

AFRICAN AND CHRISTIAN THEOLOGY OF ENVIRONMENT AS A MODEL FOR THE CONTROL OF GLOBAL WARMING

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ABSTRACT

The problem of global warming and its implications on the continuous existence of the world are alarming. Hence, the phenomenon has attracted a lot of responses from different people including scholars, journalists and religious leaders. While researches on possible solutions to the menace of global warming continue, the contribution of this paper is that a combination of traditional African attitude to nature and Christian theology of environment can be used as a model for the control of global warming. Important elements in the two traditions include the idea of relationship between God, human and nature and the eschatological views of the two traditions. The paper concludes that the combination of these views will help to check human attitude to nature and unbridled craze for material wealth which are the major causes of global warming.

Keywords: Global Warning, Environment, Theology.

INTRODUCTION

Ecological crisis is perhaps the most pressing challenge the world grapples with at present. Scientists believe that human's unregulated exploitation of nature in the name of scientific and technological advancement is the cause of this crisis. In most parts of the world, deforestation, gas flaring, oil exploration and spillage, industrialization and others take place unchecked. These result in environmental degradation and pollution, depletion of the Ozone layer and the attendant change in climate resulting in global warming and cooling.

Many attempts have been made, many conferences organized and suggestions made on what to do to control global warming so that the world can be a conducive place to live. However, it needs to be pointed out that the exploitation of the environment that results in global warming is an attitudinal issue and it is a change of attitude that can ameliorate the challenge. In this paper, it is suggested that a combination of African and Christian theological attitude to nature can serve as a model for the control of global warming.

GLOBAL WARMING

According to Gina (2010:60), global warming is an increase in the average temperature of Earth's near surface, air and Oceans. Global warming can be induced through natural processes or by human activities. It is on record that the world had experienced climate change in the past due to natural causes. Ologunorisa (2011:10) records that the last period of extensive glaciations occurred between 22,000 and 14,000 years ago. The period from 7,000 to 5,000 years ago was said to have been warmer than the present time. The last 5,000 years have been characterized by declining temperatures with very cold intervals some 28,000 and 350 years ago. However, he states that it is generally believed that presently the world is passing through the interglacial period (Ologunorisa, 2011:10). The current scenario starting from the wake of the industrial revolution in the 1750s was caused by human activities. Though there is cooling in some parts of the world, most parts of the world today experience warming. Global temperature is said to have increased per decade in the last 100 years by about 0.7 degree Celsius (Mastrandrea and Schneider, 2009:2). This is caused by an increase in green-house effect aggravated by human activities. Most of the warming occurred in the 20th century during two periods, 1910 to 1945 and 1976 to 2000. Writing in 2011, AMCEN records that in the last 25 years, the increase has been more rapid with 2001-2010 being the warmest decade on record. The decade has the average temperature of 0.46^o Celsius above the 1961-1990 mean. (AMCEN, 2011:4, cf Zabbey, 2007:3).

According to scientists, numerous changes are taking place necessitated by global warming. These include melting mountain glaciers and polar ice, rising sea level, more intense and longer drought, more intense storms, more frequent heat waves and changes in the life cycles of many plants and animals. It is said that in the Arctic region (the point on the Earth surface that is furthest north), temperature has risen almost twice as much as the global average (Okolie, Ossai and Eze, 2013:52).

According to Mastrandrea and Schneider, (2009:16) the data gotten since 1957 from reliable weather stations located far away from cities and since 1979 from satellite show that a clear surface warming trend exists. The state further that temperature has risen particularly sharply in the last four decades. Eleven out of the twelve warmest years on record occurred from 1995 with 2001-2006 in the top six. It is also a fact that it is not every part of the world that is warming at the same rate or that is warming at all. Some part of the world cooled over the 20th century. Hence, many scientists prefer the phrase 'climate change' to 'global warming' to describe the weather condition in the world. However, taking all the local measurement together, the world is warming significantly and many more places experience warming than cooling. Rise in sea level; one of the indications of global warming, is caused partly by the melting of the ice in the

water volume and ice on the mountains. Rise in sea level can lead to flood causing famine, outbreak of epidemic and spread of diseases. Already, the glaciers on the mountain of Kilimanjaro are said to have lost 82% of their ice since 1912 and are estimated to be totally gone by 2020 (Ogbe, 2008: 49).

Global warming can also aggravate heat induced health challenges. Vectors like mosquitoes which flourish in warm environment will be on the increase and reach regions they had never reached before due to the hitherto cold weather of the regions. Ogbe records that global warming contributes to the spread of mosquitoes to places like America, Korea and USSR where they could not reach before now. He also records that the depletion of the Ozone layer is already causing increase in cancer cases the world over (2008:52). Sayne in Ukonu (2012:10) asserts that there are a growing number of voices in the media and policy circles that climate change raises the risk of violent conflict in the 21st century. If the trend continues, the already stressed resources will be thrown into shorter supply. This could have negative effects that will aggravate more sicknesses and hunger, fewer jobs and poor economic growth. This could in turn open doors to more violence.

If global warming continues, it portends a greater risk in future. Depending on the rate of green-house emission, the Earth will continue to warm. In the case of high emission, warming will increase to 2.4 to 6.4 Celsius degree (4.3 to 11.5 Fahrenheit degrees) by 2100. If there is lower emission, (that is a situation where emission grows slowly, peaks around 2050, and then falls) there will be further warming of 1.1 to 2.9 Celsius degrees (1.9 to 5.2 Fahrenheit degrees) by 2100 (Mastrandrea and Schneider, 2009:18). This will lead to rapid increase in sea level rise and many more species of plants and animals will go extinct.

The reality of global warming poses unprecedented dangers to the world and Africa in particular. West Africa is listed among the specific regions of the world that are at risk of global warming (Ologunorisa, 2011:27). West Africa is projected to be warmer by 1.3°C year round and have about 0-15% increase in summer (Ologunorisa, 2011:26). According to Sanusi, there was a gradual increase in the temperature of Nigeria between 1901 and 1940. It dropped slightly between late 1940s and 1950s and rose till late the 1960s. The sharp rise in temperature became real between 1970s and 2005 from 26.5 degree Celsius (1936-1970) to 27.8 degree Celsius (2011:461). This is necessitated by the fact that Nigeria is a major contributor to global warming. By 1987, Nigeria was 21st in the Greenhouse Index Rank contributing a total of 53,000 (0.9%) of the various greenhouse gases to the atmosphere. By 2007, Nigeria's share of the worldwide carbon dioxide emission was 0.35 % (Ologunorisa, 2011: 26).

Among the various sectors in Nigeria as at 1988, Fossil Fuel Combustion emits 35672.224 Co₂, 5.036 CH₄ and 0.915 of N₂O, Oil and Gas systems emit 34625.893 Co₂, 115.936 of CH₄ and 0.84 of N₂O while Industrial process is said to emit 1874.167 Co₂, 0.000 of CH₄ and 0.000 of N₂O. Others are Industry (10689.43 Co₂, 33.24 CH₄, 0.37 N₂O), Transportation (14558.36 Co₂, 4.09 CH₄ and 0.20 N₂O),

Energy Conversion,(34635.36 carbon dioxide, 116.36 Methane and 0.38 Nitrous oxide), and Natural Resources (1038.96 Carbon dioxide, 66.23 Methane and 0.000 Nitrous oxide), (Ologunorisa, 2011: 23). In Nigeria the states that emit the highest percentage of green-house gases are in the Niger Delta state. As at 1988, the then Rivers state which has now become Rivers and Bayelsa states emitted 36.18% of the total green-house emission in Nigeria followed by Lagos state(14.62%) and Akwa Ibom state (10.16%) (Ologunorisa, 2011: 24-25).

The effects of global warming in Nigeria are enormous. Adesina records that the occurrence of extreme climate events like flooding, high temperature, frequent dry spells and damages of ecosystems among others are proofs of climate change in Nigeria. According to him a Nigerian meteorological Agency in 2009, recorded that the whole of northeast, Katsina state and Sokoto state in the northwest, had drier season than normal rainy season (2012:211). If the trend continues there will be serious challenge to food security, and health and these will in turn necessitate violence. While climate change will lead to increase in aridity and desertification in northern Nigeria, it will lead to increase in flooding in the coastal regions (Uyigwe and Agho, 2007:9). The rise in sea level along the coastline in Nigeria has a lot of consequences. The Nigerian Environmental Study/Action Team (NEST) reported in 2004 that sea level rise and repeated ocean surges will worsen the problems of coastal erosion in the Niger Delta and the associated inundation will increase the problems of floods, intrusion of sea water into fresh water sources thereby destroying the ecosystem, destroying mangrove and affecting fisheries, and general livelihoods (cited in Etiosa and Agho, 2007:8). Adesina (2012: 203) notes further that for many years now Victoria Island in Lagos has been subjected to threats from ocean surges traceable to climate change. He goes further to record that if the present trend continues, Lagos and the Niger Delta will be dangerously affected. Nigeria will lose close to 9 billion dollars to the catastrophe that will result from global warming (2012: 203).

THE CONTROL OF GLOBAL WARMING

Many approaches have been considered toward the control of global warming. It has been suggested that controlling global warming implies stabilizing atmospheric concentration of greenhouse gases. This is done by reducing man-made greenhouse emissions. The strategies to do this include: the use of renewable and alternative energy like solar power, wind power and geothermal power and switching to hydrogen fuels. Alternative fuel to be used can include fuel made from plants such as biodiesel (made from used and new vegetable oil) and ethanol (a plant based gasoline additive) (Singh et al 2008:455). Another approach is management of carbon in underground geological formation. Also, carbon can be sequestered in vegetation. This includes improved agricultural practices, reducing oxidation of soil organic

matter, enhancing soil texture to trap more carbon as well as protecting wetlands (Singh, et al, 2008:455).

Another system to capture carbon is by preserving and planting more trees. Trees soak up a great deal of carbon dioxide from the atmosphere and store carbon atoms in new wood. But burning of trees releases stored carbon into the atmosphere. Carbon can also be captured directly. This is traditionally released into depleted oil wells to force more oil out of the ground or seafloor. The same process can be used to store carbon dioxide released by a power plant factory or any large station. (Mastrandrea and Schneider, 2009:22, Singh et al, 2008:455). Singh, Singh et al (2008:456) also suggest carbon trade and imposing carbon tax as veritable approaches. Carbon trade according to them involves provision for the payment to industries, community and others for undertaking activities that sequester carbon through plantation and conservation of forest. Another one is to phase out the uses of chemicals that promote the depletion of the Ozone layer. One of these chemicals is chlorofluorocarbons.

Better waste management can also reduce emissions of greenhouse gases to the atmosphere. These include waste avoidance or prevention, reuse of products and materials, recycling and energy recovery (Arokoyu, and Weli 2008:179). In sum, these 10 top tips by West (2013:1) will help to reduce global warming. These can be carried out by individuals. They include reduction of waste by choosing reusable products, recycle paper, plastic, newspaper, glass and aluminum cans and use less heat and Air Conditioning. Replacement of regular light bulbs with compact fluorescent light; less and smart driving; purchasing of energy efficient products; and the use of less hot water. Others include switching off light when leaving a room and using only as much light as it is needed; planting a tree; getting a report card from utility company and encouraging others to conserve by sharing information about recycling and energy conservation.

International Agreements is also a great effort that has been made to control global warming. Governments all over the world have seen the importance of international Agreements in reducing greenhouse gases. Hence, many international conferences and meetings have been held, while many bodies have been formed in this direction. The first international conference held to address this was in 1992 in Rio de Janeiro in Brazil. In this conference known as the United Nations Conference on Environment and Development and informally known as the Earth Summit, more than 100 countries pledged to confront the problem of greenhouse gases by signing the United Nations Framework Convention on Climate Change (UNFCCC). So far, more than 180 nations have ratified the UNFCCC. In the agreement, nations were committed to stabilize greenhouse gas concentrations to the level of avoiding dangerous human interference with the climate. Also, it is to be done in such a way that ecosystems can adapt naturally to global warming, food production is not threatened and economic development can proceed in a sustainable manner (Mastrandrea and Schneider, 2009:24, Adesina, 2012:206).

In 1994, there was the Montreal Protocol on reduction and elimination of Chlorofluorocarbons (CFCs) and other ozone depleting substances. This followed the Vienna convention on the protection of ozone layer adopted in 1985. In 1997 in Japan, 160 nations drafted an agreement known as Kyoto Protocol which was an amendment to the United Nations Framework Convention on Climate Change (UNFCCC). In the treaty, targets were set to reduce greenhouse gases. Industrialized nations were to cut their emissions by 5% below 1990 levels. This was to be achieved not later than 2012; developing countries were not required to commit to mandatory reductions. The industrialized nations were asked to take the first step since they were responsible for most emissions and they have resources at their disposal for the efforts. The European Union agreed to a reduction of 8 percent, the United State of America 7 per cent, Japan and Canada 6 per cent and Australia winning an increase of 8 per cent. These differences in reduction burden however generated controversies, making the United State of America to back out during the time of George Bush who succeeded President Clinton. Also, Australia, another major polluter refused to sign the protocol (Ologunorisa, 2011:51, Adesina, 2012:207). In 1999, there was a meeting in Beijing where it was agreed that ozone depleting substances be phased out in the near future. The developed countries were said to have, as a result of the agreement, phased out the production and use of Chlorofluorocarbons, Halons and others by January 1996 and by 2030 would have phased out HCFCs. For developing countries, it was hoped that by 2040 all of these must have been phased out (Singh et al, 2008: 470).

In March 2007, the Green Summit was conveyed by 27 European Union (EU) nations. It was agreed that emissions be reduced by 20% from 1990 level by 2020 or by 30% if nations outside the EU joined the commitment. Also, renewable sources of energy like solar, wind power would make up 20 percent of overall EU energy consumption by 2020. It also called for 10% increase in the use of plant-derived fuels such as bio-diesel and ethanol. It then agreed to work out plans to promote energy-saving fluorescent light bulbs (Manstrandrae and Schneider, 2009:26). In addition to these, individual nations also have mapped out strategies to reduce the tide of global warming.

Whether or not these treaties have yielded and are yielding the expected result is a serious issue and should be the focus of another research in future. However, it should be born in mind that the fight against the tide of global warming should be the duties of many nations and disciplines. The need for Africa as a continent to pay serious attention to the control of global warming cannot be over emphasized. Already, before the advent of Europeans in Africa, she had practices and taboos that guarded against the abuse of nature. Also, recent researches on theology of environment have shown that the Bible does not give room for hostility to nature: that it is uncritical exegesis of Biblical texts that caused hostile attitude to nature. At the root of the exploitation of nature is attitude. Hence, the place of attitudinal change in the attempt to control global

warming cannot be over emphasized. There are elements in African cum Christian theological attitudes to the environment that will help in the control of global warming. The attempt of these researchers is to examine these as a model for the control of global warming. This begins with examination of African attitude to the environment.

AFRICAN AND THE ENVIRONMENT

Prior to the advent of Europeans, Africans had a balanced and a harmonious relationship with their environment. Their beliefs and practices enabled them to preserve their environment. These beliefs and practices could be found in their norms, folklores, proverbs, taboos and myths, which are reflections of their cosmology. In African cosmology, there is symbiotic relationship between the visible and the invisible world. Africans believe in three worlds which are linked together: the heaven above, the earth and the earth beneath' (Awajiusuk, 2010: 103). Africans see themselves as part of other creatures of God. Also, they believe that all things biotic and abiotic have souls. Hence, they treat them as sacred (Awajiusuk, 2010: 103).

Alokwu confirms this view when he records that in traditional Africa, both the visible and invisible elements of nature are linked together. Human life is inseparably bound with nature and both human life and the life of other creatures are one with the divine. He states further that it is this view of cosmic oneness that led to the belief that deities inhabit natural phenomena and that they are associated with mountains, rivers, forests, sky or sun. This oneness makes Africans to always strive to live in harmony with nature, deities and their fellow humans both living and dead (2010:39). Among the Igbo, certain trees believed to be the abode of deities like Iroko are left to grow for years without anyone cutting them down. Awajiusuk also confirms that Iroko or certain trees are left uncultivated in Africa. Hence, desertification, quarry and deforestation were rare practices in traditional Africa (2010: 103).

The practice of medicine was another way traditional Africans preserve nature. Certain trees were preserved due to their medicinal significance. Hence, such trees could last for many years without extinction. There were taboos that guarded against desecration of land. The land is seen as 'mother', believed in Africa to be a deity. The earth is called Ali in Ikwerre, Ile among the Yoruba. Any desecration done to the earth could incur her wrath. Traditional Africa's agricultural practices also helped to preserve the land. When a land was cleared for farming the bushes were burnt on the land and the ashes would serve as fertilizer. Different types of crops would be planted on the same spot. In some part, shifting cultivation applied. After about three years of cultivation on a land the farmer would move to another piece of land while the portion would remain fallow to regenerate. The regeneration process might take up to ten years. Though the system was only relevant when there was low population density, it helped to preserve the land.

Also, in traditional Africa there were taboos surrounding defecation inside river or near the village stream, stealing or murder. Certain animals were considered as totem and killing them was forbidden. Hunting was for domestic consumption. Some fishes like shark, barracuda, and whale were treated by traditional Africans as sacred. Quoting Ejitiwi, Awajiusuk records that the Andoni of Niger Delta have a fishing calendar. They fish from September to April and observe vacation from May to August. During this period, people are forbidden from fishing in the Atlantic Ocean. This allows big fish to move from the ocean and lay eggs in the creek, while the small fish migrate to the sea. Though, the observance of vacations during these months has both religious and climatic undertone, Awajiusuk believes that at least it helps in the preservation of fish species (2010: 109).

CHRISTIAN THEOLOGY OF ENVIRONMENT

In recent times, Christian theologians, ethicists and environmentalists have seen the need for the formulation of a Bible based and ecological friendly theology of environment. This is premised on the damage human activities have inflicted on the environment, the call on religion viz a viz Christianity to join the force for the reduction of the effects of global warming and the accusation of Christian theology as the cause of the present ecological crisis. In 1967, Lynn White in his historic work 'The Historical Roots of our Ecological Crises' had accused Western Christian theology of contributing immensely to the present ecological crisis. White argues further that it is believed in Christian theology that since man named animals, he had dominion over them. Every physical creation has no purpose than to serve man. Man is seen as different from creation because, though he was made out of the clay, he was created in God's image (Gnanakan, 1999:8). This attitude for White, led to the emergence of science and technology. He thus accused Western Christianity of being anthropocentric.

Biblical scholar, Chris Manus records that from 1991, many theologians have been writing to alert Christian faithful to dangers posed by the exploitative tendencies of human kind. In this list are Birch 1990, McDonagh 1990, Ruether 1992, Haught 1993, and Christiansen Grazer, 1994 (2004:14). He further records that in 1992, there was a United Nations conference at Stockholm Sweden where the World Council of Churches Commission of the Churches in International Affairs challenged the church among other things, on the threat posed by environmental crisis on the Oikumene. In 1983, "Christian Perspective on Stewardship of the earth's Resources" conference held in Vellore, India. The declaration "Peace with Justice for the whole creation", also emerged in 1989 from the inter-church consultation in Basel. Further, in 1990, world convocation held in Seoul South Korea and a communiqué was promulgated titled 'Justice, Peace and integrity of Creation' (2010:15).

The foregoing shows theologians' and church's concern to formulate an appropriate Christian outlook to nature. It is in formulating a Bible based and

eco-friendly Christian theology of the environment that Christianity can contribute its quota to the current attempts to ameliorate ecological crisis. It is important to note that stewardship of God's creation and environmental cum ecological conditions are the central concerns of the Biblical message. Also, theology of the environment is concerned with why we must do what need to do so; it is a theology of purpose. Scholars believe that such theology must possess certain features some of which are discussed below (Gnanakan, 1999:7)

In the first place, this theology must be Bible based. It is a theology that results from critical re-reading of the Biblical texts. From Genesis to Revelation, the place of creation and that of human in it is explicit. A Bible based theology of environment does not turn nature to an object of worship; neither does it over blow human's place in creation. A critical re-reading of the Old Testament creation story, for example will discover that God does not endorse or legitimize the exploitation of the earth (Manus, 2010: 18). Davies concurs to this when he records that the earth is not created independent of human care but there is no mandate in the Bible for a greedy exploitation of the earth's surface (1991:1). A bible based theology of the environment ensures a balanced perspective of nature and examines the Bible holistically and not disjointedly. It engages in thorough exegesis of Bible texts and allows other parts of the Bible to explain a part.

Also, it recognizes the relationship between God and creation. God is both close and distant to creation. The Psalmist celebrates the relationship between God and creation in Ps 97:6 when he says that ' the heaven declare his righteousness and all the people see his glory'. Hence, creation is good. Gnanakan, therefore suggests that theology of redemption should go along with theology of creation (1999: 41). For Gitau, the creation story shows that everything that God created has its own purpose and that all creations are interdependent (2000:62). Johnson advocates a more adequate theology of creation beginning with psalms and with Biblical confession of God as the living God. This theology shows that the earth belongs to God and sees creation as the world coming into being out of nothing by the power of God. It also sees God as the life giver in the present (2005:4).

In the created order, human and nature have close relationship. Adam (~d'a') was made out of the earth, Adamah (hm'd'a]). The creation of man in God's image implies that man is expected to have dominion and not domination over creation. The implication of God's image in man according to Biblical scholars, is that he is expected to represent God in his concern and interest for creation (Davies, 1999: 2, cfAbogunrin, 2009:6)). The image of God in man also implies to keep and rule over; this has two sides- care, love and responsibility and on the other hand, creative power. Human is to rule over creation the same way the moon rules over the day and night. That is, it is not harsh and destructive but purposeful. Jesus models the perfect image of God. He came to serve and not to be served. He served in love and not authoritatively. He came for his father's desires and not his self-cravings. The sin of man brought

destruction and hence exploitation. Nature also shares in human's rebellion and will share in human's future redemption. (Gnanakan, 1999: 47, Gitau, 2000: 62, Manus, 2010: 21).

Further, theology of the environment suggests an understanding of the meaning of dominion. It has been argued that the command to have dominion in Biblical text does not imply exploitation. For Gnanakan, "man's superiority implies higher level of intelligence and greater prospective for the protection of nature" (1999:47). Manus also notes that the dominion granted man does not imply exploitation or abuse. But it implies man's duty as God's representative, co-creator and good managers of the planet acting wisely, justly and caringly with other creatures (2010a: 10, 2010b: 23). Man as God's representative implies love, something done in the interest of another. It implies servant hood, stewardship, creativity, with respect and in justice. It was the sin of humanity that resulted in over expression of dominion into exploitation.

The reading of the Priestly and Yawhist accounts of creation in Gen 1 and 2 together gives a balanced understanding of the meaning of the way God expects human to rule over creation. Humans are expected to rule the earth by caring for it. Moo confirms this when he reasons that the dominion mandate must be interpreted theocentrically. It is anthropocentric interpretation of the dominion mandate that occasions the exploitation of nature (2006:458). Moo argues further that the dominion mandate should be connected to the New Testament and be interpreted Christologically. This reflects Christ sacrificial rule over creation. He also connects the dominion mandate to the image of God language in the New Testament. The dominion mandate follows God's expression of his intention to create humans in his image. In Ancient Near East, image refers to 'king'. This implies that creation of human in God's image means that humans are to be his agents or vice regents in the world he has created. This royalty of human creation and its responsibility over other creation, according to him, is more established in Psalm 8:3-8 (2006:458).

Moreover, theology of the environment is based on God's concern for nature. The instruction to human to keep and have dominion over nature is a proof of God's concern for nature (Gen. 2:15). This is because no one cares for the safety and preservation of what he does not have concern for. Also, God's covenant in the Old Testament shows his concern for creation. In the Noahic covenant, God enters into covenant with all lives on earth. He promises not to destroy the earth totally again with flood and use a non-human entity (rainbow) as a witness. Also, in the Sinaitic covenant, he reiterates his continuous ownership of the earth. The New Testament continues the covenant and makes it available for all God's creation (Gitau, 2000: 69).

Further, God gave land to Israel and gave her both Jubilee and Sabbath principles to remind her that he has concern for the land, the downtrodden and even non-human creation. Jubilee year is a time of release and rest for the Israelites, their land and cattle. It forbids degradation, exploitation and it is a

time of rejuvenation and renewal to enable human live long in the land. This ensures peaceful coexistence, justice and harmony with God, self, one's neighbor and one's environment, Deut. 22:6-7 (Mbonu, 2011: 62, cfGnanakan, 1999: 68).

Further, theology of the environment is expected to define expected relationship between God and creation on one side and between human and non-human on the other side. On this, Gnanakan prefers theocentrism (an aspect that sees God at the center and that allow each to fulfil its divine distinct purpose) instead of anthropocentrism (man centred) or bio-centrism (nature centred). Further, he suggests that God-creation relationship be guided by the principles of God's immanence and transcendence. Human and non-human relationship, for him should be based on stewardship metaphor. A steward is a servant-manager and not a possessor. He is responsible for both the owner of the thing and the beneficiary (the thing) (1999:134).Gnanakan's conclusion on the concept of relationship of man to creation is instructive. He draws out four salient points. They are one; we all stand equal at the level of our relationship to God. Two, there is a difference in status and role between the various constituent elements of God's creation. Three, relationship must be seen in terms of privileges as well as responsibilities. And four, individuals must only be seen in the context of the community under God's Lordship. By community here, he means ecological community (1999: 133- 134).

Theology of the environment is expected to suggest practical solutions to the problem of climate change, environmental degradation, extinction of species, and depletion of ozone layer. Theology of the environment is a local theology with a global content. It is a theology that aims at addressing local environmental challenges and at the same time has the global community in view. It is a theology that equips Christians with necessary scientific, technological, biblical and ecological training. It is a theology that upholds environmental ethics. Also, theology of the environment is expected to challenge the Church to have a correct view of ecology. It saddles the Church with the responsibility of having a strong prophetic voice locally, nationally and internationally on the environment. A theology that goes beyond theory, but that practically involves the church in the attempt to address environmental issues. It is a theology that challenges the Church to show a good example in environment-friendly living and challenges the Church to fight for environmental justice and equity.

Moreover, theology of the environment is to be based on the redemptive work of Jesus Christ. In Colossians 1:16-17 creation finds its underlining place alongside Christ authority over the church. All things were created by him and he has pre-eminence over all creation. The identity and existence of creation consist in him. Jesus sustains creation and upholds it (Heb. 1:3). The image of God tampered with at the fall was restored in Jesus and then in the church as it matures (1999: 103) (Col 1:15, Eph. 4:13). Creation is also restored through Jesus. At redemption, full humanity is restored to human. Hence, there is restoration

of relationship at all levels. Redemption includes creation also and creation waits the final redemption of humanity.

Gregarious in Gnanakan gives 3 principles guiding environmental theology of New Testament. They are: one, human redemption can be understood only as an integral part of the redemption of the whole creation. Two, Christ is in three relationships to members incorporated into his body; to the human race; to the other than human order of created existence. And three, Christ and the Holy Spirit are related to the whole created order in three ways by creating it, by redeeming it and by finally fulfilling it in the last great consummation (1999:109-111). Moo points to the last great consummation of nature when he opines that since human rebellion in the garden affected nature, human redemption and restoration also brought restoration to nature, human's future redemption will also bring redemption to nature (2006:460). Gnanakan therefore opines that the proclamation of good news to human must also include a renewed environment-friendly attitude that will show God's intended Redemption for creation (1999:120).

Finally and most importantly, theology of the environment is expected to have a right perspective of eschatology in relation to nature. It must not only recognize nature as a co-pilgrim with human in the eschatological redemption of humanity, it must also incorporate the idea of realized and future redemption. Eschatology should not be limited to what happens beyond history, but includes the activities of God in history. If nature shares in human's rebellion and redemptive work on the cross and will also share in the future redemption, it should not be plundered before the time. Also, if God is active in history in the work of renewal, humans as his vice regents on earth are expected to involve in the work of renewal of nature by embarking on activities that will reduce global warming. If humans expect their redemption in future and see the earth as a place of sojourn, they should avoid anything that will destroy the earth to enable another person meet it intact. A right perspective of Christian eschatology will make humans avoid greed and the spirit of unnecessary materialism which is the root cause of the exploitation of nature. If Christians know that they are mortals and that they will carry no wealth to heaven, they will avoid amassing more than they require.

OBSERVATION AND CONCLUSION

The foregoing has shown that African and Christianity are eco-friendly. It is therefore believed that a combination of African and proposed Christian theology of environment will help in the effort to reduce global warming. Appropriate elements in African worldview will include African idea of the unity of reality, the interconnectedness between God, humanity and the cosmos and the African view of community involving both humans and inanimate objects (Ukpong, 1994:18-9 Awajiusuk, 2010: 103, Alokwu, 2011). This idea of community is entrenched in the idea of Ubuntu which Etieyibo recommends as

a solution to African environmental challenge. Ubuntu implies "I am because we are and since we are, therefore I am" (2011:118). This agrees with the Biblical view of the relationship between man (~d'a') and the earth (hm'd'a]). Members of the oikojqeou include both human and non-human and not only humans.

Nature is part of the created order and is related to man, hence should be cared for. As co-tenant on earth, nature should not be plundered, exploited or use for one's selfish end, but for the good of all. It is alarming to note that the major cause of global warming is man's plundering of nature to satisfy his selfish material ambition without considering the effects of such actions on nature and his fellow human. Also, both see man as not just part of creation, but also a steward of the environment. God is the owner of nature. In traditional Africa, deities are believed to reside in nature, hence, its exploitation can incur the anger of the gods. A stewards therefore, man must not only avoid exploiting nature, but also lend his prophetic voice against the injustice done to nature by fellow human beings.

Also, the correct eschatological views of the two traditions can help in preserving nature. African traditional eschatological view is cyclic: There is no end to this world. Man moves from birth to puberty, to adulthood, he marries and when he is old, he dies. If he lives a good life, on earth, he becomes an ancestor and can decide to reincarnate to this world. Knowing that he may still come back to this world, man therefore needs to be careful of the way he uses the environment. Christian eschatological view on the other hand does not encourage unbridled materialism which is the root cause of global warming. Christians belief that none of the property they acquire on earth will follow them to heaven will prevent them from amassing wealth unnecessary.

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