

The Role of the Church in Promoting Climate Justice: A Theological Reflection on Environmental Sustainability and Food Security

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Abstract

The problem of climate change and its consequences are among the serious issues for humanity today. Environmental degradation, the leading cause of climate change, is growing at a jet-like pace. In efforts to produce food and create wealth, Africans are forced to exploit nature, which has far-reaching consequences for communities. Climate change leads to powerlessness and vulnerability in African communities, further leading to chronic hunger and abject poverty. Food security, which means the availability of quality and sufficient quantity of food to all people all the time, is one of the fundamental human rights. Regrettably, today, more than 800 million people, mainly Africans, suffer from chronic hunger. Environmental degradation has not been adequately addressed, and there is a remarkable disconnection between the Christian Faith, food security and environmental sustainability. The techniques used for food production are not driven by biblical principles and ethical values, which are environmentally friendly. Land reclamation, destructive farming techniques, irrational application of chemical fertilizers and pesticides, and lack of awareness and willingness for environmental protection are some of the issues experienced in many African Christian communities. In this regard, this paper proposes an ethical and biblical-based model for food production that is environmentally friendly and promotes human holistic well-being in Africa. The methodology used in this article is Pastoral Circle, which involves four steps: Contact/ Insertion, Social Analysis, Theological Reflection and Pastoral Action. These steps allow interaction with communities to analyze what communities are experiencing together through guided observations and some literature reviews. The study calls for the discovery of the biblical principle of the sacredness of the whole creation, the interconnectivity and interdependence between humanity and the rest of creation, as they are all created by God for a purpose.

Keywords: Climate Justice; Food Security; Creation Care; Environmental Protection.



Introduction

The problem of climate change, which results from environmental degradation, has become a global concern for humanity and people living in poverty who are less polluters yet the most affected (Jefferson 2004, 209). Global warming, rising sea levels, the perturbations of the traditional seasonal calendars, ocean acidification, and species extinction negatively impact food security and human wellness (Jefferson Davis 2004, 267-9; Nkansah-Obrempong 2013, 275-7). Because climate change does affect poor people in developing countries where Christianity is a dominant religion, there is a need to analyze the contribution of Christians to environmental degradation, how they are affected and the role they can play in finding sustainable solutions. The assumption made in this paper is that one of the significant causes of climate change and environmental degradation is the disconnection between Christian faith, food security and environmental sustainability. The reason behind this disconnection is perhaps the lack of a clear biblical foundation and ethical values to guide people in Christian communities at local levels. The dominant Christian worldview in Africa is influenced by the dualistic view of the West, which "undermines and discards the basic interconnectedness between human beings and nature (Nkansah-Obrempong 2013, 277-8).

The consequences of environmental misuse lead to all kinds of disasters, such as hunger, diseases, natural calamities and poverty. The suggestion to answer this problem is to rediscover the biblical principle of the sacredness of all creation and the interconnectedness and interdependence of all creatures and to have ethical values to guide peoples' behaviours. In this way, there is hope that African churches will significantly contribute to addressing hunger and environmental degradation. This article highlights contemporary challenges of climate change and food shortage, Christian gaps in addressing the issue of climate change, current secular strategies to mitigate climate change, African traditional values toward environmental protection and the biblical and ethical strategies to promote environmental protection, climate justice and food security.

Effects of Climate Change on Holistic Human Well-being

The concept of climate refers to an average of weather recorded for many years of observation that considers the changes in rainfall, wind and temperature during that period. "Climate is what, on average, we can expect, while the weather is what we get" (Koutsoyiannis 2021, 3). Practically, "Climate change is any variation in climate over time whether due to natural variability or as result of human activity" (Diara & Christian 2013, 87). Climate change refers to the modification that affects climate stability. Since most



African communities organize their agricultural activities according to the natural climate, any change in climate patterns affects their farming calendar and food production.

Climate change has become a world threat, and if nothing practical is proactively done, far-reaching consequences will continue to undermine human existence and the rest of creation. McMichael states, "The long-term good health of the population depends on the stability and functioning of the biosphere's ecological and physical systems" (McMichael 2003, 1). According to Christian (2012, 73),

The global climate has substantially changed largely as a result of human activity. The sun that shone mildly to give the day-light, has suddenly become hostile, harsh and unfavorable to [hu]man. The rain that dropped to give water to the earth, has also become hostile and extreme, destroying houses and lives. The ocean and seas that were initially calm and reserved have suddenly risen and encroaching into dry lands, flooding several places. The land that sustained and produced food for [hu]man, has turned against [hu]man. And the air that was clean and unpolluted has become contaminated and harmful to [hu]man.

The report of the International Environment Agency (IEA) for the year 2021 indicates that Greenhouse Gas (GHG) emissions continue to rise and reach the highest level in 2021 (IEA 2021, 3). On the other hand, the Intergovernmental Panel on Climate Change (IPCC) report 2020 shows that the net emission of carbon dioxide (CO₂) has increased. The report reveals that more than half (58%) of the greenhouse gases in the atmosphere have been produced in less than 200 years from 1850 up to 2019. The shocking fact is that of this 58% of the greenhouse gases, 42% have been emitted only in 29 years, meaning from 1990 up to 2019. The worst thing again is that 17% of these gases were produced between 2010 and 2019 (IPCC 2020, 63). Another UN Report indicates that "extreme weather events have doubled since the early 1990s. Between 2005 and 2015, over 700,000 people died, over 1.4 million were injured, 23 million lost their homes, and over 1.5 billion were affected by natural disasters" (Report of the Special Rapporteur HRC A_74_161_E.pdf, <https://undocs.org/en/A/HRC/RES/37/8>).

The failure to reduce greenhouse gas emissions affects human well-being through the physical effects of extreme climatic events and the pollution level in the air, agricultural, marine, and freshwater systems that remain the source of food and water (McMichael et al. 2003, ix). The effects of environmental degradation on developing countries can be summarised in two ways. Developed countries emit more greenhouse gases, which disturb the atmosphere and provoke climate change. Consequently, climate change disrupts the systems of food production, causing famine and hunger in developing countries. Conversely,



the supply of raw materials from developing countries does not follow environmentally friendly practices. Mining, timber production, cash crop production for export and food production for local consumption are mainly done unjustly with catastrophic environmental pollution. Developed countries are mainly interested in raw materials for their factories, while developing countries struggling for daily survival solely look for money and do not care about environmental pollution.

In the contemporary society driven by consumerism, people enjoy what they can buy and have little or no concern about the effects of their behaviours on the environment and climate stability. Cynthia D. Moe Lobeda has complained that environmental destruction is basically a result of human overconsumption in wealthier countries combined with the consumerism of the elite in developing countries (Moe Lobeda 2013, 209). In this regard, Richard B. Norgaard argued that "at least to some extent, the rich nations have developed at the expense of the poor and in effect, there is a debt to the poor" (Jefferson 2004, 209).

In her discussion on the Millennium Development Goals (MDGs), Wangari Maathai observed that achieving each of the eight MDGs depends heavily on healthy ecosystems and guaranteeing environmental sustainability. For Maathai, anything that touches the environment affects everything else (Maathai, 2009). Notably, the environment affects agriculture and food security in Africa; therefore, "with the destruction of the mountain forest, rainfall patterns are affected and with them, yields from cash and food crops" (Maathai 2009, 241). In the same logic, "the lack of regular rainfall...also undermines prospects for eradicating extreme poverty and hunger 'MDG 1' and reducing child deaths' MDG 4' from causes associated with malnutrition" (Maathai 2009, 241). Reliable statistics reveal that one out of every three Africans does not get enough to eat and that tens of millions of children in Africa suffer from malnutrition. The consequences of hunger include malnutrition, starvation, physical and mental diseases, and conflicts (Kinoti and Kimuyu 1997, 13).

From African experience, there is a direct correlation between environmental degradation, climate change and food shortage. The lack of food negatively affects human dignity in all its dimensions. In African communities where most people depend on agriculture for their livelihood, the lack or insufficiency of food leads to poverty and misery. Without enough food production, families do not have enough food to eat at home and no surplus to sell or money to meet other needs. This situation of hunger and poverty results in the dehumanization of human beings. According to Justin Thacker, hunger and poverty bring powerlessness and vulnerability, which deter human dignity (Thacker 2017, 38). For Chambers



Poverty [and hunger] contribute to physical weakness through lack of food, small bodies, malnutrition leading to low immune response to infections, and inability to reach or pay for health services; to isolation because of the inability to pay for the cost of schooling, to buy a radio or a bicycle, to afford to travel to look for work, or to live near the village center or main road: to vulnerability through lack of assets to pay large expenses or to meet contingencies; and powerlessness because lack of wealth goes with low status: the poor have no voice (Chambers 1982, 144-5).

Thus, addressing climate change and all associated ills is a prerequisite to defending human dignity and promoting justice.

The study done in Rwanda has shown stagnation in both economic growth and poverty reduction from 2014 up to 2017 due to natural calamities caused by climate change (Republic of Rwanda, NISR, EICV 5, 2018, 21). In Africa, people suffer from hunger and poverty due to either the lack or the delay of rain, torrential rains, which cause floods and land sliding, or drought, which results in crop failure. African Christian communities and their Western partners lack genuine engagement to address the problem of environmental degradation. One reason for that scenario is an apparent disconnection between Christian faith, food production and environmental sustainability.

Understanding Christian Role and the Missing Link

Christianity is the main religion in Africa. Unfortunately, it does not seem to play a vital role in tackling the issues of environmental degradation and climate change, which are among the prominent causes of hunger and poverty. Severe critics accuse Christianity of neglecting environmental protection and the promotion of climate justice. Lynn White Jr. has vehemently criticized the Christian doctrine of creation as being the root cause of environmental degradation and claims that Christianity is the most anthropocentric religion and that the mandate to rule over the rest of creation has led to human "arrogant exploitation of nature" (Gnanakan 1999, 7).

Further, White has vehemently criticized science and technology as being tainted with orthodox Christian arrogance toward nature and neglecting the physical world at the expense of human comfort (White 1967, 1207). The harsh criticism of Christianity as anti-nature is undoubtedly prompted by general human behaviours through which people treat the rest of creation as if it were only to serve human beings. The biblical narrative of the unique human position within the created order has been distorted to affirm a supremacist attitude toward people who abuse nature. This supremacist anthropocentric view of nature leads to the consideration of the environment as less worthy and not part of God's redemption plan.



The Bible teaches that only human beings are created in the image of God and commissioned to rule over the rest of creation (Gen 1:26–30; 2:15–17; Ps 8:4–8). Due to human sin in Genesis 3, creation is also presented as fallen, cursed, doomed and destined to perish (Gen 3:17–19, 2 Pet 3:10). When these passages are not interpreted correctly in light of the biblical story, they can be misunderstood. Nkansha-Obrempong has lamented that this negative view of the physical world undermines the motivation to care for the creation (Nkansah-Obrempong 2013, 280). Other biblical passages also talk about the impending destruction of the present world (Ps 102:25–27, Mark 13:31, Heb 1:10–12). For some preachers, the priority is to facilitate people getting to heaven (Geoff Davies and Kate Davies 2019, 284). This skewed viewpoint distorts the biblical meaning and the church's role in caring for creation.

The wrong conceptualization of humanity's dominion mandate (Gen 1:28) has led to the egocentric and illogical exploitation of nature instead of exercising stewardship responsibility over God's creation. Some biblical interpreters "see the status and role of human beings in Gen 1:27–28 text over the non-human creation" (Nkansah-Obrempong 2013, 278). Contrary to this supremacist anthropocentric vision, one of the main messages of creation stories demonstrates that everything God created was good and beautiful. God worked and found delight in his work. John H. Sailhamer believes that the frequent repetition of what God has made as good (Gen 1:4, 10, 12, 18, 21, 25, and 31) was the way to clearly emphasize the goodness of what God has created. This goodness calls for humanity to take care of the entire creation. Human beings were created from the dust of the earth amid the plants and water of the garden (John H. Sailhamer 1992, 87-8).

The biblical storyline shows that creation has intrinsic value given by the Creator God (Gen 1 and 2). With the fall of humanity, creation was negatively affected by sin (Gen 3). During Noah's time, when the flood came, God intervened and preserved the creation (Gen 6-9), and afterwards, creation continued to display God's glory (Ps 104). Through his Spirit, God remains active, sustaining his people and the entire creation. In his letters, Paul demonstrates that the entire creation holds together in Christ and is concerned with God's redemption work (Col 1:15-20). Creation is depicted as groaning, longing for Christ's eschatological redemption at the renewal of all things (Rom 8:19–20). The richness of these biblical passages is not given due attention in our church's practices, which is why there are misconceptions about the Christian role in creation care (Jefferson 2004, 269-73).



Contemporary Church and the Environmental Degradation and Climate Change

Regardless of some policies and programs in some churches today, many weaknesses hinder the church from being more effective in contributing to environmental protection and promoting climate justice. Generally, churches do not have thorough contextualized teachings on environmental protection and climate justice at grassroots levels.

Some church leaders' position on the problem of population growth is detrimental to environmental protection. Some leaders hold the view that population is power. However, the irresponsible population increase is critical in developing countries and needs serious consideration from government and church structures. The region of sub-Saharan Africa, where world poverty is concentrated, is also where population increase is the highest (Roel van Der Veen 2004, 241-48). If population growth continues at the same speed as the twentieth century, the world will continue to sink into the abyss of environmental degradation. McNeill has rightly observed that,

The twentieth century witnessed a quadrupling of the world's population, a 14-fold expansion in the world economy, a 16-fold increase in energy use, a 13-fold increase in carbon dioxide emission, and a 9-fold increase in water consumption. Human beings in the twentieth century used ten times more energy than humanity had consumed in the one thousand years before 1900 (McNeill 2000, xv, xvi).

Similarly, Calvin B. Dewitt claims that all factors contributing to environmental degradation can be associated with high population growth. These include land conversion and habitat destruction, species extinctions, land degradation, resource conversion and wastes and hazards production, global toxification, and alteration of planetary exchange (DeWitt, 1991). The majority of these degrading phenomena are human actions. As people keep increasing in uncontrolled ways, there will always be too much pressure on the environment as people exploit it to meet their needs. Van der Veen believes that "one of the biggest threats facing Africa's environment was [is] the irreparable loss of biodiversity...largely due to the appropriation of natural habitats for human activities" (van der Veen 2004, 249).

Sometimes Christians are driven by the "myth of modernity" grounded in a utilitarian mindset (individualism, unlimited progress, competition, consumerism, unfair market...)" (Pope Francis, 2016, para. 2). Wrongly led by consumerism mindset, Christians utterly fail to care for nature. Additionally, the UNEP (2016, 9) quotes Gus Speth, former UNDP Administrator, who stated that "...The top environmental problems are selfishness, greed and apathy... and to deal with those we need a spiritual and cultural transformation – and ... scientists don't know how to do that." This assertion reveals that science alone is inadequate



to resolve environmental problems. The involvement of churches in resolving climate change is needed.

Christianity stands accused of failing to integrate principles of environmental care into its doctrinal teachings and ethical values. Many gaps in church doctrine and ethics need to be addressed. Even though the church has been framed as part of the problem emphatically, it can solve it through its teachings, policies and practices. Christianity is built upon the pillars of repentance and forgiveness, which can bring a positive change of mind and behaviour. Different biblical passages indicate that God has power over nature and can use natural powers to discipline his people. However, in such a situation, there are promises that when God's people turn from their evil ways and humbly repent, God will pardon peoples' sins and restore them (2 Chro 7: 11–22).

Scientific and Secular Approaches to Environmental Protection and Climate Justice

In scientific circles, there are two main approaches for environmental protection and promoting climate justice. They include Climate Change mitigation and Climate Change adaptation. Climate change mitigation is "any action undertaken to permanently eliminate or reduce the long-term risk hazards of climate change to [hu] mankind's life and property" (Diara & Christian 2013, 87). It is "an anthropogenic intervention or response to reduce or stabilize the greenhouse gas emissions from their source or enhance the sinks of greenhouse gas emissions" (Smit, Burton, Klein & Street 1999, 200).

Mitigation tactic deals with the root causes of the problem. It aims to decrease carbon dioxide emissions by reducing or ending various actions that produce greenhouse gases. This approach has less chance of succeeding because it interferes with the economic interests of rich countries in the West, whose economies rely on industrial manufacturing. Unfortunately, the effects of climate change caused by those developed countries affect mainly developing countries, which produce less harmful gases (Jeffrey Sachs 2005, 284). It is here that the issue of justice arises. Those who produce more harmful gases are supposed to take more responsibility in order to address the problem. Similarly, developing countries which blame Western countries for the mass production of greenhouse gases are also part of the problem. By their ever-growing spirit of consumerism among their rich and elite, they also contribute to industrial overproduction and emission of harmful gases.

The second approach used to address the problem of climate change is adaptation. This term refers to the "adjustment in the ecological, social or economic system in response



to actual or expected climate stimulus and its effects or impacts" (Smit & Pilifosova 2018, 779). It is a reactive approach to climate change's actual or potential effects. The International Union for Conservation of Nature (IUCN) considers adaptation as a process that seeks to enable communities and individuals to cope with climate consequences and develop a flexible and resilient system in response to changes (IUCN 2011, 2).

Adaptation measures are more reactive and seek to respond to real felt problems when disasters have happened. They are expensive and have a limited impact on tackling the issue. Adaptation implies sometimes living with a problem that has come but can be prevented; mitigation and adaptation approaches come out of fear as humanity seeks to protect themselves and to assure their own safety, survival, and comfort, but they fail to consider the 'intrinsic value of creation' and its worth for protection regardless of its usefulness to humanity (Nkansah-Obrempong 2013, 285).

Humans engage in activities touching the environment to produce food and make farming businesses. Food production, processing, packaging and distribution contribute to environmental degradation and climate change. Using fossil fuels for farming and transporting agricultural inputs and products "contributes significantly to the emission of carbon dioxide and other gases that cause global warming" (Moe-Lebeda 2013, 206). People do farming activities, tilling the land, reclaiming new arable land by cutting down forests or destroying water catchment areas. In doing so, they destroy animals and living habitats. In order to maximize crop production, harmful chemicals are used either as fertilizers or as pesticides. These chemicals pollute water and air and kill some birds and bees, which are necessary for pollination. Farming exposes arable land to soil erosion, environmental degradation, and ecological crises. This ecological perturbation leads to irregularities in sunshine and rainfall, which are ecological determinant factors for food production. Less or too much rainfall or sunshine leads to crop failure, hunger, and poverty.

Poor and hungry people, when they try to find food, use any means and have fewer environmental protection concerns. Geographical environmental degradation often happens in the poorest countries and communities striving for survival. The sad result here is that there will be an endless cycle of hunger/poverty- environmental degradation-hunger and poverty. According to the Food and Agriculture Organization of the United Nations, "climate variability and extremes are among the key drivers behind the recent uptick in global hunger and one of the leading causes of severe food shortages. The cumulative effect of climate change is undermining all dimensions of food security – food availability, access, utilization, and stability" (FAO, 2018). In this regard, the church, one of the most influential institutions



in developing countries, must propose a biblical and ethical food production model to provide necessary food while preserving the environment.

Input from the African Cultural and Traditional Values

African cultures provide a strong foundation for creation care and environmental protection. African traditional societies hold two important principles toward nature. First is the belief that there is vital solidarity of all life within creation; second is the view that creation and all life are sacred (Nkansah-Obrempong 2013, 282-283). This vital solidarity "is expressed in the African concept of 'universal oneness' of the 'bondedness of life' or 'interdependence' or 'interconnectedness' of all living things to each other" (Nkansah-Obrempong 2013, 2820).

For humanity to grow and flourish, nature offers everything necessary. In this regard, Sindima has correctly observed that "nature and persons are one, woven by creation into one texture or fabric of life... characterized by interdependence between all creatures" (Sindima 1990, 143). The effect of this African worldview of the interconnectedness and interdependence between humanity and nature is that, in traditional African society, nature has to be treated with high reverence since it is also sacred.

In the African perception of the sacredness of every life, both humans and other beings, God is seen as the source of all life and the creator of everything. In this respect, God's power and glory is revealed in nature through the beauty in creation, which consists of trees, rivers, mountains, rocks, forests, animals, and birds, among others. Africans see some of these creatures as sacred. This sense of the sacredness of creation puts an enormous responsibility on individuals and communities to respect and revere the sacred objects, species and space (Nkansah-Obrempong 2013, 283). Since there was a distinct relationship between human beings and those sacred objects, people willingly committed to preserving and conserving them. This value was ingrained in peoples' minds from an early age. Furthermore, if a person was cruelly engaged in destructive acts against nature, this person was considered an *Igikanya* (the destroyer of life, i.e. the one who will cause early death to himself and his family). The people of Rwanda have a proverb about this truth, *Igikanya kirikanya*, meaning that a destroyer destroys himself.

These African traditional and cultural beliefs and values about the sacredness of life are shared with biblical worldviews. For example, in Genesis 1, after the creation of the natural world, God saw it was good (Gen 1:31). Since African people, in their traditional ways of living, depend much on nature, there was always a desire to live harmoniously with the rest of creation. Africans believe that when nature is offended, it can take revenge against



human beings by refusing to provide what people need to survive, including rain or sunshine. The land can "refuse" the required yield, and nature can create dreadful scenarios that destroy life. Locusts, hail, pests, floods, and droughts can naturally revolt against humans' mistreatment of nature.

For Africans, nature belongs to God, the creator, and "whoever treats nature with contempt treats God with contempt" (Nkansah-Obrempong 2013, 284); similarly, "whoever commits a fault against a creature commits a fault against God, the Creator himself" (Bujo 1998, 215). Positively, traditional African beliefs and values promote a holistic view of reality, showing the interconnectedness and interdependence between human beings and nature. Therefore, protecting the environment is fundamental for food production and human flourishing. This belief can be a stepping stone upon which churches in Africa can build their theology and ethics for environmental sustainability and food production.

Environmental Sustainability and Food Security in Africa: A Response

This section corresponds to theological reflection, the third moment of the 'Pastoral Circle,' and the methodology used in this article. It discusses theological principles and ethical values that can help Christian communities address climate change and food shortage from a biblical perspective. From the biblical perspective, everything that was created was beautiful. God's pronouncement that the creation is good was done before the creation of humanity (Gen 1: 31). This means that nature has an intrinsic value, which is divinely given independent of its usefulness to meet human needs (Nkansah-Obrempong 2013, 286).

From Psalms 104:10–22, creation depicts God's glory, "The central motif in this Psalm is that of the visible creation viewed as the 'radiant and stately robe with which the invisible Creator has clothed ...to display his glory'" (Jefferson 2004, 271). If people claim to love and respect God, they should love and care for creation, which depicts God's glory. Human work and productivity imply exploiting the world's natural resources, mainly land, water, minerals, air, oil, animals and plants. However, the instructions to feed well-working animals (1 Cor 9:9, Deut 25:4, 1 Tim 5:18) and to give them some rest (Leviticus 20:10b), the command to give land a fallow period for rest and restitution (Lev 25:1–7), and the overall commandment to protect the garden God had created indicate human obligation for environment protection (Gen 2:15). Human work leads to land conversion and habitat destruction, species extinctions and land degradation, resource conversion and production of hazardous wastes, leading to global toxification and alteration of planetary exchange (Gnanakan 1999, 11-16). As humans are called to work, rule over and subdue the earth, there



is also a need to pay attention to what God requires them to maintain a healthy relationship and a good balance of the created world (Isa 24:4-5).

The mandate to have dominion and to rule over (Gen 1:28; Psa 8:4-8) has led some people to wrongly think that human beings are to do whatever they want with creation. This perception is wrong because the earth and everything in it belong to God; humanity is only given responsibility for stewardship (Ps 24:1-2). Consequently, Wayne Grudem believes that "these commands to subdue the earth and have dominion over it do not mean that we should use the earth wasteful or in a destructive way..." (Grudem 2010, 25).

The Bible indicates that as they carry out their work, humans are to protect animals and plants (Prov 12:10; Deut 20:19-20). Wayne Grudem believes that the command to love one's neighbour as oneself (Matt 22:39) implies protecting nature to allow neighbours to live in a safe environment (Grudem 2013, 325-6). The biblical ethical value defended here is that in our work, "we should use the resources of the earth wisely as good stewards, not wastefully or abusively" (Grudem 2013, 326). The earth and everything in it is part of God's creation and should be treated appropriately (Ps 24:1). In Psalms 104, the Lord makes springs pour water into the ravines. They give water to all the beasts of the field; the wild donkeys quench their thirst. The birds of the air nest by the waters; they sing among its branches. He waters the mountains from his upper chambers; the earth is satisfied by the fruit of his work.

From prophetic books, God cautions those who would allow only human work and benefits to fill the land at the expense of other creatures (Isa 5:8). Some families and individuals selfishly acquire massive land beyond what is necessary to them; some others claim sea and lake shores for their leisure, denying access to any other persons. The spirit of greed is one of the hindrances to attaining climate justice. As Calvin B. DeWitt says, "While expected to enjoy creation, while expected to partake of creation's fruit, we may not destroy the fruitfulness upon which creation's fullness depends. We must, with Noah, save the species whose interactions with each other and with land and water form the fabric of the biosphere" (DeWitt, 2023). Here, Calvin reminds us to let the profound admonition of Ezekiel 34:18 reverberate and echo in our minds. The prophet vehemently rebuked the people of Israel who fed on the green pasture and then trampled on the rest, drank the pure water and muddy the rest with their feet. Humans have the right to enjoy the created things responsibly and sustainably.

In his plan for redemption, God is concerned with restoring the broken relationship between all created things. As redeemed people of God, Christians are expected to restore the destroyed relational harmony of creation (Isa 65:17-25). Furthermore, "God's redemptive



plan is not limited to human beings; it extends as well to the [entire] creation" (Jefferson, 2004, p. 270-1). This fact is well depicted in the story of Noah, whom God commanded to take with him two of every living thing in the ark (Gen 6:20); "The preservation of animals on the ark is evidence of the intrinsic value that they have in God's sight" (Jefferson 2004, 270).

Other theological principles that imply ethical behaviour, such as pro-environment behaviour, are found in the New Testament teachings. According to the Epistle to Colossians 1:15–20, "Christ is portrayed as the Creator of all things in heaven and earth... who holds all things together and give the universe its order and coherence" (Jefferson 2004, 272). Consequently, every created thing is not to be considered only for its utilitarian value for human beings, "but creation is to be seen in terms of its final purpose to reveal the glory and excellence of the one who created it" (Jefferson 2004, 272).

Also, through his death and resurrection, Christ brought redemption to all human and non-human creation and reconciled them to God (Rom 5:10–11, 15–21; 8:19–23; 2 Cor 5:17–21). In this last passage, the entire creation has lost its original beauty; now, it suffers in bondage and decay resulting from human sin. It eagerly awaits the revelation of the children of God so that it can enjoy redemptive freedom from Christ. Since creation is on God's agenda for redemption, the ethical implication for believers is to care for creation, waiting for full redemption when everything will be made new (Isa 65:17–25; Rev 21:8).

From these biblical passages, it is reasonable to conclude, as Francis Schaeffer stated, "God's calling to the Christian community[ies]...is that we should exhibit a substantial healing here and now between [hu]man[beings] and nature and nature itself as far as Christians can bring it to pass" (Schaeffer 1970, 69). In light of these biblical texts, it is possible to grasp some vital biblical principles concerning the environment, which call for Christians to adapt and apply practical ethical values for environmental protection and climate justice. It is plain that nature belongs to God, and it is also sacred though tainted by sin; it has an intrinsic value apart from its usefulness; it is part of God's redemptive plan and has the right to sabbatical rest and must be conserved and preserved.

There is a vital interconnectedness and interdependence between humanity and the rest of creation, and humanity was given a stewardship mandate to care for the rest of the creation as nature also sustains humanity. People have limited right to enjoy the fruitfulness of creation as they seek to fulfil their calling as productive stewards of God. As people care for the environment, they create an ecological balance, a prerequisite for food production and human flourishing.



Biblical Principles for Environmental Protection and Climate Justice

The biblical paradigm for environmental protection and climate justice is based on the biblical principles that God created nature, belongs to God, is sacred, and is fully interconnected with humanity. The second important principle is recognizing that human beings, as bearers of God's image, have been created with an intrinsic ability to rule over and take care of the creation for God's glory and the common good. Humanity is endowed with the responsibility of stewardship to exploit nature and protect and preserve it. In this regard, Christians in their communities must develop and apply biblical practices that promote environmental sustainability and climate justice.

Christians need to opt for the biblical principles of the sacredness of creation, the interconnectedness and interdependency between nature and humanity (Gen 1 and 2). It is necessary to recognize that both human beings, land and animals have to observe the law of rest (Lev 25 and Deut 15). This principle enables living things to renew life in them and nature as a whole. The strategic use of land and water, as Joseph did in Egypt, is an example of the wise use of natural resources to meet human needs. When he got a vision of the pending drought, he planned a proper use of the land during rainy seasons to have food in dry seasons. Communities need adequate strategies for food production, storage and distribution (Gen 41). The adequate use of food which avoids overeating and food waste is helpful. When people use a reasonable amount of food, there will be less pressure on food production and the environment. Food waste that characterizes affluent families and countries must be avoided.

In addition, some other practical principles include moderation of consumption by reducing the quantity of water, energy, firewood, food, plastics, chemicals we use, and even the amount of food we eat, as well as resisting the spirit of consumerism. It is worth considering a low-carbon diet, which requires less fossil fuels to arrive on our tables (Moe-Lobeda, 2013, 206). Other actions that appear small but can significantly impact are reusing and recycling plastic bottles, glasses, shopping bags, clothes, household items, and tree growing at family, parish, and school levels. Also, harvesting rainwater helps reduce erosion and attenuate pressure on springs and underground water reservoirs. Improved farming techniques, prioritizing organic farming and agroforestry, and promoting public transport and bicycle culture can all significantly reduce greenhouse gas emissions.



Conclusion

The problems of environmental degradation and climate change have become a global issue affecting humanity. Climate change has very negative impacts on all people, mainly those in developing countries. The increase in greenhouse gases leads to increased diseases, fluctuating farming calendar and food production, resulting in hunger and poverty. The leading causes of this destruction are human actions driven by dualistic and anthropocentric views of reality, which do not recognize the sacredness of nature and the interconnectedness of humanity and nature. This dualistic worldview is opposed to biblical basic teachings and to the African traditional view of reality, which is holistic and pro-environment.

Christianity, as a predominant religion in Africa, does not play a critical role in addressing the issue of climate change. It lacks practical and contextualized teaching that is available and applied at grassroots levels. The neglect of uncontrolled population growth is among the contributing factors making matters worse. The secular and scientific approaches used to address the problem of climate change include climate change mitigation and climate change adaptation. These approaches are hampered by capitalistic economies and the growing spirit of consumerism, hence the need for a theological and ethical approach driven by biblical principles and the Christian core value of love. In this regard, this paper argues for discovering the critical biblical view of the sacredness of the environment and the vital interconnectedness and interdependency between nature and humanity.

In order to contribute effectively to environmental protection and promote climate justice, scientific and secular measures need to be applied. However, most importantly, Christian communities must make radical changes to rediscover the sacredness of creation, its interconnectedness, and the interdependence between nature and humanity. This understanding will guide Christians to adopt a biblical-based environmental protection and food production model based on biblical principles and ethical values, including care for nature, the biblical jubilee principle, and moderate food and energy consumption. This understanding fits the traditional African worldview, which considers nature sacred and interdependent with humanity.



References

- Bujo, Benezet. (1998). *The Ethical Dimension of Community: The African Model and the Dialogue Between North and South*. Nairobi: Pauline Publications.
- Chambers, Robert. (1983). *Rural Development: Putting the Last First*. New York: John Wiley and Sons Inc.
- Davies, G. & Davies, K. (2019). "Priorities for Ecumenical Eco-Ethics. In *The 21st Century: Thoughts and Lessons from SAFCEI*," In *Kairos for Creation: Confessing Hope for the Earth*, L. Andrianos, M. Biehl, et al., (eds),. Wuppertal, Germany, 16 – 19 June 2019. Foedus-verlag, Solingen, pp. 281-289.
- Davis, John Jefferson. (2004). *Evangelical Ethics: Issues Facing the Church Today*. 3rd. ed. Philipsburg: P&R Publishing.
- Development*. Nairobi: IFES Anglophone Africa & AISRED.
- DeWitt, Calvin B., (ed). (1991). *The Environment and Creation: What Can We Learn from the New Testament?* Michigan: Baker.
- DeWitt, Calvin B., *Three Biblical Principles For Environmental Stewardship*.
- Diara, B.C.D., & Christian N. G. (2013). "Theology of Climate Change Mitigation and Adaptation: The Place of the Church." In *Academic Journal of Interdisciplinary Studies*, MCSER Publishing, Rome-Italy, Vol. 2, no 13, pp.85-91.
Doi:10.5901/ajis.2013.v2n13p85.
- FAO, IFAD, UNICEF, WFP and WHO, *The State of Food Security and Nutrition in the World 2018. Building climate resilience for food security and nutrition* (Rome, FAO, 2018).
- Gnanakan, Ken. (1999). *God's World: A Theology of the Environment*, *International Study Guide* 36. London SPCK.
- Grudem, Wayne. (2010). *Politics According to the Bible: A Comprehensive Resource for Understanding Modern Politics Issues in Light of Scripture*. Grand Rapids: Zondervan.
- <https://www.leaderu.com/theology/environment.html>, accessed on Friday 14th August, 2023.
- IAE, (2021). *Global Energy Review: CO2 Emissions in 2021. Global Emissions Rebound Sharply to Highest Ever Level*. <https://iea.blob.core.windows.net/assets/c3086240-732b-4f6a-89d7-db01be018f5e/GlobalEnergyReviewCO2Emissionsin2021.pdf>
- International Union for Conservation of Nature and Natural Resources (IUCN) (2011). *Terminologies Used in Climate Change*. Kathmandu, Nepal. Retrieved from <https://portals.iucn.org/library/efiles/documents/2011-118.pdf>
- IPCC, (2021). IPCC Press Release: *Climate Change Widespread, Rapid, and Intensifying* – IPCC, Geneva. Retrieved from https://www.ipcc.ch/site/assets/uploads/2021/08/IPCC_WGI-AR6-Press_Release_en.pdf
- J. R. McNeill. (2000). *Something New Under the Sun: An Environmental History of the Twentieth Century World*. New York: W. Norton.
- Kinoti, George and Kimuyu Peter. (1997). *Vision for a Bright Africa: Facing the Challenge of*



- Koutsoyiannis, D. (2021). "Rethinking Climate, Climate Change, and Their Relationship with Water." *Water* 2021, 13, 849. <https://doi.org/10.3390/w13060849>.
- Moe, Lobeda, Cynthia D. (2013). *Resisting Structural Evil: Love as Ecological-Economic Vocation*. Minneapolis: Fortress Press.
- Pope Francis (2016). "Ethic of Ecology" In *Kosmos, Journal of Global Transformation*, Retrieved October 3, 2023. <https://www.kosmosjournal.org/news/pope-francis-on-an-ethics-of-ecology/>
- Republic of Rwanda. EICV 5, 2016/17 *Rwanda Poverty Profile Report*, Kigali: National Institute of Statistics, November 2018. <http://www.statistics.gov.rw/publication/eicv-5-rwanda-poverty-profile-report-201617> accessed on Thursday 14th, September 2023.
- Sachs, Jeffrey (2005). *The End of Poverty: How Can We Make it Happen in Our Lifetime*. London: Penguin.
- Sailhamer, John H. (1992) *The Pentateuch as Narrative: A Biblical-Theology Commentary*. Grand Rapids: Zondervan.
- Schaeffer, Francis A. (1970). *Pollution and the Death of Man*. Wheaton: Tyndale House.
- Sindima, Harvey. (1990). "Community of Life: Ecological Theology in African Perspective," In *Liberating Life: Contemporary Approaches to Ecological Theology*, eds. Charles Birch, William Eaken, and Joy B. McDaniel. Maryknoll: Orbis Book.
- Smit, B., & Pilifosova O., (2018). *Adaptation to Climate Change in the Context of Sustainable Development and Equity*, pp 879-906. Retrieved, February 27, 2024. <https://www.ipcc.ch/site/assets/uploads/2018/03/wg2TARchap18.pdf>
- Thacker, Justin. (2017). *Global Poverty: A Theological Guide*. London: SCM Press.
- UN, Report of the Special Rapporteur HRC A_74_161_E.pdf, <https://undocs.org/en/A/HRC/RES/37/8>. Accessed on Monday 19 November 2023.
- UNEP (2016). *Environment, Religion and Culture in the Context of the 2030 Agenda for Sustainable Development*. United Nations Environment Programme, Nairobi. Retrieved on June 22, 2023, https://wedocs.unep.org/bitstream/handle/20.500.11822/8696/-Environment,_religion_and_culture_in_the_context_of_the_2030_agenda_for_sustainable_development_2016Environment,_religion_and_culture_in_the_context_pdf?sequence=2&isAllowed=y
- Van Der Veen, Roel. (2004). *What Went Wrong with Africa: A Contemporary History*. Amsterdam. KIT Publishers.
- Wenham, G.J. et al., eds. (1994). *New Bible Commentary, 21st Century Edition*. Leicester and Downers Grove: Inter-Varsity Press.
- White, Lynn, "The Historical Roots of Our Ecologic Crisis," *Science* 155 (1967):1203-7. Campbell
- Woodward, A. (2003). *Climate Change and Human Health: Risks and Responses*. Geneva: WHO.

