Ahia* (the beginning of the market days) or *diokpara ubosi* (the first son of the week). It is a sacred day to be honored by everyone; and sometimes associated with *Eke* python or *Eke*-the creator God (Kanu 2015).
- b. *Orie* is *Ada Ubosi* (the first daughter of the week). It is the day when the opening of farming season is done or declared by Igbo communities. As a holy day of obligation, the Uturu farmer rests from farming on this day and feasts together with his or her family.

- c. *Afo* is *Osote Diokpara* (second son). It is the day of merriment and masquerade displays.
- d. Nkwo is Isote Ada Ubosi (the second daughter). Those who die on Nkwo day are considered righteous. It is a day when many celebrations or feasts among the Igbo begin.

iv. Water Spirit (Mmuo Mmiri)

The African universe is made up of a myriad of spirits. In Igbo ontology, spirits inhabit mountains, trees, the ground, the sky, the water- rivers, seas, oceans, canals, etc. The spirit that inhabits the water is popularly called *Mmuo Mmiri*. It occupies a prominent place in Igbo pantheon. It is a female deity believed to hold the key to the gate that leads to the world of solutions (Kanu 2013 & 2015).

Mmuo Mmiri underscores the awe for female fecundity, symbolizes the female dimension of the Igbo universe, a role model for female achievement and sacredness of life. This deity is supremely beautiful, colorful, sparkling, elusive and benevolent, however, equally dangerous as she can cause turmoil, diseases and even bring about death. Those who are her devotees find in her a source of fertility, children, food, health, wealth, etc. Her icons are python, crocodile and tortoise (Kanu 2021; Jell-Bahlsen 2014).

v. Ala Deity

Ala is the most important deity in Igbo public and private cults (Onwu 2002). Everything that was done in Igbo traditional society had a bearing to the land. She is the sole daughter of *Chukwu* and is believed to have made the ground and the vegetable kingdom. In the contention of Ogbukagu (2008):

The *Ala* is *ipso facto*, the earth-divinity of the Igbo speaking peoples. It is the great mother goddess, the spirit of fertility and the queen of the underworld. It is generally believed to be the most powerful of all divinities who is also the custodian of public morality, assisted by the ancestors. (p. 385)

Among the Igbo, the land is holy, and from it, God produces all living things, including human beings. It is also through the land that human beings rejoin their Maker – *Chineke*. When a person, therefore, commits a crime, he or she is said to have "*Meruo Ala*" (defiled the land). If such a person dies without having "*Mejuo Ala*" (pacified the land), the *Ala* whose function it is to expose people's atrocities will reject the corpse by throwing it out of the belly of the earth. In this case, the bereaved are left with the option of cremation (Kanu 2015). The offences against *Ala* include: suicide, incest, stealing, murder, pre-marital sex, exploitation of nature (Achebe 1958; Ilogu 1978).

While *Chukwu* is in charge of creation, *Ala* is in charge of conserving that which is created. While *Chukwu* is the giver of the moral law, *Ala* is the enforcer of the law. The Igbo, an agrarian people, regard *Ala* as the "Mother" of all crops. Before planting and harvest, they hold days of ritual ceremonies to appease *Ala* so that she will facilitate the growth of healthy crops or to thank her for making possible the abundant harvest (Kanu 2013, 2021).

Characteristic Features of Igbo Eco-Spirituality

The characteristics of Igbo eco-spirituality include:

- a. **Religious:** Igbo eco-spirituality is highly religious, and begins by linking a person back to God as a starting point. This strongly religious characteristic is on account of the myriad of spiritual powers that dominate the Igbo world. The Igbo does not understand his or her existence outside of God- he or she is bound by the spirituality that continuously speaks of created reality as sacred (Kanu 2021). This religious affiliation of nature with God introduces an understanding of nature as the outcome of divine ordering which must not be manipulated and exploited (Francis 2015 & Global Buddhist Climate Change Collective, 2015) and also the concept of stewardship and trusteeship (Halpert 2012; Northcott, 2013 and Islamic International Climate Change Symposium, 2015).
- **b.** Cosmological: Igbo eco-spirituality is related to the way the Igbo understands the universe and conducts himself or herself in it. This cosmological foundation shapes Igbo eco-spirituality. The universe for the Igbo is anthropocentric. The implication is that it is the responsibility of the human person to ensure that there is balance in the cosmos for his or her own well-being (Kanu 2021).
- **c. Moral:** The human person among the Igbo, at the individual and community levels, has a moral responsibility to care for the earth. The communal responsibility is anchored on the fact that the earth is a residence for the entire community; if everyone fails mismanaging the earth, everyone would be a part of the suffering that would follow. Thus, the community makes taboo bordering on the use of trees, care for animals, forests, water bodies, etc., (Uche 2009). These taboos are referred to as the ecological guardians of the environment (Johannes 1978, 1982, 1984; Chapman 1985, 1987; Gadgil 1987 and Adu-Gyamfi 2011).
- **d.** Complementary: Igbo eco-spirituality understands the dimensions of the world as inextricably related to all other life forms within an *interrelated, interconnected* web. Every reality in the Igbo world has an inseparable link to every reality (Uwenze 2021). While the world provides a home for the human person, the human person beautifies the world through creativity, science and technology to make it a better home. An African proverb says:

"No one throws a stone where he or she has placed a container of milk" (Kanu 2021).

Principles of Igbo-African Eco-Spirituality

The principles that define, direct and determine Igbo eco-spirituality include:

- a. **Symbolism:** Symbols within the Igbo context are religious and cultural realities that are imbued with deeper meanings than can be seen by any direct act of perception or apprehension, in the sense that they represent the abstract in a concrete form (Ilogu 1974 & Ukaegbu 1991). According to Dukor (2006): "Symbolic relationships are essentially tied to culture, as they show an essential function of the human consciousness which is basic to our understanding the language of a people" (p. xvi). Echekwube (2005), therefore, avers that "Symbolism is an interpretation of an object in order to make it signify that which ordinarily it is not" (p. 6). In this world, trees, forests, animals, mountains, rivers, canals, etc., represent or symbolize one spirit force or the other (Rubio 1985).
- b. Cause and effect: The Igbo world is an ordered universe in which all events are caused and potentially explicable (Aja 2001). Thus, Gyekye (1987), Kanu (2012) and Ozumba (2004) maintain the doctrine of universal causation in the Akan and Igbo worldviews. The Igbo-African principle of causality is expressed in the following: ife na-akpata ife (something is caused by something); odighi ihe gbaraka mee (nothing happens without a reason); nwata no nuzo na-agba egwu, odi nwa nnunu na aguru ya egwu no'hia (a child who is dancing on the road, there is a bird singing for it in the bush), You cannot see the rabbit in the afternoon in vain. Within the context of the present ecological crisis, it understands the changes in nature as a consequence of a cause, that is, as effects of a cause (Kanu 2014).
- c. Relationships: The Igbo world is a world of relationships between the living and the dead, the spiritual and non-spiritual, the divine and human, the animate and the inanimate. In these relationships, forces in nature influence one another in a positive or negative way (Kanu 2017). Tempels (1959) holds that: "The world of forces is held like a spider's web of which no single thread can be caused to vibrate without shaking the whole network" (p. 60). Expanding our understanding on relationships in nature, Maurier (1985) writes that: "Relationship as the fundamental category of African philosophy, is the vital and active link between persons" (p. 60). Iroegbu (1995) adds that: "Not only is relationship vital... It is also active" (p. 370).

It is not enough to be in a relationship in the Igbo world, every reality must belong or not be at all. To be and not belong is to suffer selfalienation. Ireogbu (1995) describes belongingness as the synthesis of the reality and experience of belonging. The way to belong is to participate, that is, engaging the active side of relationship. This is the level of relationship with the whole that gives meaning to human existence or existence in general and each being gains its identity. The purpose of a healthy relationship between the forces in nature is to maintain a balance and preserve the health of the universe. Once this balance is lost, usually born out the failure of particular beings to negotiate their existence on the highway of being in relation to the being of the other, the result is crisis, which can take an ecological form (Kanu 2017).

d. Solidarity and Respect for Nature: This is based on the Igbo understanding of nature as a part of the network to which the human person belongs. When the human person expresses solidarity with nature, it is a way of preserving his or her own being. The consequences of the human action on the environment will have a resounding effect on the health of the human person (Kanu 2017).

The Ecological Value of the Igbo Spirituality

- 1. The concept of *Ala* deity brings a new perspective to the understanding of nature with the concepts mother, source of life, nourisher, supporter and teacher. The land is not just a solid part of the universe, it is a she. As mother, it is the abode of the living and the dead as all will be buried in her womb, and thus, the home of the ancestors. From this understanding, the land is not seen as a property, or belonging to the people, rather the people belong to the land. *Ala* deity is the landlord of the earth. Thus, as a tenant, one must be of good conduct so as to avoid been thrown out of the earth (Orji 1999, Abduftai et al 2014, Afigbo 1992, Odogwu 2013, Egboka 2000 and Ogbonna 2009).
- 2. Motherhood also introduces the concepts of respect, love, care, empathy, support, patience, etc., which are indispensable for the promotion of the good health of the environment. These concepts which are missing in the current relationship between human beings and nature are at the heart of the present ecological crisis.
- 3. The Igbo understanding of the land and water bodies as manifestations of great spirits, means that they are not just considered as things. They are spiritual personalities deserving of respect and care. *Ala* and *Mmuo Mmiri* give the land and water bodies personal identities that have consciousness. The identity that they give comes from the fact that the land and water bodies are named according to these spiritual beings that inhabit them. This does not only give an identity but a voice and representation as the water bodies and land are now able to contribute to discussions about their own preservation through negotiations and taboos.

- 4. The spiritual understanding of the land and water bodies helps the human person to tread with caution as the destruction of the ecosystem will imply the destruction of a deity. Thus, Wallace (2000) avers that "the spectre of ecocide raises the risk of decide: to wreak environmental havoc on the earth is to run the risk that we will do irreparable harm to the love and mystery of God" (pp. 60-61).
- 5. What *Ala* and *Mmuo Mmiri* deities provided protection for nature associated with them. This protection was provided through the taboos that were associated with these spirit beings. The crabs, crocodile, tortoise, snakes, water birds, frogs, etc., are seen as children and messengers of these water spirits and so are not to be harmed. Such water bodies become breeding grounds for species of organisms for other connecting water bodies, with a great deal of biodiversity.
- 6. Sacred market days among the Igbo have ecological significance as the activities that particular sacred days abhor contribute to the preservation of the environment. For instance, there were particular market days that fishing or hunting was prohibited. The advantage of this is that it allowed the water body or forest to regenerate itself from use. At the spiritual level, it is taken that the particular deity associated with the particular market day is having time with his or her children, which include the fish and other inhabitants.
- 7. There were no tree planting campaign announcements in traditional Igbo societies, but some particular events and times went with the planting of sacred trees. For instance, when a land is given to someone, he demarcates it with *Ogirisi* tree. During the rites of *Iru Agwu* (the pacification of spirits), the *Oha* and *Ogirisi* are two stems that were planted and watered to ensure that they do not die. When a lady is married into a man's house, she comes with her *Chi*, which is symbolized in the *Oha* tree which she plants in a corner of the compound. These trees are believed to possess spiritual powers.
- 8. To the Igbo, the environment is not just a living phenomenon but a dimension of the human life, its destruction would have direct consequences on the health of the human person. Therefore, to treat other dimensions of nature with respect is to treat oneself with respect and to exploit them would mean waging war against oneself as there are future consequences.

Conclusion

Until recently, debates and discussions about pollution, deforestation, global warming and other related environmental problems used to be considered in Africa as western issues, but today, there is hardly anybody in the world, no matter how remote the area is, that is not aware of the situation of the natural environment. This work holds that as much as the adverse effects of ecological crisis affect everyone, so also is there the need for a contextual study of this

problem, and to find solutions to them from within the categories of particular people. This explains why an Igbo-African Spirit-based spirituality of the environment has been studied.

The Igbo-African eco-spirituality has an identity and this identity is its contribution to the ongoing discourse on eco-spirituality. Its identity is its spirit-based capacity for the analysis of environmental issues in Africa. This is anchored on the fact that Igbo-African worldview is spirit-centred. It is a worldview that places emphasis on life, relationship, harmony and the maintenance of co-existence. It is a worldview in which God is well present and involved in His creation through the spirits. It is a religious and spiritualized universe. Bushes and forests, mountains and hills, trees and plants, rivers and streams, animals and peoples are all the abodes of spirits. This explains why the African universe has been described by many as 'a forest of spirits', because the length and breadth of her universe is wielded together by spirits.

This work is not concluding that the dominant approach should be abrogated completely in the human search for better ways of relating with the environment. It has only argued that the dominant approach is not enough to deal with the issue of environmental crisis given the progressive escalation of the crisis. There is, therefore, the need for an alternative perspective to the issue, one that is non-empirical unlike the dominant approach that is majorly empirical in character. Such an approach should be an eclectic approach that combines the riches and values of the different possible approaches. This *Igwebuike* kind of approach (which articulates the dominant and relegated perspectives in the service of an integrated vision of the preservation of the environment) is necessary given the diverse nature of peoples and societies all over the world. This will not only ensure the respecting of the rights and cultures of peoples, but also communicating with people about environmental preservation within the categories that they best understand.

References

Abduftai et al (2014). *Review of gully erosion in Nigeria: Causes, impacts and possible solutions*. http://www.pubs.sciencepub.com accessed 10th March 2022.

Achebe, C. (1982). Arrow of God. London: Heinemann.

Achebe, C. (1958). Things Fall Apart. London: Heinemann.

Adibe, G. E. (2008). *Igbo mysticism: Power of Igbo traditional religion and society*. Onitsha: Imagine Realities.

Adler, J. H. (2001). Free and Green: A new approach to environmental protection. *Harvard Journal of Law and Public Policy*. 24. 2. 653-694.

Adu-Gyamfi, Y. (2011). Indigenous beliefs and practices in ecosystem conservation: Response of the church. *Scriptura*. 107. 145-155

- Afigbo, A. E. (1992). *Ground work of Igbo history*. http://www.booksgoogle.com accessed 10th March 2022.
- Agbo, J. N. (2010). Is globalisation a process or a product? In A. B. C. Chiegboka, T. C. Utoh-Ezeajugh, and G. I. Udechukwu (Eds.). *The humanities and globalization in the third millennium* (pp. 26-39). Nigeria: Rex Charles and Patrick.
- Aja, E. (2001). *Metaphysics: An Introduction*. Enugu: Donze.
- Aniako, C. (1979). Ancestral Legitimation in Igbo Art. West African Religion, 18 (2) 13 15
- Aniako, C. (1984). Ikenga Art and Igbo Cosmos. *Ikoro*. 5. 1&2. 68 70
- Aniako, C. (2002). Art in the Culture of Igboland. In G.E.K. Ofomata (Ed.), *A survey of the Igbo Nation* (pp. 300 307). Onitsha: Africana First Publishers.
- Bhagwat, S. A. (2009). Ecosystem services and sacred natural sites: Reconciling material and non-material values in nature conservation. *Environ Values*. 18. 417-427
- Behrens K. (2017). The Imperative of Developing African Eco-Philosophy. In Isaac Ukpokolo (Ed.). *Themes, Issues and Problems in African Philosophy* (pp. 200-224). UK: Palgrave Macmillan.
- Bonfiglio, Olga. (2012). Celebrating Earth Day Through Eco-Spirituality. https://www.findcenter.com/article/51308/taoism. Accessed 10th March, 2022.
- Cardelus, C. L., Scull, P., Baimas-George, M., Lowman, M. D., Eshet, A. W. (2013). A preliminary assessment of Ethiopian ancient grove status at the landscape and ecosystem scales. *Divers.* 5. 320-334.
- Chapman, M. (1987). Traditional political structure and conservation in Oceania. *Ambio.* 16. 201-205
- Coutant, F.R. (1936). Where are we bound in Marketing Research? *Journal of Marketing*. 1(1). 28-34.
- Chiras, D.D., *Environmental Science: A Framework for Decision Making*. London: Addison-Wesley Publishing Company.
- Crockett, Daniel (2014). Nature connection Will Be the Next Big Human Trend. *Huffington Post*. https://www.huffingtonpost.co.uk/daniel-crockett/nature-connection-will-be-the-next-big-human-trend_b_5698267.html. Accessed 10th March, 2022.
- Calder, R. (1968). Man and the Cosmos. New York: NY Mentor.
- Dafni, A. (2006). On the typology and worship status of sacred trees with a special reference to the middle east. *Journal of Ethnobiology and Ethnomedicine*. 2. 26. 1-14.
- Dukor, M. (2006). Theistic panpsychic animism of African medicine. *Essence-Interdisciplinary International Journal*. 3. VI-XXX

- Durkheim, E. (1995). *The Elementary Forms of Religious Life. Transl. K. E. Fields.* New York: The Free Press.
- Durkheim, E. (2008). *The Elementary Forms of Religious Life. Transl. C. Cosman.* Oxford: Oxford University Press.
- Delaney, Colleen (2009). Ecospirituality: The Experience of Environmental Meditation in Patients with Cardiovascular Disease. *Holistic Nursing Practice*. 23 (6): 362.
- Echekwube, A. O. (2005). The basic principles of African philosophy. *Essence-Interdisciplinary International Journal*. 2. 23-40.
- Ede, M.P. (1985). Towards an Igbo Metaphysics. Chicago: Layola University Press.
- Eliade, M. (1958). *Patterns in comparative religion*. New York: Sheed and Ward.
- Eliade, M. (1959). *The sacred and the profane*. New York: Harcourt, Brance and World Inc.
- Eliade, M. (1976). Patterns in comparative religion. London: Sheed and Ward.
- Eneji, C.V.O., Gubo, Q. I., Jian Xiaoying, Oden S. N., Okpiliya, F. I. (2009). A review of the dynamics of forest resources valuation and community livelihood: Issues, arguments and concerns. *Ambio.* 16. 201-205
- Frese, P. R. and Gray, S. J. M. (1995). The Encyclopedia of Religion Vol. 15. New York: Macmillan.
- Francis, Pope (2015). *Laudatio Si (Praise be to You)*. Papal Encyclical on Climate. Vatican City: Libreria Editrice Vaticana.
- Francis, Pope (2020). *Fratelli tutti*. Social encyclical on the fraternity and social friendship. Vatican City: Libreria Editrice Vaticana.
- Gadgil, M. (1987). Social restraints on exploiting nature: The Indian experience. *Development: Seeds of Change.* 1. 26-30
- Global Buddhist Climate Change Collective. (2015) *Buddhist Climate Change Statement to World Leaders*. https://gbccc.org/ Accessed 10th March, 2022.
- Good, N.C. (1970). Rural Markets and Trade in East Africa. Chicago: University of Chicago
- Gupta, S. S. (1980). Sacred trees across cultures and nations. Calcutta: Indian Publications
- Gyekye, K. (1987). *An essay on African philosophical thought: The Akan conceptual scheme.* Philadelphia: Tempel University Press.
- Gbenga, J. S. (2006). *African Religion and Christianity in a Charging World: A Comparative Approach*. Nsukka: Chuka Educational Publishers.
- Gwamna, Dogara Je'adayibe (2016). *Ecological Crisis*. Nassarawa State University, Keffi. 29 January, Ph. D Lecture Class.
- Gaudelli, W. (2017). People, pope and planet: a hermeneutic and spectacle analysis of laudato si' for global citizenship educators. *Journal of International Social Studies*. 7. 1. 70-91.

- Halpert, J (2012) *Judaism and Climate Change*. Yale Climate Connections 29 February. http://www.yaleclimateconnections.org/2012/02/judaism-and-climate-9change/Accessed 10th March, 2022.
- Hughes, D. J. and Chandran, S. M. D. (1997). The role of sacred groves in conservation and management of biological resources. A paper presented at the KFRI, Peechi.
- Hughes, J. D. and Chandran M. D. S. (1998). Sacred groves around the earth: An overview. In P. S. Ram-akrishnan, K. G. Saxena, V. Chanderashekara (Eds). *Serving the sacred for biodiversity* (pp. 869-876). New Delhi: Oxford and JBH publishing.
- Hufnagel, L. (2018). *Ecosystem Services and Global Ecology*. IntechOpen. https://www.intechopen.com Accessed 10th March, 2022.
- Hufnagel, L. (2020). *Changing Ecosystems and Their Services*. IntechOpen. https://www.intechopen.com Accessed 10th March, 2022.
- Ilogu, E. (1974). Christianity and Igbo culture. Leiden: Brill.
- Iroegbu, P. (1994). *Metaphysics: The kpim of philosophy*. Owerri: IUP.
- Islamic International Climate Change Symposium. (2015) *The Islamic Declaration on Global Climate Change*. http://islamicclimatedeclaration.org/islamicdeclaration-on-global-climate-change/ Accessed 10th March, 2022.
- Izzi Dien M (2013) Environmental economics of Islam. In: Bell C, Chaplin J and White R (eds). Living Lightly, Living Faithfully: Religious faiths and the future of sustainability. Faraday Institute/KLICE: Cambridge, UK.
- Jell-Bahlsen, S. (2014). *Mammy water in Igbo culture: Ogbuide of Oguta Lake*. Enugu: Eze Books.
- Johannes, R. E. (1978). Traditional marine conservation methods in Oceania and their demise. *Annual Review of Ecology and Systematics*. 9. 349-364
- Johannes, R. E. (1982). Traditional conservation methods and protected marine areas in Oceania. *Ambio. 5.* 258-261.
- Johannes, R. E. (1984). Marine conservation in relation to traditional lifestyle of tropical Artisanal fishermen. *The Environmentalist.* 4. 7. 30-35.
- Kanu I. A. (2015b). A hermeneutic approach to African traditional religion, theology and philosophy. Nigeria: Augustinian Publications.
- Kanu, A. (2013). Dimensions of African Cosmology. *Journal of African Philosophy, Culture and Religion*. 2. 2: 533-555.
- Kanu, I. A. (2012 a). Being qua Belongingness: The provenance and implications of Pantaleon's concept of being. *Lwati: A Journal of Contemporary Research*, 9. 4. 227-234.
- Kanu, I. A. (2012 b). From 'Onye' to 'Ife' hypothesis: The contribution of Edeh to the development of the concept of being. *Lwati: A Journal of Contemporary Research*, 9. 3. 218-223.

- Kanu, I. A. (2013). The Dimensions of African Cosmology. *Filosofia Theoretica: Journal of African Philosophy, Culture and Religion.* 2. 2. 533-555.
- Kanu, I. A. (2014). Causality in African Ontology. *Asian Journal of Humanities and Social Sciences*. 2. 1. 54-60.
- Kanu, I. A. (2014). Freedom and Determinism in African Ontology. *Asian Journal of Humanities and Social Sciences*. 2. 1. 47-53.
- Kanu, I. A. (2015). African philosophy: An ontologico-existential hermeneutic approach to classical and contemporary issues. Nigeria: Augustinian Publications.
- Kanu, I. A. (2017). *Igwebuike* as a Complementary Approach to the Issue of Girl-Child Education. *Nightingale International Journal of Contemporary Education and Research*. 3. 6. 11-17.
- Kanu, I. A. (2017). *Igwebuike* as a Wholistic Response to the Problem of Evil and Human Suffering. *Berkeley International Journal of Contemporary Education Research*. 3. 6. 56-72.
- Kanu, I. A. (2017). *Igwebuike* as an Igbo-African Ethic of Reciprocity. *Berkeley Journal of Humanities and Social Sciences*. 6. 4. 115-124.
- Kanu, I. A. (2017). *Igwebuike* as an Igbo-African Philosophy for the Protection of the Environment. *Nightingale International Journal of Humanities and Social Sciences*. 3. 4. 28-38.
- Kanu, I. A. (2017). *Igwebuike as* the Consummate Foundation of African Bioethical Principles. *Nnadiebube Journal of Philosophy*. 1. 1. 1-13.
- Kanu, I. A. (2021). *African Eco-Philosophy: Nature and Foundations.* In I. A. Kanu (Ed.). *African Eco-Philosophy: Cosmology, Consciousness and the Environment* (1-18). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). *African Eco-Spirituality: Nature and Sources*. In I. A. Kanu (Ed.). *African Ecological Spirituality: Perspectives on Anthroposophy and Environmentalism. A Hybrid of Approaches* (1-22). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). *Ala Deity and Environmental Sustainability*. In I. A. Kanu (Ed.). *African Eco-Theology: Meaning, Forms and Expressions* (109-122). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). *Amadioha and the Quest for Ecological Balance*. In I. A. Kanu (Ed.). *African Eco-Theology: Meaning, Forms and Expressions* (181-192). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). Ecological Significance of Mmuo Mmiri (Water Spirit) in Igbo Philosophy and Religion. In I. A. Kanu (Ed.). African Eco-Philosophy: Cosmology, Consciousness and the Environment (31-42). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). *Igbo-African Market Days and the Conservation of the Eco-System*. In I. A. Kanu (Ed.). *African Indigenous Ecological Knowledge Systems:*

- Religion, Philosophy and the Environment (41-56). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). Sacred Animals as an Igbo-African Ecological Knowledge System. In I. A. Kanu (Ed.). African Indigenous Ecological Knowledge Systems: Religion, Philosophy and the Environment (1-18). Maryland, USA: Association for the Promotion of African Studies.
- Kanu, I. A. (2021). Sacred Trees/Plants: The Greening of Igbo-African Religion. In I. A. Kanu (Ed.). African Indigenous Ecological Knowledge Systems: Religion, Philosophy and the Environment (73-96). Maryland, USA: Association for the Promotion of African Studies.
- Klauder, F. (1978). *The Wonder of Real*. Springville: Christopher Publishing House.
- Khalid F (2013) The environment and sustainability An Islamic perspective. In: Bell C, Chaplin J and White R (eds). *Living Lightly, Living Faithfully: Religious Faiths and the Future of Sustainability.* Cambridge, UK: Faraday Institute/KLICE.
- Kotler, P. (1967). *Marketing Management: Analysis, Planning and Control, Englewood Cliffs*. New Jersey: Prentice Halls.
- Kotler, P. and Fox, F.A.K (1995). *Strategic Marketing for Educational Institutions*. Englewood Cliffs, New Jersey: Prentice-Halls, Inc.
- Kotler, P. and Keller K. (2006). *Marketing Management*. Pearson: Prentice Hall Inc.
- Malhotra, K. C., Gokhale, Y., Chatterjee, S., Srivastava, S. (2007). *Sacred groves in India*. New Delhi, India: Aryan Books International.
- Manikandan, P., Venkatash, V. R., Muthuchelian, J. (2011). Conservation and management of sacred groves in Theni district, Tamil, Nadu, India. *Biosc Res.* 2. 2. 76-80.
- Maurier, H. (1985). *Philosophie del'Afrique Noire*. Saint Augustine: Anthropos Institute.
- Mbiti, J. S. (1976). *African religions and philosophy.* London: Heinemann Educational Books.
- Mbiti, J.S. (1975). *Introduction to African religion*. London: Heinemann Educational Books
- Mbiti, John (1970). Concept of God in Africa. SPCK: East Africa.
- McDonagh, S. (2004). *The Death of Life: The Horror of Extinction*. Columbia: The Columbia Press.
- McDonagh, S. (2010). Climate Change: A Challenge to All of Us. Columbia: Columbia Press.
- Melnick, D. Jeffrey McNeely, Yolanda Navaaro, Guido Schmidt-Traub, and Robin Sears. (2005). *Environment and Human Wellbeing: A Practical Strategy: Achieving the Millennium Development Goals*. London: Earthscan.

- Nnamdi S. O. (2000). Afrika Der Zukunft Ist Scwarz. Africa: the Future is Bleak. In C. Umezinwa (Ed.) *Essays in Philosophy* (23-35). Nsukka: Afro Obis Publications Ltd.
- Nnabuchi, N. (1987). The Conscience of God. Enugu: Life Printing Press.
- Northcott M (2013) *A Political Theology of Climate Change*. Eerdmans: Grand Rapids, MI.
- Nwala, T.U. (1985). Igbo Philosophy. Ikeja, Lagos: Lantern Books.
- Nwaubani, C. (2018). *Trees in Igbo Society*. www.blog,ukpuru.org.accessed 10th March 2022.
- Ogbukagu, I. K. (2008). Traditional Igbo Beliefs and Practices: A Study on the Culture and People of Adazi-Nnukwu. Enugu: Snaap Press.
- Onwu, E. N. (2002). UzQ ndU na eziokwu: Towards an Understanding of Igbo Traditional Religious Life and Philosophy. http://ahiajoku.igbonet.com/2002. accessed 10th March 2022.
- Odogwu, E. (2013). *As erosion brings Anambra to her knees.* http://www.punchngr.com accessed 10th March 2022.
- Ogbonna, R. (2009). *Erosion: Communities at the brink of extinction*. http://www.nairaland.com accessed 10th March 2022.
- Orji, M. O. (1999). History and culture of the Igbo people. Anambra, Nkpor: Jet Publishers
- Ogungbemi, D. (2007). *Philosophy and Development*. Ibadan: Hope Publication.
- Okwokwo, Izunna (2011). Liturgical Theology: An Environmental Concern. *AFER*. 53. 2. June. 417-436.
- Ozumba, G. O. (2004). African Metaphysics. Quodlibet Journal, 6. 3.
- Ruether, Rosemary Radford. (1992). *Gaia and God: An Ecofeminist Theology of Earth Healing*. San Francisco: HarperCollins.
- Rim-Rukeh, A., Irerhiewie, G., Agbozu, I. E. (2013). Traditional beliefs and conservation of natural resources: Evidences from selected communities in Delta State, Nigeria. *International Journal of Biodiversity and Conservation*. 5. 7. 426-432.
- Rubio, J. C. (1985). Simboles del art Cristiano. Salamanca: Universidad Pontifica.
- Scott, A. J. (1975). Discrete Dynamics Locational Systems: Notes on a Structural Framework in Dynamics Allocation of Urban Space. Mass. Saxon House: Lexington.
- Shaw, A.W. (1912). Some Problems in Market Distribution. *Quarterly Journal of Economics* 26 (August). 706 756.
- Slaymaker, William (2007). Ecoing the Other(s): The Call of Global Green and Black African Responses. In Tejumola Olaniyan and Ato Quayson (Eds.). *African Literature: An Anthology of Criticism and Theory* (pp. 28-40). London: Blackwell Publishing.

- Schalkwyk, Annalet (2011). Sacredness and Sustainability: Searching for a Practical Eco-Spirituality. *Religion and Theology*. 18 (1-2): 77-92.
- Suganthi, L. (2019). Ecospirituality: A Scale to Measure an Individual's Reverential Respect for the Environment. *Ecopsychology*. 11 (2). https://www.liebertpub.com/doi/10.1089/eco. Accessed 10th March 2022.
- Sponsel, Leslie E. (2014). Spiritual Ecology. In Leeming, David A. (ed.). *Encyclopedia of Psychology and Religion* (1718–1723). 2nd ed. Boston: Springer
- Tarusarira, Joram. (2017). African Religion, Climate Change, and Knowledge Systems. *Ecumenical Review*. 69 (3): 398-410.
- Taylor, S. (2019). *Ecopiety: Green Media and the Dilemma of Environmental Virtue*. New York: New York Press.
- Tubi, P-K. (2020). Ecocide in Traditional Communities: An Anthropological Study of Ecological Crises in northeast Yorubaland. *IJMSSPCS*. 3. 3.
- Thompson, F. W. (1970). West African secret societies: Their organization, officials and teachings. Westport: Negro University Press.
- Taylor, Bron. (2009). Dark green religion. *Nature Spirituality and the Planetary Future*. California: University of California Press.
- Tempels, P. (1997). Bantu Philosophy. In E. Chukwudi Eze (Ed.). *African Philosophy: An anthology* (200-220). Oxford: Blackwell Publishers.
- Uche, O. O. C. (2009). The socio-religious significance of taboos in Nigeria. In F. Aghamelu & C. Asomugha (Eds.). *Readings in African thoughts and culture*. (238-257). Enugu: Strong Tower.
- Ukaegbu, J. O. (1991). *Igbo identity and personality vis-à-vis Igbo cultural symbol.* Salamanca: Universidad Pontifica.
- Uwineze, M. (2021). *African spirituality and its contribution to ecological crisis*. La Civilta Cattolica. <u>www.laciviltacattolica.com</u> accessed 10th March 2022.
- Ukpokolo, Isaac (2017). Introduction: The Shifting Focus of Philosophy in Africa. In Isaac Ukpokolo (Ed.). *Themes, Issues and Problems in African Philosophy* (230-256). London: Palgrave Macmillan.
- Udodora, R. O. (2011). Religion and land use: A threat to global peace. In Adesewo, M. A. (ed). *Religion and Land Issue* (3140). Ilorin: NASRED.
- Wallace, M. (2000). The wounded spirit as the basis for hope in an age of radical ecology. In D. T. Hessel and R. R. Ruether (Eds.). *Christianity and ecology* (50-72). Harvard: Harvard University Press.