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RESOURCE MANAGEMENT: THE ROLE OF TOTEMS
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Abstract

Purpose: The exploitative tendencies of human activities have hugely hampered the environment, diversely. To that end, the international community has adopted several devices that are mainly anchored on law, ethics and religious doctrines to address the challenges. This paper looks at the relevance of religion towards environmental conservatism. In that regard, the main objective of the study was to ascertain how Traditional African Religious practices, in particular totemism and deity worship, do enhance the sustainable utilization of natural resources and the preservation of ecosystems.

Methodology: This study which was guided by qualitative methods using in-depth interviews, focus group discussions and participant-observations; purposively selected 45 participants based on their knowledge on the subject area across three ethnic groups in Ghana.

Findings: Findings showed that even though practices of totemism and deity worship by African Traditional Regions (ATRs) have aided environmental protection throughout the centuries, it is only coincidental as reasons behind the practices are spiritual and not born out of environmental consciousness or pragmatism. And that, practices of totemism and deity worship are widely spread in Ghana and observed by all clans in the country.

Recommendations: For effective environmental protectionism, it is recommended amongst other things that in addressing current ecological challenges, both modern scientific methods and indigenous traditional modes be synchronized efficiently. Findings in this article call for the festering of ideas amongst religious environmentalists, environmental institutions, governments and policy makers, towards the efficient management of environmental resources in the given circumstances.

Keywords: *African Traditional Religions, Natural Resources, Totems, Deity worship and Ghana*

Introduction

According to Boersema (2009), the definition of the term environment goes beyond the scientific definition that explains the comprehensive science of the relationship between the organism and the environment---it is one that also includes the physical, non-living and living surroundings of a society with which it has a reciprocal relationship. Within the African context, the environment is made up of both physical and spiritual elements that encapsulate both life-forms and non-life forms (internal and external elements); without which, human life or survival is unsustainable (Nwosu, 2010). Furthermore, as explained by other scholarly opinions, the natural environment includes social, religious, linguistic, economic, cultural and traditional belief elements (Mensah et al: 2015). Other scholars have included natural resources, climate and human character in their definitions.

The very existence of humankind and other diverse life systems on planet earth, is largely dependent upon the natural environment from which they derive the air they breathe, the food they eat, the energy that is needed to drive the ocean currents and atmospheric processes, *inter alia* (Benson,2018a).That said, humankind's unavoidable ever-increasing dependency on the environment and its resources has had dire consequences on the environment as well as adversely altered the earth's atmospheric systems and the climate. The exploitative activities of humankind account for the acceleration of the process that include but not limited to the greedy exploitation of natural resources by humanity, adverse agricultural practices on the land, gas emissions from industrial and transport activities, industrial and commercial activities, domestic activities, technological advancement, mining activities and lumbering activities (Aawaar,2006; Bettinger et al., 2009; Food and Agricultural Organization, 2010; Mensah et al: 2015). These activities have led to air, water and land pollutions, degradation of the land, deforestation, natural disasters and even more dangerously, resulted in global warming that risk humankind's extinction on earth (Benson, 2018a; Fuglestedt et al., 2008; Worldwatch Institute, 2008). In the given milieu, the very survival of humanity has come to a cross-road as their activities have become major causative factors even though natural occurrences such as earthquakes and floods amongst others do also account for environmental degradation.

Interventions made by the international community to respond to issues of environmental exploitation *via* human activities, have become both extensive and inclusive, taking varied forms of legal and ethical dimensions on the main. Against the backdrop of safeguarding the environment, the world today more than any other time, is witnessing several interventions from international organizations, governments, state institutions, non-governmental organizations, civil society organizations, religious bodies, traditional settings and individuals. To that extent, these global activities have resulted in an increase in environmental consciousness. This paper on the main examines how religious ethics and taboos do enhance natural resource management. However, the focus is on how traditional totems and deity worship have influenced environmental protectionism in Ghana. For the start, however, the role international institutions and religion play in natural resource management is discussed *albeit* in brief.

Part I: Environmentalism, Law and Religious Ethics

I.1: Environmental laws and the protection of nature

First, regarding the role of state and international organizations, vast local and international legal instruments are enacted on a daily basis to guide the usage of environmental resources. Several international conventions and treaties cover diverse thematic areas. The United Nations Conference on Environment and Development (UNCED), also referred to as the Rio de Janeiro Earth Summit was held from June 3-14, 1992 in Brazil. About 116 heads of state and governments among other non-governmental organizations (NGOs) participated and agreed amongst other things to set up the Climate Change Convention that led to the Kyoto Protocol and the Convention on Biological Diversity. The conference also discussed issues like sustainable development and measures that related to environmental degradation (UNCED, 2014). Several other international conventions, treaties and agreements notably, the United Nations Conference on the Human Environment (Stockholm) held in Sweden from June 5-6, 1972; the United Nations Convention to Combat Desertification (UNCCD) that came into effect on 26 December 1996; Noise pollution-Working Environment (Air Pollution, Noise and Vibration) Convention held in 1977; Nuclear safety-Comprehensive Test Ban Treaty held in 1996 and Vienne Convention on Civil Liability for Nuclear damage held in Vienne in 1963; *inter alia*, established both binding and non-binding rules among signatory states. The agreements basically seek the following: prevention of the sale of Certain Hazardous Chemicals and Pesticides in International Trade; reduction of greenhouse gas emissions; combat desertification; protect and preserve the environment and its natural resources from overexploitation and destruction such as animals, birds and plant species; protection and the use of transboundary watercourses, international lakes and seas; prevention of noise, air, water and land pollution; prevent the proliferation of nuclear weapons; and agreements on the use of airspace, amongst many others (UN Information Department, 2014; www.unccd.org. Retrieved 17/07/2017).

Several institutions are established by these international and bilateral conventions to coordinate the implementation of the varied protocols. One of such notably institutions is the United Nations Environment Programme (UNEP), established by the United Nations in 1972 to do the following: coordinate United Nations environmental activities; implement sound environmental policies and practices; and promote international corporation on environmental issues that include the encouragement of the international scientific community to participate in formulating policies for many United Nations' environmental projects. Other notable international institutions, governmental and non-governmental organizations (NGOs) involved in the promotion of environmentalism across the world include the following: the Earth System Governance Project (ESGP), Intergovernmental Panel on Climate Change (IPCC), World Nature Organization (WNO), the World Metrological Organization, Global Footprint Network, Green Cross International and Project Green World International. At the regional and non-governmental levels we also have notable institutions such as the African Conservation Foundation (ACF), the Arab Forum for Environment and Development (AFED), European Environment Agency (EEA) and Partnerships in Environmental Management for the Seas of East Asia (PEMSEA).

At the national level, such institutions as the Environmental Protection Agency (United States), Environmental Protection Agency (Ghana) and Earth Liberation Front (UK) and Environmental Law Foundation are worthy of noting. In Ghana for example, there are several national laws on land use, water use, forestry conservation and wildlife preservation. These include in particular the Environmental Protection Agency Act, Act 490 of 1994; Environmental Assessment (Amendment) Regulation LI 1703, 2002 and Criminal Offences Act, 1960; Act 29 – See s.285 – 288; Land use- Lands Commission Act, Act 767, 2008; Planning & Soil Conservation Act, 1953; Water use-Water Resource Commission Act, Act 522, Biodiversity/Wildlife laws-Wildlife Reserves Regulations, LI 710, 1971 (and Amendments); Timber Resource Management Act, Act 547, 1998 (Benson, 2018b; Environmental Protection Agency, 1994).

The Environmental Protection Agency (EPA) created by an Act of Parliament, Act 409 of 1994 (Environmental Protection Agency, 1994), oversees the management of the environment, including natural resource protection, preservation and conservation. Foremost, the 1992 Fourth Republican Ghana Constitution (Article 240) mandates local government authorities namely to plan, initiate, co-ordinate, manage and execute policies in respect of all matters affecting the people within their communities or areas of jurisdiction including environmental issues (Benson, 2018b; Local Government Act, 1993; Republic of Ghana, 1992).

Indeed, interventions from governments, international organizations and non-state actors *via* laws, multi-lateral and bilateral agreements and policy directives have gone a long way in curbing environmental catastrophes. Be that as it may, humanity is not out of the woods yet as we all have to subdue our individual parochial needs under the quest of environmental sustainability.

I.2: Religion and Natural Resource Preservation

According to James & Mandaville (2010), religion is a relatively-bounded system of beliefs, symbols and practices that address the nature of existence, and in which communion with others and Otherness is lived as if it both takes in and spiritually transcends socially-grounded ontologies of time, space, embodiment and knowing. So must it also be recognized that, all religious beliefs the world over (Christianity, Judaism, Islam, Buddhism, Hare Krishna, African Traditional Religions and *etcetera*), reflect the social and cultural conditions of the people, the environment in which they live their history and past experiences, and also the collective needs and aspirations of the people (Pals, 2006). Within this context, the objectives of religion extend beyond spiritualism to include other basic secular roles. And as alluded to above, religious doctrines and ethics play a vital role in environmental protection and natural resource management, explaining why interventions of religious bodies in this respect are seen as important factors by the international community. The import of these teachings towards environmental protection, however, were not deliberately caved out as is the case of international and national environmental laws and policy-direction. That notwithstanding, religious ethics and teachings have impacted positively on environmental protection, as they both supplement and complement other secular interventions and programs. The study focused on three global religions---Christianity, Islam and ATRs.

I. 2.1: Biblical Doctrines on Environmentalism

Christianity is the world's most practiced religion which incorporates important environmental protection policies in its Holy Book, the Bible. Basic beliefs on Christian environmentalism are centered on the ecological responsibilities of Christians as stewards of God's creation. The Holy Bible in Genesis 2: 15 teaches Christians to care and manage natural resources within the Creator's plan as instructed by God to the first man in the Garden of Eden. And it is instructive to note that Christian environmentalists while upholding biblical emphasizes on humanity's stewardship as found in Psalms 24: 1 and Leviticus 25: 23, do oppose policies and practices by governments and individuals that threaten the very survival of planet earth and by extension, humanity itself. Indeed, the roles of humankind in relation to nature are explained in many books of the Holy Bible. For a start, Genesis 1: 26-28 has it that God the Creator bestowed upon humanity, the duty of managing the earth and its natural resources in specific ways. According to Christian literature, God at the end of creation called out to Adam, the first man He created, *"Be fruitful, multiply, replenish and subdue the earth: and have dominion over the fish of the sea and over the fowl of the air, and over every living thing that moves upon the earth"*. Indeed, these three verses are well loaded in meaning. First, Adam's and therefore humankind's first responsibility is to protect (care) all God's creation, as corroborated in Genesis 2: 15, *"And the LORD God took the man, and put him into the Garden of Eden to dress it and to keep it"*. Second, though humankind is at liberty to satisfy his/her needs from a large source of natural resources, he/she must do so with caution, exhibiting the clearest sense of responsibility and proper management. Third, humankind per the commandment given in Genesis 1:26, is obliged to sustain, enhance and improve upon nature and its resources via the adoption of suitable means that are harmless to nature. Fourth, in spite of God putting humankind ahead of all His creation, he/she is only but a steward, a trustee where God is the ultimate owner of all creation as pointed out in Psalms 24.1, *"The earth is the LORD's, and the fullness thereof; the world, and they that dwell therein"*. This point is emphasized in Leviticus 25:23, *".... the land is mine and you are but aliens and my tenants"*. Fifth, humankind is accountable to God regarding the latter's use of natural resources. It is believed that humankind will be judged someday in accordance with his/her attitude towards nature on earth. This is aptly captured in Romans 14: 10, where it is stated that *"...for we shall all stand before the judgment seat of God"*. Again, in Romans 2:16 it is emphasized that *"...in the day when God shall judge secretes of men through Jesus Christ."*

Christian environmental ethics are influenced by the above beliefs and values, hanging basically on three Principles-Creational Value, Sustained Order and Purposes, and Universal Corruption and Redemption (Allen, at el, 2007). Creational value principle simply states that God who alone created the universe puts premium value on all the works of His hand, including the creational elements of the earth itself, the sky, mountains, minerals, water, air, vegetation, soil, fish, wild life, celestial bodies and above all humankind (Genesis 1:1-25; Genesis 1; Psalm 146:6; Acts 14:15; and Revelation 4:11). These verses of the Holy Bible, therefore, place humanity in the position of a trustee or caretaker other than an owner, who will account someday for his/her stewardship to the Creator Himself. The second principle of sustained order and purposes states that, God enjoins humanity to sustain and maintain all the elements and systems of creation in an orderly fashion and within His purpose, since He created all things that they will fit and function

together (Wikinson, 2012). His other purpose is to restrictively and continuously provide the needs of humanity and the entirety of His creation via creation itself, whereby; nature is to glorify and reveal His Omnipotence (Palms 19:1-4; Romans 1: 18-20). While the third principle of universal corruption and redemption states that, humanity and all of creation are vulnerable to corruption and only redeemable through God's perfect will in Jesus Christ. Romans 2: 23 states that "... *all of humanity has sinned and fallen short of the glory of God*". Humanity's sins also include mismanagement of environmental resources and our cruelty towards fellow-creatures. And being sinners we are all in need of forgiveness and salvation, and to which the Holy Bible points to Jesus the Christ (1 John1:8-10).

Many Christian denominations including the Catholic, Protestant, Evangelical, Pentecostal, Charismatic and Orthodox Churches among others do instill environmental awareness among their membership and the public at church, communal, national and international levels through their respective doctrinal beliefs (Merritt, 2007; Moore & Nelson, 2010). This has culminated in the formation of several denominational, interdenominational and non-denominational environmental movements across the world that include: the Green Christianity, Christian Organizations for Environmental Conservation, Target Earth, A Rocha Trust, Evangelical Environmental Network (EEN), GreenFaith, Plant With Purpose, Eco-Justice Ministries, National Religious Partnership for the Environment (NRPE), American Scientific Affiliation: A Fellowship of Christians in Science (ASA) and UK based Christian environmental organizations (Awoyemi, 2008; Sherkat & Ellison, 2007; Sluka et al,2011).

I.2.2: Quranic Doctrines on Environmentalism

Islam which is the second most followed religion after Christianity in the world in large part, incorporates environmental values and the judicious use of natural resources in its sacred book the, Holy Quran. Islam regards the preservation of the environment as a divine duty bestowed on humankind by Allah, the Gracious, and the Merciful. Prophet Muhammad, in replicating this great duty of humanity, explained in a popular Hadith (Islamic narration) that, "*If resurrection is starting and one of you has a sapling in his hand which he can plant before he stands up he must do so*" (d.148/765). Indeed, more than 750 verses of the Quran are related to the environment and its management. And to that extent, 14 chapters of the Holy Quran are named after certain animals and natural incidents that include: the ant (the smallest of living things), the elephant (the biggest of animals in the bush), Cow, Bee and Sun, amongst others. Pointedly, the Quran and, therefore, Islam places premium on the preservation and management of natural resources in their natural form (Gade, 2019; Johnston, 2012). For instance, in Islamic culture and tradition, water occupies an important position in life affairs as it is considered the origin and source of life and should not be destroyed by humankind. Quran (24:45), in particular states that, "... *God created from water every animal that goes on its belly, on two legs and on four legs, hence should be kept pure and clean*". A very instructive statement on nature is what is found in Chapter 20 verse 55, "... *From it (earth) We created you and into it, We shall send you back, and from it, We will raise you a second time*".

Another Hadith quotes the Prophet Muhammad regarding a sermon he once gave on nature when he said, "*Preserve the earth because it is your mother*". Furthermore, another important

viewpoint that Islam holds on the matters of nature is that, the planetary system, the earth and its ecosystems all work together within their own limits and tolerances (Johnston, 2012). In the situation where these resources are used excessively beyond their limits, the resultant effect is systematic failures that could lead to catastrophes, where humanity will be the first casualty.

To avoid this looming catastrophe, Islam sets four main principles, namely, Unity (Tawhid); the Creation (Fitra); the Balance (Mizan); and Responsibility (Khalifa) to guide the control, limitation and behavior of humanity regarding environmental protection. For instance the first concept, Unity/ Tawhid stresses the fact that Allah is independent of creation. Quran 42:11 states that *‘There is nothing whatever like unto Him, and He is the One that hears and sees all things’*. (Gade, 2019). In conclusion, Quran 30:30 instructs Muslims to protect and preserve the environment, which many of Islam’s followers do diligently obey, thus enhancing environmental protection on the global scale (Johnston, 2012). Indeed, according to Ali, Islam as a religion teaches and holds that, animals have basic rights to which humankind is responsible for, foremost, their right to life (Gade, 2019; Hadith Nahj al-Fasahah, No. 2224 & No. 2610). Again, Islam urges its followers to protect plants and, as much as possible, plant trees which act, is regarded as a form of worship (Haidth Wasaa’il al-Shi’a, Volume, pp.43, 44).

Part II: African Traditional Religions (ATRs)

Traditional African Religions also referred to as traditional beliefs and practices of the people of Africa, involves diverse ethnic religions across the continent (Gottlieb, 2006). Doctrines of ATRs which basically include beliefs in higher and lower gods, spirits, veneration of the dead, use of magic and traditional African medicine, are orally rather than scripturally passed down to generations using folk tales, songs and festivals (Juergensmeyer, 2006). Over 100 million people across the continent of Africa are adherents of ATRs, where a sizable number of them combine traditional practices with those of the Abrahamic religions namely, Christianity and Islam (Gottlieb, 2006; Lugira, 2009).

ATRs across the continent are numerous and include the following: Akan religion of Ghana and Ivory Coast; Dinka religion of South Sudan; Hausa animism of Gabon, Ghana, Burkina Faso, Nigeria and Chad; Akamba mythology of Kenya; San religion; traditional healers and Zulu methodology of South Africa; Edo religion of Benin Kingdom of Nigeria; Abwoi religion of Nigeria; Dahomean religion of Benin and Togo; West African Vodun of Ghana, Benin, Togo and Nigeria; Ancient Egyptian religion of Egypt and Sudan; Punic religion of Tunisia, Algeria and Libya; traditional Berber religion of Morocco, Niger, Tunisia and Chad; African Diaspora religions; to mention but these few (Juergensmeyer, 2006; Lugira, 2009; Togarasei, 2012).

II.1: Doctrinal Pillars of ATRs

Notwithstanding the varied African religious traditions, certain salient features are common to all the religious traditions which, in some instances assume a universal character. For a start, people of African descent are deeply spiritual and do believe that every facet of their life is guarded by a Supreme Being who makes things happen in line with His will and dictates, whether good or bad (Juergensmeyer, 2006). According to African traditional belief, this Supreme Being variously called, ‘Wiise’ literally meaning the sun by the Sissala people of Ghana, Nyamekonpon by the Ashanti of Ghana, Olorun by the Yoruba of Nigeria, created the universe. Furthermore, the

Supreme Being (as is the belief of most African religious traditions) is assisted by lesser deities such as: the god of rain and thunder, the god of forests, river gods, mountain gods, amongst others (Lugira, 2009). To that end, in times of drought and famine, the people would pray to the god of rain, and to the god of the mountains in times when they need security and prosperity. They would also pray to the god of fertility for fruits of the womb (Lugira, 2009; Soko, 2012). However, certain societies including the Kipsigis of Kenya, believe in one God who is not assisted by lesser deities (Gottlieb, 2006).

It is also believed that the universe as a creation of God is in three parts namely; Heavens, where God and all celestial beings and objects such as the sky, sun, moon and stars inhabit; Earth, where people, plants, animals, mountains, rivers and *etcetera* inhabit; and the Underworld, where spiritual beings reside (Juergensmeyer, 2006). Moreover, 'orderly universe' is maintained within four levels (Lugira, 2009; Soko, 2012). First, the natural level governed by natural and scientific laws. Second, the moral level which consists of moral codes, laws and doctrines given by God Himself through His prophets and wise men. Third, the religious level that includes man-made institutions such as churches, shrines, temples and mosques where rules of good living are fashioned. Lastly, the mystical level which deals mainly with magic, witchcraft and other mystical powers given to certain individuals and spirits to communicate with supernatural forces to receive premonitions of coming events and disasters and also perform miracles.

According to African traditional beliefs, spirits which are a life force have no physical form, and there are two types of spirits--- nature and human spirits (Juergensmeyer, 2006; Togarasei, 2012). Nature spirits are associated with certain natural objects that are either earthly (forests, mountains, hills, rivers and metals) or celestial (sun, moon, stars, sky, rain, thunder, wind) forces (Juergensmeyer, 2006; Lugira, 2009). Human spirits are spirits of people and relatives who have died recently and also in the past. It is believed that living things have spirits in them that continue to live even after death (Soko, 2012). Believe in ancestral spirits form one important pillar of traditional religions practice, where ancestors are held as intermediaries between God and the living. They are believed to have extra attributes that make them more powerful than living human beings and do continue to reside in communities, where they are actively involved in the life of the community as guardian spirits (Togarasei, 2012). That certainly explains why ancestral spirits are worshiped and revered within most traditional African settings.

That said, the core practices of ATRs revolve around animism and fetishism which include the worship of tutelary deities, nature worship, ancestral worship, and the belief in afterlife (Kimmerle, 2006). First, in ATRs practices, communal ceremonies play a key role where members sometimes go into meditative trances in response to rhythmic drumming or singing (Kamwaria & Katola, 2012). Second, followers of the religions also pray to various spirits including nature and animal spirits and those of ancestors (Barre, et al., 2008; Nel, 2008). Third, practices and rituals form a crucial part of the various types of ATRs which are closely interconnected (Kimmerle, 2006). Fourth, deities, ancestral souls and spirits are honoured through the pouring of libation and sacrifices of animals, cooked food, metals, cowries and other natural elements. The will of the gods are revealed to the believers through divination by using objects such as cowries, shells, stones, strips, water, bird feathers, amongst others (Kamwaria & Katola, 2012). Fifth, in ATRs practices, there is a connection between religious obligations of the communal aspects of life such

as: respect for parents and elders; provision of acts of hospitality to strangers and visitors; and the bringing up of children where they are taught to be honest, trustworthy and courageous (Kimmerle, 2006; Lugira, 2009). Lastly, deity shrines are considered as sacred places, the defilement of which comes with heavy penalties in both spiritual and natural realms. To that end, the preservation of such sacred places by traditionalists over the centuries (either consciously or unconsciously), have gone a long way to enhancing environmental protection and natural resource conservation (Benson, 2018b; Sheridan & Nyamweru, 2008). In West Africa, notable sacred sites assigned for traditional worship include: Ife, an ancient Yoruba city in south-western Nigeria believed to have been founded in the order of the Supreme God Olodumare; Dahomey in Benin; Igbo-Ukwu in Eastern Nigeria; and the Tongo hills of Ghana (Barre, et al., 2008; Sheridan & Nyamweru, 2008). This leads us to the next subtopic which evaluates the relevance of ATRs practices *via* totems and deity worship in respect of environmental protection.

II. 2: Totems and deity worship in African Traditional Religions

The practices of ATRs over the centuries have either consciously or unconsciously aided the preservation of some ecosystems, natural resources and species of animals and plants in Africa. The role of religious ethics in the form of totems and deity worship, are the major driving factors for this achievement (Kamwaria & Katola, 2012). In most African countries where ATRs are practiced, the traditional religions regard some selected ecosystems, animals, plants, rivers and mountains, as sacred natural elements (Sheridan & Nyamweru, 2008). Tradition religions forbid their use or destruction by followers of the regions and society in general. In the sense that these elements and in particular totems are guardian spirits, it is a taboo for clan members and in some cases the entire society to eat or destroy totems (Benson, 2018b).

The management of environmental resources within traditional African societies, dates back to pre-colonial days. According to Asabere-Ameyaw et al. (2008), traditional African communities have been involved in environmental resource management for centuries, with the processes being enforced through taboo systems and other numerous ritual practices. In most traditional societies across the African continent, certain natural objects such as rivers, mountains, forests, grooves and trees are regarded as sources of remarkable spiritual powers; where citizens are usually encouraged to worship, serve and observe these natural objects as sacred entities. These objects according to Owusu (2006), are protected and preserved through taboos and ritual observances even till date. In Ghana for example, habitats, grooves, rivers and mountains are still protected and preserved in their pristine state. In Ghana like most south Saharan African countries, the clan system and totemism account mostly for the practices of natural resource management. And as suggested by Ngaaso and Attom (2015), it is within the cultural practices of most traditional communities in Africa to pass on natural resources to generations yet unborn, through strategies and practices that are achieved through technologies that were relatively humble. These relatively humble technologies refer to nothing other than the practices of totemism and reverence to natural objects.

At this point, the totem system is briefly reviewed with particular reference to Ghana. The word totem, meaning revered or sacred is derived from the Ojibwe language (North American-Indian) word 'Oode or Odoodem', in reference to anything kin-ship related (Frazer, 2011; Haddon, et al., 2011). The totem is usually an animal or other natural figure that spiritually represents a

group of people traditionally linked by blood kinship (tribe, ethnic group, clan or family), as tutelary ancestral spirits (Barre, et al., 2008; Frazer, 2011). Totemism is practiced worldwide where descendants of each totemic group, refrain from either killing or eating their totem. For instance, the Bakwena tribe of Botswana in Africa which is named after Kwena (crocodile), forbids any group member to harm, eat or sell the sacred creature (Frazer, 2011). It goes without saying that, totemism is also observed by some Europeans who use totems as seen painted on special backgrounds such as Coat of Arms, national flags, and *etcetera* (Haddon, et al., 2011). Within this context, the system identifies each tribe, clan or family group with an animal or plant species which, group members do taboo the killing and/or eating of these special plants or animals throughout their lifespan. Indeed, it is even common to have clan members prevent other non-members from harming their totems.

It is expedient that at this stage, deity worship in Ghana is briefly discussed. A deity is traditionally considered as a supernatural being or sacred god that exerts force over certain earthly expects, as such are worshipped by people (O'Brien, 2009). Deity worship as approved by ATRs is polytheism (belief in many gods) unlike the Abrahamic religions of Christianity, Islam and Judaism which practice monotheism (belief in one God). Deity worship in traditional African religious settings bear similarities with totemism and like some other religio-cultural practices, may bear ecological underpinnings (Awuah-Nyamekye, 2009a; Awuah-Nyamekye, 2009b).

Certain mountains, rivers, special grooves and many other natural elements (both living and non-living) are regarded as deities and for that matter worshiped in Ghana. For example, some Ewes living around Hohoe in the Volta Region of Ghana recognize and revere Mount Afajato, (highest mountain in Ghana) as a god or deity. The owners of the mountain prohibit certain activities on and around the mountain such as tree cutting, bush burning and noise-making, amongst others. Offenders who have transgressed the rules and norms, are made to pay heavy penalties (physical or spiritual). Similarly, mount Hikah which is situated in the little township of Samoa in the Lambusie District of the Upper West Region, is zealously protected by the traditional custodians (Benson, 2018b). It is perhaps worthy to note that, the author of this article was named after this mountain by his paternal uncles. On regular basis, people from all walks of life come from near and far to bring gifts to the owners of the deities, in appreciation for the fulfillment of very important requests made earlier before the god (Benson, 2018b).

Also, hundreds of rivers and lakes across the country notably; the Pru, Black Volta (Mouhoun) and Sisili Rivers are worshiped as river-gods. Either consciously or unconsciously, these natural elements are preserved and protected for centuries *via* cultural practices (Awuah-Nyamekye, 2009b). For example, fishing is prohibited in the Pru River, whilst washing of clothing is also prohibited in the Densu River. Last but not the least, most ethnic groups in Ghana guarded by traditional beliefs, have over the centuries indulged in the conservation of certain plant and animal species within their habitats in the form of grooves, sanctuaries, game reserves, and *etcetera*. Some of these sites have become tourist's sites today in Ghana, serving the purposes of natural resource preservation and management and income-earning ventures for both state and individual owners (Asabere-Ameyaw et al., 2008). These species which are of cultural and spiritual values are protected from harm by clan members and the society, thus keeping the

vulnerable species from extinction. Hence, there are many state-imposed sanctions on violations of rules guiding the use of natural resources (Asabere-Ameyaw et al., 2008).

Part III: Methodology

The general mythological approach of this study derives from an empirical research technique in the field of Religious Studies, which is phenomenologically descriptive of the knowledge of participants of a survey (Cox, 2010). Notwithstanding its intrinsic limitations, the objective understanding of the study is almost always appropriately realizable (Ekeke & Ekeopera, 2010). Specifically, however, the study was guided by qualitative methods. This tool is often used in understanding and describing the world of human experiences, often extracted from the thoughts and behaviors of people in given circumstances (Cox, 2010; Gilgun, 2010). According to Merriam & Tisdell (2016), qualitative research seeks to elicit meaning, experience or perception from the viewpoint of the respondent rather than from the perspective of the researcher; whereby the researcher's perspective and influence is lessened on the informant. In-depth interview, focus group discussions and participant-observation methods were adapted (Bernard, et al., 2017; Howard & Berg, 2017), involving 45 participants from three culturally-rich and largely representative ethnic groups in Ghana namely; Sissala, Ashante (Akan) and Ga-Adangbe. Thirty-two (71%) of the 45 participants chosen were males while 13 (29%) were females, aged from 18 years to above 60 years (Bartlett & Vavrus, 2017). Informants were chosen purposively from targeted groups, based on their knowledge and experiences in the subject area and their ability to provide relevant answers to the research questions; through the quota sampling procedure and snowballing technique (Lewis & Sheppard, 2006; Merriam & Tisdell, 2016).

On the main, the discussion of findings was descriptive and exploratory since it investigated the attitudes, behaviors, perceptions, opinions, beliefs, and cultural practices of traditional African religious systems. Respondents freely answered questions under confidential conditions. Nonetheless when processing the results, the short-falls of the methodology in terms of validity (the attainment of accurate results that truly reflect reality on the ground); reliability (that comes irrespective of who the researcher is); and generalizability of the study results (irrespective of the size of application and the number of people involved or the width of social setting), were addressed through triangulation where there was the use of multi-purpose approaches to the investigation of research questions conducted in confidence (Bryman, 2008; Edmonds & Kennedy, 2017). Instead of adapting a narrative approach, the research design was a case study on Ghana, that allowed for in-depth understanding of the phenomenon under investigation (Ravitch & Carl, 2016). Regarding Data Analysis, the Qualitative Content Analysis technique which, is a summary of verbal and visual data was used, as it was both reflexive and interactive to do so (Judd et al., 2017; Pallant, 2016). It took nine (9) months to complete both fieldwork and the analysis of the data that was collected (February 15, 2020 –November 17, 2020).

Table 1: Categories of participants

Category	Number interviewed	Gender	
		Male	Female
Traditional rulers (chiefs, Elders and queen-mothers)	7 (16%)	5	2
Traditional priests, priestesses and traditional healers	10 (23%)	8	2
Sacred groove attendants	3 (7%)	2	1
Christian and Muslim clerics	2 (4%)	2	0
ATRs practitioners	5(12%)	4	1
Farmers	2 (4%)	1	1
Hunters and fishermen	3(7%)	3	0
Mining Companies, small-scale miners and sand winners	3(7%)	2	1
Forests and game reserve officials	2 (4%)	1	1
Eco-based NGOs officials	2(4%)	1	1
Environmental Protection Agency (EPA) officials	2 (4%)	1	1
Agricultural Extension officials	2(4%)	1	1
Local government officials	2 (4%)	1	1
Total	45 (100)	32	13

Source: Fieldwork, 2020

Socio-demographic Characteristics of Participants

The ages of participants were classified into four categories as follows: 18-30, 31-40, 41-50 and 60 years and above (see Table 2).

Table 2: Socio-demographic characteristics of participants

Age	Frequency (N=45)	Percentage
18-30	5	11
31-40	7	15
41-60	13	29
Above 60	20	45
Total	45	100
Education		
No formal	10	22
Basic	8	18
Secondary	15	33
Tertiary	12	27
Total	45	100
Religion		
ATRS	28	62
Islam	3	7
Christianity	10	22
Others	4	9

Source: Fieldwork, 2020

Table 1 above depicts the category of 45 participants that were interviewed during the survey. They were as follows: (a) Traditional leaders, queen-mothers and elders of the society constituting 7 (16%) participants of which 5 are males and 2 females; (b) Traditional priests, priestesses and herbalists constituting 10 (23%) of which 8 are males and 2 females; (c) Sacred grove attendants constituting 3 (7%) participants of which 2 are males and 1 female; (d) Christian and Muslim clerics constituting 2 (4%) participants of which both are males; (e)ATRs followers constituting 5 (12%) participants of which 4 are males and 1 female; (f) Famers constituting 2(4%) participants of which 1 is a male and the other a female; (g) Hunters and fishermen constituting 3 (7%) participants of which all are males; (h) Mining Companies, small-scale-miners and sand winners constituting 3 (7%) participants of which 2 are males and 1 female; (i) Forests and game reserve officials constituting 2 (4%) participants of which 1 is a male and the other a female; (j) Eco-based

NGOs officials constituting 2 (4%) participants of which 1 is a male and the other a female; (k) EPA officials constituting 2 (4%) participants of which 1 is a male and the other a female; (l) Agricultural extension officials constituting 2 (4%) participants of which 1 is a male and the other a female; and (m) Local government officials constituting 2 (4%) participants of which 1 is a male and the other a female. In all there were 32 males and 13 females.

On the other hand, Table 2 above shows the Socio-demographic dynamics of the participants as follows: 5 interviewees representing (11%) were aged between 18 and 30; 7 interviewees representing (15%) were aged between 31 and 40; 13 interviewees representing (29%) were aged between 41 and 60; and 20 interviewees representing (45%) were aged above 60. Regarding their educational status, those with no formal education were 10 (22%), basic education were 8 (18%), secondary education were 15 (35%) and tertiary education were 12 (27%). Lastly, regarding their religious backgrounds, ATRs were 28 (62%), Christians were 10 (22%), Muslims were 3 (7%) and other religious denominations were 4(9%).

IV: Results and discussions

The main objective of the study was to ascertain how traditional belief systems across Ghana and for that matter Africa, as established by Traditional African Religions (ATR) promote environmental preservation. In particular, how totemism and deity worship enhance the sustainable utilization of natural resources and the preservation of ecosystems and other forms of nature in Ghana. In the main, four questions were asked the participants: What are the main indigenous nature conservation practices of ATRs within this given locality in the light of totems and deity worship? What are the main reasons that underline the institution and regulation of traditional taboos (totems) and deity worship within this traditional setting? How relevant are totemism and deity worship today as indigenous nature conservation practices, and to what extent have these practices enhanced natural resource management within the Ghanaian society? Can you please mention some of the challenges that face ATRs practices in the light of natural resource protection? The answers to these main questions and others by the informants are variously discussed below:

Research Question One: What are the main indigenous nature conservation practices of ATRs within this given locality in the light of totems and deity worship?

This question investigated the varied taboos and deity worship that are observed by ATRs among three ethnic groups in Ghana, the observance of which turn to enhance environmental conservatism. From the discussions, the interviewees gave the list for the main indigenous nature conservation practices as captured in Table 3 below.

Table 3: Totems of the three Ghanaian ethnic groups used for the survey ---Sissala, Akan (Ashanti) and Ga-Adangbe

Ethnic group	Totems according to clans	Deities worshipped
Sissala	Buwala (Fox or Wild dog/Antelope/ Monkey), Gandawila (Peacock/Tiger), Nguveira (Crocodile), Balaveira (Monitor Lizard), Hanviera (Horse), Galibagla (Porcupine), Kpaviera (Tiger), Gilinganviera (Crow), Konnala (Crocodile/Peacock), Essang (Tiger/Royal python)	Mount Hikah (Samoa); River Dancheke; Plant Species that include <i>Digitata/Konkontia</i> , (baobab tree), <i>Blighia sapida</i> (akee apple)
Akan	Aduana (Dog/Frog), Agona (Parrot), Asakyri (Vulture/Hawk), Asenie (Bat/Whale), Asona (Crow/Raven/ Red Snake), Brekuo (Leopard), Ekuana (Buffalo) and Oyoko (Falcon/Hawk).	River Birim (Tain); River Densu; River Ofin; Boaben-Fiema (Monkey Sanctuary); Nananom Mpow (Ance- stral grooves); Mprisi Sacred Forest; Plant species (Rattan/Climbing palm tree, globiferus parasitic mistletoe plant); Lake Bosomtwe; Benya lago- on (Elmina); Kato Mfensi groove; and Baidan groove, <i>etcetera</i> .
Ga-Adangbe	Kpone (Lion), Ga (Elephant/Snail), Shai (Osudoku, Old Ningo (Elephant/Monkey), Ningo Prampram (Eagle/ Sea Turtle), Yilo and Manya Krobos (Royal Python/Rat) and Ada (Cock).	Guako groove of Pokuase-Accra; Monkey Sanctuary at Shai Hills;

Source: Fieldwork, 2020

The list of totemic objects and deities of these ethnic groups is endless since almost every community and its people have the totems and deities that they worship or revere. In some instances the information was that long ago, not just every clan but family had their gods they worshipped. Some of the totemic objects listed to me include: Porcupine, python, crocodile, fox, lion, leopard, parrots, elephants, monkey, bat, vulture, monitor lizard amongst others. In the case

of deities the following were listed: Guako groove, Shai monkey Sanctuary, Lake Bosomtwe, River Birim, River Ofin, Nananom Mpow Ancestral groove, River Dancheka, Mprisi sacred Forest, and Mount Hikah to mention these few. For both totemic objects and deities of the three ethnic groups, please see Table 3 for more details.

Further discussions with participants revealed the following: First, clan totems have symbolic meanings or qualities. For example within the Akan clan system, the following qualities are ascribed to their totemic animals: the dog stands for skills; the parrot stands for eloquence; the vulture stands for cleanliness; the bat stands for diplomacy; the crow stands for wisdom; the leopard stands for aggressiveness; the buffalo stands for uprightness; whilst the falcon/hawk stand for patience (Owusu, 2006).

Second, to maintain a natural balance between the spirit world and the world of the living, tribal and clan leaders, lineage heads, family heads and fetish priests play crucial roles in religious functions such as the Homowo festival among the Ga-Adangbe, the Odwira festival among the Akans, and the Paragbeille and Kelwie festivals among the Sissalas. These tribal festivals are mostly observed on yearly bases, where the chief priests as traditional custodians pour libations and make sacrifices on behalf of traditional rulers and their subjects for a show of gratitude to the gods and ancestors for granting the citizens long lives, abundant harvests and fortunes.

Third, several lagoons and estuaries in the coastal areas of the country in particular within the Ga-Adangbe enclaves, are managed and protected *via* strict traditional enforcement mechanisms, such as the imposition of bans to fishing within protected ecosystems periodically, the prohibition of the fishing of specific species of fish or the prohibition of the use of specific implements to fish in those water systems. One notable water body in the Ashanti enclave where these restrictions are observed is the Lake Bosomtwe.

Fourth, the Guako groove of Pokuase within the Ga-Adangbe enclave is believed to be the abode of the blacksmith god of the Ga tribe, which is guarded by a taboo system where over 76 plant species of high economic value and a large bird species including *pynonotus barbatus* (common garden bulbul), *plouceus cucullatus* (village weaver bird) and the *anthrepets gabonicus* (mouse-brown sunbird) are protected from human exploitation.

Fifth, all 10 traditional priests, priestesses and herbalist confirmed that the relationship between a clan and its totemic plant or animal comes as a result of their ancestors tracing their origin to a particular plant or animal. Also, some of the participants affirmed that, the bond between clans and their totemic plants and animals stem from the fact that their forebears were once helped by their totemic animals and plants or perhaps benefited from them in a special way. A participant within the Sissala enclave explained that the Buwa clan has the fox as their totem because it saved their great forefather from the hands of the slave raiders. Oral tradition has it that the savior animal of the 'dog family', alerted their forebears of the looming danger from its continuous loud barking.

Also, according to traditional narration, it is believed that the ancestral god of the Shais within the Ga-Adangbe enclave known and called Kyere-ke-kyerete, is the twin brother of the monkey. It is therefore a lovely scene when tourists visit the reserve in the Shai Hills to watch these protected species live comfortably and peacefully with human beings. A traditional leader also said that the Shais celebrate Fridays as the Day of the river-god. For that matter they do not

go to their farms but rather use those days for communal labour to clean their surroundings. Some participants also explained that, it may also be that the totemic object revealed itself to the leader of the clan, thus falling in line with the assertion of Awuah-Nyameskye's (2012c) that, many times these totemic objects come through revelation from the spirit world through traditional seers.

Lastly, all clans in Ghana in one way or the other have symbolic socio-cultural totemic plants or animals. The informants also asserted that many clans and even individual house-holds in Ghana have deities in the form of grooves, mountains, rivers and other natural elements that they worship in spite of the invasion of foreign religions that have seen the sharp decline of ATRs in Africa. This fell in line with Owusu's (2006) assertion that foreign religions despite their influence on ATRs, has failed to eradicate deity worship among Africans in totality.

Research Question Two: What are the main reasons that underline the institution and regulation of traditional taboos (totems) and deity worship within this traditional setting?

Research question Two investigated the significance of taboos and deity worship in ATRs and factors that accounted for their institution. In answering this question, 40 participants representing almost 88% alluded to the fact that, the establishment of taboos and deity worship amongst practitioners of ATRs, had nothing to do with environmental preservation but a sheer coincidence, in spite of the fact that the practices enhance environmental preservation. Three of the participants (about 7%) said it was for both spiritual and ecological reasons and two participants (4%) said it was purely for ecological reasons.

From that context the majority view was that, human-nature relationship is a spiritual ordinance rather than an ecological relationship. This overwhelming position of the participants was corroborated by Taringa (2006) who says, human-nature relationship within traditional setting is more spiritually based than it was ecologically, a relationship that has been established long ago by ancestors who have had spiritual and in some cases direct physical protection from totems and deities. It is believed that even today, these totemic animals and plants and clan and family deities, are still the guarding spirits of members of society. As one other traditional leader opined, *'the foundations for African environmental ethics lie in the fact that, the traditional society conceive humanity and the environment as Siamese twins-inseparable and interdependent, a relationship established long ago by our ancestral spirits'*. Thus, corroborating the assertion of Agboro (2008) who said Africans see and hold everything within the spiritual context. And it is this traditional African ethical code that compels them to keep and care for the environment as stewards since all natural resources are divine gifts from the Supreme Being, and as a communal property they should hold it in trust for themselves and the future generations (Asiama, 2007). This social and moral obligation is central to African 'environmental' ethics.

Regarding deity worship, 41 participants (91%) agreed that even though these activities promote the conservation of ecosystems and the preservation of certain endangered animal and plant species from extinction, they have nothing to do with environmental consciousness but actions that are imbued with spiritual connotations. One priest said, *'Our fathers made it known to us as it was passed down to them from their forebears that, deity worship has been part and parcel of our people for the only reason that we get our protection and indeed, everything from these deities. Nothing else'*. Three of the participants (about 7%) who are all females, assigned other

reasons for deity worship to environmental awareness. Of the three, two of them worked for environmental agencies while the other is a local government official.

Research Question Three: How relevant are totemism and deity worship today as indigenous nature conservation practices, and to what extent have these practices enhanced natural resource management within the Ghanaian society?

The third research question sought to know from the participants the relevance of totems and deity worship in respect of environmental resource management. As stated above severally, totemic objects and deities are believed to have existing mystical or ritual relationships with the respective ethnic, clan or social groups (Taringa, 2006). And the belief is that, the killing or eating of such animals by group members bring curses or calamities on the people (Nugteran, 2009). Against this background, many people turn to avoid the violation of these indigenous practices that enhance natural resource practices (Asiama, 2007). To this end, all 45 (100%) participants alluded to the fact that indigenous nature conservation practices by ATRs in the form of totemism and deity worship are still relevant in the following ways: totemic objects are believed to have powers that protect people from the harm of enemies and wizards, explaining why some people emulate their totems on their bodies in the form of rings, bands, *etcetera*; totemic objects and deities are said to have the capacity of bestowing powers, riches, good health, fortunes and abilities on ardent followers of the traditional religion---in that light those groups who have the parrot as their totem are usually fluent or eloquent speakers and orators; totems are communication channels through which Chiefs and family heads communicate their identity to others as in ancient Ghanaian societies where totemic objects were used to summon subjects to the palace, institute war campaigns, assemble tribal festivals or even used as seals for covenant agreements; totems are unifying symbols as seen in the Ashanti culture where they regard the Golden Stool as their rallying point; countries of the world including Ghana gain financially from tourists who come to see and learn about the historical totems of clans, chiefs and communities; totems have educational significance as they portray the ingenuity of our literature or semiology where symbols are used in communication; totemism and deity worship are the basic rocks upon which ATRs are founded; and above all the practices have ecological importance since they help in preserving special species of animals, plants, natural elements and ecosystems (Awuah-Nyamekye, 2012c; Awuah-Nyamekye, 2009b; Benson, 2018b).

In answering the second leg of the question, participants unanimously asserted that practices of totemism and deity worship have enhanced natural resource management in diverse ways such as: the preservation of certain animal and plant species which would have been extinct by now but for indigenous nature conservation practices; certain ecosystems are preserved by indigenous practices where the use of natural resources within these systems are restricted, for example where fishing within some water bodies are done on yearly or monthly bases; the fear of spiritual and physical punishment associated with the violation of traditional environmental ethics and norms, have positively promoted natural resource management; and traditional ecological modes and practices have complemented national efforts in respect of natural resource management and environmental conservation.

Research Question Four: Can you please mention some of the challenges that face ATRs practices in the light of natural resource protection?

This research question sought to unearth the challenges that have led to the decline of traditional practices in Ghana and how that has negatively affected environmental protection. In her response, one groove attendant said, *‘Troubles for African traditions and culture begun the very day Christianity and other foreign religions were introduced into Africa.’* Another traditional priest remarked, *‘the Gold Coast that used to be dominated by colorful African culture and traditions, suddenly became a home of weird adulterated white-influenced culture, with the advent of colonialism.’* Clearly from the outset, traditionalists and ATRs practitioners who formed majority of my interviewees (about 33 participants representing 73%), had the mindset that the events of colonialism and the invasion of foreign religions into the continent had negatively impacted traditional practices including totemism and deity worship. And to that extent, had derailed the process of natural resource management *via* traditional methods. This claim was, however, refuted by the two clerics who insisted that, the decline of traditional worship and practices only gave way to more superior religious foundations that held the spiritual hope of the people. The 2010 population census in Ghana recorded that only 2% of Ghana’s population was still into traditional worship, with about 71.2% being Christian, 17.6% Muslims and the rest being other religions and those that do not belong to any region (Population Census Report of Ghana of 2010).

Moreover, from the discussions with the interviewees, it was clear that the challenges were multi-faceted. We recorded other notable challenges that include: that the Ghanaian government and its agencies within the environmental sector do not collaborate effectively with the traditional sector; traditional laws and ethics regarding natural resource management are weak and in many cases are unenforceable as they are not state-backed; penalties imposed by the traditionalists on offenders regarding breaches of the rules governing the preservation of sacred sites are minimal; most of the population especially the youth of today, have no explicit ecological knowledge or awareness and therefore do not see the relevance of traditional ecological practices that are frequently violated because they no longer regard traditional beliefs; even in some of the communities where traditional belief systems still exist, they are grave ecological abuses by human activities as alluded to by people like Awuah-Nyameskye, 2012c and others; both modern scientific methods and indigenous traditional modes have not adequately addressed current ecological problems; and lastly the system relies so heavily on legalities rather than creating ecological awareness among the people.

These challenges and many more according to the participants, have adversely affected natural resource management. When asked about the way forward, one major recommendation that was put forward was that, there is the need to synchronize modern methods and those of traditional modes in ensuring effective environmental protection and efficient natural resource management. This suggestion falls in line with that of Taringa (2006) who said, traditional ecological efforts would succeed where scientific models and traditional modes of environmental preservation activities are effectively and jointly coordinated.

Conclusions

Today, indigenous nature conservation practices mainly established by ATRs are still of relevance in Ghana and Africa at large, regarding efficient resource management and effective environmentalism in general (Awuah-Nyameskye, 2012c; Taringa, 2006). In large part, most of these practices manifest in traditional deity worship and reverence of totemic objects within traditional settings in Ghana (Awuah-Nyameskye, 2012c). Findings of this study showed the following:

- (a) Totemism and deity worship form the bed-rock of ATRs;
- (b) All ethnic groups in Ghana have clan totems and deities that they revere and worship;
- (c) Indigenous nature conservation practices mainly manifested in totemism and deity worship in terms of environmental protection are only coincidental as they connote spiritualism rather than ecological consciousness; and
- (d) That, these indigenous nature conservation practices have positively promoted environmental protectionism as well as complemented modern scientific efforts in the area of resource management. For instance, many ecosystems and endangered species have been preserved from extinction due to indigenous nature conservation practices of ATRs.

Be that as it may, many challenges have befuddled attempts made at promoting environmentalism within our societies using indigenous nature conservation practices. These challenges on the main include: the abandonment of traditional beliefs that has led to a sharp decline of indigenous nature conservation practices due to the current dominance of foreign religions in Africa; that both modern scientific methods and those of indigenous traditional modes are not adequately addressing current ecological problems (Allen, et al., 2007); and that traditional ecological laws are hardly enforceable as a result of governments inability to give support to traditional practices (Agboro, 2008).

Way Forward

For the way forward, and based on findings and deductions resulting from the survey, the following recommendations were made:

- (a) Both modern scientific methods and those of indigenous traditional modes are efficiently synchronized so as to address the current ecological problems (Awuah-Nyamekye; 2013);
- (b) that, government and its eco-based agencies should actively collaborate with indigenous systems and traditional authorities in terms of policy-direction, awareness creation, funding and the enforcement of rules governing environmental protection (Benson, 2018a);
- (c) that, there is the need to de-spiritualize the institution of totems and deity worship of natural elements in the minds of the people through educational programs and workshops, that way, people will come to appreciate and participate in programmes that aim at protecting and preserving the environment and its resources;
- (d) that, governments could also promote indigenous ecological knowledge and awareness and the means to interact physically rather than spiritually with these natural elements

- in a sustainable manner, starting from the classroom to workshops for people of all ages and walks of life (Nugteran, 2009; Awuah-Nyamekye; 2013);
- (e) that, governments and their agencies, international organizations, religious bodies, traditional authorities and citizens of all nations must safeguard the efficient and rightful use of natural resources and at the same time diligently seek and implement measures that will protect the environment; and
 - (f) Lastly, appropriate efforts that are aimed at resolving global, regional, national and local environmental problems must be intensified and encouraged to fall in line with the UN Millennium Goals (UN MDGs, 2000).

Regrettably, in spite of all the efforts and interventions made by the international community, nations, NGOs and religious bodies in addressing the environmental crisis, humanity is not out of the woods yet. The clarion call in the given circumstances is to redouble these global efforts whole-heartedly, other than paying the usual lip service in conferences and seminars at all societal levels. Remember we are stewards of creation who will answer someday for our misdeeds and mismanagement of God's gift to humankind.

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