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Original Article

‘Fill the Earth and subdue it...Have Dominion’ Gen.1:28: Environmental Violence and the Theology of Ecology.

Paddy Musana^{1*}

¹ Makerere University, P.O. Box 7072, Kampala, Uganda.

* Author for Correspondence ORCID ID: <https://orcid.org/0000-0002-7517-860X>; Email: paddymusana@gmail.com

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The world today, never as ever before, stands at the gates of human-instigated destruction. In living to our divine mandate of subduing and dominating the earth, as enshrined in the Bible text (Gen.1:28), we have overstepped all the principles that would grant self-regeneration of the universe. Through individualistic and nationalistic interests, humans have set out on an exploitative undertaking of the natural resources without limit and consideration. The intricate universe with its pre-set principles groans under the weight of unregulated degradation through human ‘inventions’ and manipulations. The reality of climate change and the call for mitigation measures is met with denial and derision especially by individuals who are set to exploiting resources to the extreme. Given the reality of overexploitation and destruction, there is need for reflection. This should be a reflection based on the interpretation and implications of the human mandates as stated in the text quoted above. Such a reflection is guided by seeing the universe as a gift of the Creator to His subjects who should use and maintain resources in a manner that reflects responsibility. The purpose of this article is a call to critical reflection on the need of religious institutions, using their scriptures and doctrines, to actively participate in environmental protection and climate change mitigation measures.

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INTRODUCTION

In reading the above passage in the topic of our discussion (Gen.1:28), our mind always runs to the divine mandate given to humanity especially in regard to being fruitful and multiplying (procreation). And this, we tend to think in terms of populating the earth. While this is part of the 'package', beyond this mandate, it is possible to also come to terms with the privilege given to us: to rule and have dominion; a ruler-ship that confers upon us a huge responsibility of custody or stewardship. This is a case of delegated responsibility which implies the need to have care and concern when dispensing our responsibility. In the text, we may note, God gives us a fourfold mandate:

- Procreate offspring-Gen.1:28
- Replenish the earth-Gen.1:28
- Harness and utilise natural resources-Gen.1:28
- Dominion over other creatures-Gen.1:28

We note that 'these commands describe our reaction to the environment in its widest sense...We are never authorized to act towards His creation (either inanimate or animate) in ways or from those motives which are foreign to that nature.¹Nature is given to us by God and as His vice-regents, we need to keep the earth in the same way it was created. In this procreation, we are called to guard against ecological actions that degrade, alter, and destroy the environment. We are to preserve, in fact, conserve nature in such a pristine manner like the biblical writer would refer to the idyllic 'Garden of Eden'. All that affects the environment negatively should be seen as a manifestation of sin, or the consequences of the fall, and matters of contemporary debate such as environmental

degradation and pollution should be handled in equal measure as we should handle sin in its diverse manifestations: adultery, murder, fornication, gender-based violence, rape, robbery, etc. If we can speak of 'sin' and 'evil' in social terms, we should extend this to the environment in its strict terms-where we are and live-whether we care and maintain our surrounding in a manner that sustains life, since environmental degradation is anthropogenic.

We are responsible for the change in weather patterns, soil fertility and composition, extinction of various animal and plants life, diminishing water levels in rivers and lakes, diminishing glaciers and snow on the once ice-capped mountains and ranges, rise in ocean levels, pollution of air and water bodies, inventions and new innovations leading to the introduction of new species and forms of life like bacteria and viruses, and contribution in other forms that negatively impact on our environment. This is environmental violence. There should not be any separation between social and environmental 'evils' for any act that contradicts the divine mandates is but sin. This means that we have moral and ethical obligation to the environment-not to worship it, or think of it as an end, but as a means to sustain us. This is what biblical theology would call upon us to reflect on what faith means, which is faith in action that seeks the redemption and preservation of life.

In Christian terms, our faith calls into question what the plan, will and purpose God is for the universe. We would further seek to know what the place and position of God is in the universe. One of the fundamental questions we need to answer in regard to the environment is whether God is still at work in the world or not. In answering some of these questions, we would seek to know what our relationship with creation should be. This is the theology of the environment, since theology is expected to engage with the immediate realities and

¹Berry RJ, *God and Evolution*, (London: Hodder and Stoughton, 1988), 156-158.

phenomena, and the reality of climate change cannot be denied. In fact, the biblical Creation Narrative gives us a firm foundation on which we can stand and call to order the extremely selfish exploitation of natural resources by individuals, companies, nations, and multinationals. This Narrative serves to point to the fact that the earth is given to us by God and implies the possibility of accountability on how we live in and with it.

To the traditional African mind, life is a whole, a totality that should not be dichotomised. The dominant view is that physical life is a mirror of spiritual life, and the dividing line in life, if there is any, is so thin and blurred. In order to take care of life and not living anything to chance, there is the overwhelming presence of the spirit at all-time just as our presence and reality cannot be denied or even questioned.

In some African cultures, it is common to find sacred places-not necessarily shrines, that are considered 'pure', 'holy' or sacred and that should not be destroyed for that would mean desecration. Such include ravines, rivers and lakes, caves, forests, hills, and mountains, and all that evokes awe, such as rare plant and animal species or sizes. Such places may in some instances be no-go areas and relationship is established with them through occasional worship sessions, sacrifices and offerings not to them, but to the great power that they reflect. Where access is granted, and even exploitation allowed, there are strict rules and regulations that should be strictly adhered to. For example, in the case of animals, while hunting may be allowed, there may be some game that should not be killed. There are hills that are can only be accessed at particular times of the year for rituals and ceremonies. Some caves, rocks, and water-bodies may be viewed as abodes for spirits and should not be accessed without observing particular rituals, or may even have access totally denied.

Among the Baganda (Uganda), L. Victoria, which is the second largest fresh water lake in the world, with eighty percent of its water coming from rain,

shared by the three East African countries of Kenya, Uganda, and Tanzania, is revered as *Nalubaale*.² This is something that has in the past been misconstrued to be 'nature worship' or 'idolatry', but for our discussion, we need to point out the fact that these natural objects and phenomena are not seen as an end-and indeed some people in their view of such awesome and inspiring phenomena do not go beyond nature and creation but end up looking to them as end and hence idolatry-but rather as means to the worship the Creator who is the source of all. Worship to such, or ascribing to nature divinity is supposed to be seen as human failure to discern, or where revelation has taken place, a kind of rebellion and denial of the Creator, which attracts God's wrath as Paul would state (Rom.1:19-20). In this passage, Paul addresses the depraved Roman Gentile society of his time which bears resemblance to ours: God has revealed His glory, His eternal power and divine nature in His creation through which He can be known. The God who is invisible and unknowable has made Himself knowable through what He has made. The creation is a visible disclosure of the invisible, an intelligible disclosure of the otherwise unknown God.³ Through this general revelation, we should be led to the true knowledge of God. But as the writer of Psalms would say, the morally deficient (fool) says in his heart 'there is no God' and suppressed all truth. It is this that leads to godlessness, an attempt to get rid of God in our life and therefore we 'become like God' (Gen. 3:5b) to determine the nature and course of life. In this state of 'self-determination', we make decisions without reference to any other authority outside our being. This depraved mind (Rom.1:28) is the one that leads to all antisocial behaviour.

We therefore consider the universe as a gift of God to us for our life and sustenance. Exploiting nature with abandon is one of the ways we deny or reject the divine mandate that was assigned to us. It is a form of rebellion to the Creator, the giver of good things, who after He had created aspects would see that it was 'good', with the creation of humanity being the climax, and hence 'very good' (Gen.1:12, 18, 21, 25, 31). But we cannot ignore the fact that

² The traditional Luganda (a Bantu language spoken by majority of the indigenous people from central Uganda-Buganda) name of the lake is derived from 'Mother' of 'Balubaale' (divinities) since it is believed that the divinities in Buganda have their origins (birthplace) in

Buvuma, formerly an island (now a name of the district) on L. Victoria.

³ Stott, John R.W. *The Message of Romans* (Leicester, Inter-varsity Press, 1994), 71-79.

after the Fall it was no longer the ‘very good’ world that we live in. We are to live by the sweat of our brow. The earth itself produces thorns and thistles that pinch us now and then. And finally, there is death, the greatest enemy at whose mention we become morbid. Could it be this inescapability which defines our finiteness which shapes our view of the world—that it is as finite as we are and therefore exploit it? It is possible to argue that our view of life, both as individuals and communities shapes the way we live. If we think that there is life hereafter, we shall live with the desire to experience that life in a better way than we live today. If all there is for humanity is to live and die, whereby our memories will be gone and forgotten forever, then in our brief life on earth we shall care less for what the future holds. And it is this view that seems to be dominant in our day where the earth is being stripped bare of all that has been passed on to us from generations past. This could be based on our interpretation of the word ‘subdue’ and have ‘dominion’.

From the original Hebrew text, *kabash* is the word from which we get the English ‘subdue’⁴. It also implies to enslave, and at its harshest, molest or rape. Used in military terms, it implies bringing to submission or subjection an enemy. It implies a form of conquest. In this case, humanity is given the right to contain the harsh environment, to rule over it. This, we may argue, is a divine mandate to explore and exploit. However, it remain to us, created in the image of God, to know how best to ‘subdue’. As we shall argue later, this ‘subdue’ is not to be seen as a form of ‘rape’ as we have done, but rather, a creative response to the natural order—a form of taming of the hostile nature in which we find ourselves. We are called to make nature do our bidding, to tame or bring it under control in a manner that is life-supporting. In this, we are supposed to use the earth’s resources in a responsible manner that will preserve and sustain life.

The other Hebrew word in the text is *radah* which means ‘dominion’ or ‘rule’⁵. It is a king who has dominion and practices ruler-ship over a territory. The king in this regard has to have subjects, and it matters how he relates with his subjects. It is

anchored in our traditions that kings and rulers—those who have dominion—do not use their power for destruction but rather for maintenance and sustenance of life. Kings and rulers who exhibit these attributes are praised, while those who are destructive through bad governance and rule are despised and loathed. Should we desire an example, God the Creator has already given it to us. As His vice-regents, we are called to replicate His mighty works and deeds by stewarding the universe as it was passed on to us: preserve its nature in all totality. This is responsibility that reflects our obedience and submission to the love of God.

When we behold the beauty of the variety of species, each accomplishing its roles and responsibility, from the smallest to the largest of the creatures that are upon the face of the earth, the tapestry, and the intricate interdependence of each and everything, we are not left with wonder and amazement only, but called to worship and honour the Creator Who gave it to us, like the song-writer below would exhort us. And it is for our good, we have to remember, to do good to the eco-system and the universe in general. We are the beneficiaries of the good weather, right climatic seasons, fertile soils, right temperatures, which in totality contribute to a healthy life for wellness and a satisfying long good life. Therefore, any negative influence we have on the universe in whatever form is a statement of our failure to steward the earth and in a creative manner ‘subdue’ the negative and harsh aspects that confront us in the process of realizing our mandate. For example, there is no one from the tropics who has travelled to countries towards the North and South Pole can deny the harsh winter conditions. However, those who live in such regions have creatively harnessed nature in such a way that they can live and produce high quality products through research and innovation. Those of us who do not experience such extreme weather conditions in clearly defined summer, winter, spring, and autumn should wonder why it is such countries that are highly industrialised and rich in the world (although major polluters also through this!), when while our climate and seasons are more favourable, we continue wallowing in poverty.

⁴ <https://www.biblestudytools.com/hebrew/kjv/kabash>

⁵ <https://biblehub.com/hebrew/7287.htm>

Some biblical scholars consider the text quoted above to fit in the First Creation Account (Gen.1-2:4a). This is an account that tends to be deliberate and detailed. Considered by some to come from the Priestly Source,⁶ it gives the order of events that leads to the creation of the universe as a complex whole, with each created thing having its origin in God's original plan and design. The Account concludes with the creation of humanity who are given the right of use and ruler-ship over the created order. Humanity in this case is created as the completion, the climax or conclusion of God's activity, where we are placed in a completed world, or what we may call an 'adorned' universe with all that we need for daily use. Humanity is not created as an afterthought, but rather, created 'in the image of God', we are given responsibility to maintain, oversee, and take care of the created order as God's vice-gerents or His representatives.

The act of the creation of the universe and humanity as the crown of it should not be considered as that of a lonely heart seeking to spend time doing something. Neither is it an act of selfishness where someone has interest in attracting acclaim and recognition as awesome, intelligent, and creative. It is, if we are to infer from traditional Christian theology, an act of a self-outpouring, a sacrifice at its best, where God in His manifold wisdom, mercy, and love chooses to do that which He does not out of compulsion for self-praise, but a kind of self-giving, where He reveals His attributes through and to all that He has created, but all as act of love. The Narrative of Creation is therefore a call to worship of the God of love who has chosen to reveal His love to us, just as the hymn would state:

*O Lord my God, when I in awesome wonder
Consider all the worlds thy hands have made;
I see the stars, I hear the rolling thunder,*

Thy pow'r throughout the universe displayed:

Chorus

Then sings my soul, my Saviour God, to thee;

How great thou art, how great thou art!

Then sings my soul, my Saviour God, to thee:

How great thou art, how great thou art!

*When through the woods and forest glades I
wander*

And hear the birds sing sweetly in the trees,

When I look down from lofty mountain grandeur,

And hear the brook and feel the gentle breeze.⁷

The wonder of nature and the universe does not leave us astounded and amazed with just wonder, but a wonder that leads us to worship and adoration of Him to Whom we ascribe majesty, again as the Psalter would exhort us to sing: Psalm 8:

¹*Lord, our Lord,*

how majestic is your name in all the earth!

You have set your glory

in the heavens.

²*Through the praise of children and infants*

*you have established a stronghold against your
enemies,*

to silence the foe and the avenger.

³*When I consider your heavens,*

the work of your fingers,

⁶ The German biblical scholar Julius Wellhausen proposed a hypothesis of the *Four Source* in the study of the Pentateuch, the first five books of the Bible. Each of these sources is considered as an author or authors or a school of thought with dominant themes and viewpoints. The *Priestly Writers* or *Source* is considered to be the last of the chroniclers of Israel's history composed about the time of the exile in Babylon (586 BCE) and seeks to put together the laws and

customs of the people of Israel. Emphasis by this *Source* is put on religious worship and practices.

⁷ A Christian hymn composed by the Swedish Carl Boberg (1859-1940) in 1885 as a poem, which was turned into music and has been translated into different languages with various additions through the years, sung across denominations with celebration, thanksgiving and worship. The stanzas differ, but in this case I have chosen the first two of the English version.

the moon and the stars,

which you have set in place,

⁴ *what is mankind that you are mindful of them,*

human beings that you care for them?

⁵ *You have made them a little lower than the angels*

and crowned them with glory and honor.

⁶ *You made them rulers over the works of your hands;*

you put everything under their feet:

⁷ *all flocks and herds,*

and the animals of the wild,

⁸ *the birds in the sky,*

and the fish in the sea,

all that swim the paths of the seas.

⁹ *Lord, our Lord,*

how majestic is your name in all the earth!

New International Version (NIV)

We cannot discuss the biblical doctrine of creation of the universe and the place of humanity without listening to voices that would attribute the universe-its origin and purpose to other possible sources and sources. For example, there abound alternative views based on scientific studies like the popular theory of Big Bang where it is posited that billions of years past, the universe evolved through expansion of matter originally from a single primordial atom. Life therefore came to be, not into being, as a result of this initial process that continues to the present, so it is argued. Added to this is the Theory of Evolution, also known as Darwinism according to which life evolved in time and space from single-cellular organisms to complex forms, and the process still continues. However, these theories albeit characterized by ‘gaps’, attempt to explain the mystery of the universe, a mystery that hits us with such intricate overwhelming reality. It is the biblical text that draws our attention of the

origin of the universe to the creative act of God. In this case, it is argued by some that there is no conflict or contradiction between Science and Religion since Science deals with objective realities, and Religion, through claims to revelation, deals with both objective and subjective realities. It is not the purpose of this chapter to deal with this long debate that rages on with some of the protagonists of either claiming superiority over the others. The views of this chapter are in consonance with the biblical creation accounts.

THE HEART OF THE MATTER

We have failed to live up to the divine mandate as given to us. How did we get to where we are? How do we account for the run-down earth that we live in, so sore, sick, and decaying that we today can hear voices of concern that predict the soon-to-come self-destruction of humanity, and the universe in general? How do we account for the depleting ozone layer and the environmental crisis that we are experiencing today through what we have come to term as Climate Change? Why are we experiencing extreme weather conditions and changing patterns that are heavily impacting on human activities? We cannot, especially most of those of us in Africa, with certainty tell when which season is to set in. Whereas this was possible in times past, given the indigenous knowledge that individuals had, we are currently shocked by the duration of seasons and the force they come with. There are floods unmatched in human history (that of Noah stands out as an exception and there is a promise to it by God that He would not punish the earth in the same manner again (Gen.9:11). There are droughts and harsh dry periods that seem to foretell desertification. There are falling water levels in some rivers and lakes. This is negatively impacting those who live in proximity to these areas due to failing agricultural production and grass for herds. Reduction in vegetation cover accounts for the threat of desertification. There are also rising water levels in the seas and oceans as a result of the melting ice due to global warming threatening the existence of islands and harbours. Marine life is choking under the weight of pollutants-oil spills, garbage, transport, plastics, and other human factors. Particular species-both flora and fauna are slowly becoming extinct. New species are evolving, giving us a challenge of managing them. Is there a way out-

through mitigation and protection? Who holds the mandate if such undertakings are to be: individuals, communities, nations, agencies? If both, how should this be tackled? What of the existing fora that are working towards a peaceful healthy universe? That Man was created and handed the custodial responsibility to procreate and maintain the universe has significant implications on how we live and interact with nature. This once appreciated, we shall stop or reduce on the on-going changes that are happening to habitats and associated loss of biodiversity, the acidification of oceans and other water bodies, the emergence of pests, diseases and allergies, floods, wild fires, and above all, hunger.

While most of the climate change effects are seen as a result of environmental factors with human activity as the major contribution, it is important to note that there are also major actors in this, especially coming from the rich, developed countries of the world. These are the industrialized countries that look to exploitation of the natural resources without consideration of the future. The major culprits in this are countries like America and in Europe whose economies depend on intensive use of carbon dioxide (CO₂)-producing fossil fuels. The use of such fuels has been on the increase since the discovery of coal in the eighteenth century for mass production through energy powered machines. The irony is that some of these countries, especially America, lack commitment to efforts that seek to mitigate the climate change impacts. In fact, America refused to ratify the Kyoto Protocol. This Protocol was signed by 172 countries in 1997 and it was a commitment to control emissions of Green House Gases (GHGs) resulting from human activities, especially CO₂ from carbon-based fuels. It set targets to reduce emissions from industrialised countries. This Protocol was cognizant of the fact that the greenhouse effect alters the earth's climate, which in turn affects human living conditions through extreme weather conditions and the sea-level rise.⁸ By 2016, China had overtaken America in the share of CO₂ emissions.⁹

In the case of Africa, most of the countries on the continent, especially in the eastern and central parts are highly vulnerable to climate change since they rely on rainfall for agriculture. Coupled with the high pollution growth rates that average 3.7 percent, and endemic poverty together with poor governance and constant conflicts, any shift in weather patterns leaves the people in vulnerable and fragile situations. The bad news is that poverty affects more than fifty percent of the population, yet climate change predictions point to increased rainfall and a rise in temperatures. However, rainfall is predicted to be erratic and violent, further disrupting the predominantly rain fed agricultural production systems.¹⁰

The way we respond to these questions is depend upon our view of the universe. If we view the universe as a gift passed on to us for enjoyment, we shall live in it with care and concern. If we view it as something given to us to exploit and 'subdue' or have dominion over, and this not in a custodial manner, we shall wreck it through schemes and processes that seek to get the most at the shortest time possible, not allowing it to regenerate. Above all, if we view it as 'impersonal', we shall literally 'kill' it. And this is the concern of our discussion: responsible living in a living universe.

Sacred Mother Earth

Using the Teleological Argument, there is an inescapable truth that harmony, order, and design are evident in the universe. In fact, the universe appears to be designed with a purpose. Although varied, everything in the universe works to fit in the particular scheme. This cannot be attributed to chance or accident, and as Hover has noted:

No one can deny the universe seems to be designed; instances of purposive ordering are all around us. Almost anywhere can be found features of being that show the universe to be basically friendly to life, mind, personality, and values. Life itself is a cosmic function that is. A very complex arrangement of things both

⁸ Okonski, Kendra (Ed), ADAPT or DIE: The Science, Politics and Economics of Climate Change, (London: Profile Books Ltd).77

⁹ <https://www.statista.com/statistics/271748/the-largest-emitters-of-co2-in-the-world/> accessed 20-05-2018

¹⁰ Waithaka, Michael, *East African Agriculture and Climate Change: A Comprehensive analysis*, (Washington DC: International Food Policy Research Institute, 2013), 32-33 (Waithaka)

*terrestrial and extra-terrestrial must obtain before life can subsist. The earth must be just the right size, its rotation must be just right, its distance from the sun must be within certain limits, its tilt must be correct to cause the seasons, its land-water ration must be a delicate balance. Our biological structure is very fragile. A little too much heat or cold and we die. We need light, but not much ultraviolet. We need heat, but not too much infrared. We live just beneath an air screen shielding us from millions of missiles every day. We live just ten miles above a rock screen that shields us from terrible heat under our own feet. Who created all this screens and shields that make our earthly existence possible?*¹¹

In relation to the above quotation, it has been observed by many that it is the emission of Green House Gases (GHGs) resulting from human activities, especially carbon-dioxide (CO₂) from the carbon-based fuels which is responsible for the increase in temperatures leading to global warming. About 80 percent of the CO₂ in the atmosphere is created by humans and comes from the combustion of oil, coal, and gas (fossil fuels), while the remaining 20 percent is attributed to deforestation. However, over half of this gas is absorbed by oceans and plants. The CO₂ concentration in the atmosphere has increased by 31 percent from the times of pre-industrialisation.¹² Human use of fossil fuels increases by leaps and bounds every day. Deforestation has increased again due to human activities and the growing population needs. Land is a fixed factor and yet the population of most nations of the world, especially in the poor developing countries continues to increase rapidly. This is exerting pressure on the available land that is not under use like forest reserves and national parks, giving rise to the phenomenon of encroachment, or even governments de-gazetting such protected and reserved areas. Important to note in this is that extensive change in land-use and agricultural practices are responsible to changes in the eco-

systems, leading to the evolution of new species. This is against the knowledge that particular species are suited for particular zones and areas, but through science and innovation, nature is being manipulated to act in favour of conditions that it would otherwise reject. We can now talk of drought and pest-resistant crops, and there is a loud call for countries in Africa to adopt genetically modified organisms (GMO) as the 'magic-bullet' of the food needs. Many countries produce hybrid crops with extensive use of artificial fertilizers and use of pesticides and herbicides, whose application is not regulated. Current debates reveal that use of these is a major factor in the discussion of human health-although some would deny the relationship between some of the emerging new disease burdens¹³ plaguing some of our countries.

Predictions are that the world population is bound to grow to around 9 billion by 2050. In the same period, the population of Africa, south of the Sahara is projected to surge around 1.7 billion. East Africa alone is projected to make up 44 percent of the population south of the Sahara, and almost 9 percent of the world's population.¹⁴ There is loss of the forest-cover unprecedented in human history to date. All this is happening amidst the poverty that defines countries in this region. More predictions paint a dark picture:

- Over 200 million people may be exposed to water stress within the next two decades, exacerbated by a rapidly growing population.
- Climate variability and change will severely compromise food production, decreasing yields in some areas by as much as 50 percent by 2020.
- Over-fishing and rising water temperatures will decrease lake fisheries resources.
- By the end of the present century, up to 5-10 percent of gross domestic product (GDP) per

¹¹ A.J. Hover article in *The Evangelical Dictionary of Theology*, Walter Elwell (ed), Grand Rapids, Michigan: Paternoster, 1984) 449

¹² Okonski, ADAPT or DIE: The Science, Politics and Economics of Climate Change, p.204

¹³ In Uganda, cancer has become a major health concern. While publicity through modern media channels is considered a major contributing factor in the knowledge about cancer, most health-

workers and cancer specialists acknowledge the fact that there are rising cases of types and numbers of cancer patients. Environmental exposures and life-styles are considered major factors in this.

¹⁴ Waitakha, East African Agriculture and Climate Change: A Comprehensive analysis. Foreword

annum may be absorbed for adaptation to sea-level rise in highly-populated low-lying areas.¹⁵

Environment Violence

The setting up of the Intergovernmental Panel on Climate Change (IPCC) in 1988 under the auspices of the United Nations (UN) to study and address the issue of climate change at an international level is the testimony enough of the realisation of the seriousness of environmental degradation world-over. Using mathematical models to simulate climate tendencies till 2100, it was discovered that there would be a temperature increase of between 1.5°C-4.5°C¹⁶. Such changes in temperatures affect life on earth. It will be soon that we shall lose out on some of the plant and even animal species best suited for particular temperatures in different parts of the world. This is already evident in some places where indigenous species (both plants and animals) are on decrease and nearing extinction. This is because such changes do not support particular lives. Added to this is the direct influence of human activities like introduction of new species for commercial purposes. For example, in Uganda today we see huge chunks of land under commercial agro-forestry with trees atypical to the prevailing soil and weather conditions-threes that would otherwise be found in the alpine and tundra regions. While these would qualify to be invasive to such settings, they are looked at as sources of income due to their quick maturing periods unlike the trees such as mahogany and *muwule*. We have cloned eucalyptus, pines, and all those seedlings touted as the magic bullet for soil cover, hence protection from erosion, afforestation, and commercial agro-forestry under the label of 'carbon trading'. This has been made possible by the offer of financial incentives to whoever can access sizeable acreage of land. Coupled with the land-grabs and the highly commercialised land and property sales, the poor are being pushed from prime land to marshy areas that should be protected. We note the indirect negative impacts this will have on the country since such activities directly affect our would-be niche in

honey production and the international market for organic products.

Environmental Protection

We cannot afford to run down nature and imagine that we shall get away with it. If indeed it is true that climate change is not an environmental problem, but a civilizational one, and that climate change is not just another issue; and that if it is not addressed in a proper order, it will swamp every other issue facing us today, then the clarion call is loud and clear: let us protect the environment for our own good, but also for posterity. Nature cannot be cheated just as the natural order that was set from the beginning will not alter, but maintain its cycle: 'As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease' (Gen.8:22). However, sinful humanity has in its rebellion set its heart and mind to excessively 'fill the earth and subdue it' through overpopulation and overexploitation, leading to pressure and the choking of the earth. However, we can be sure of this true fact: nature will fight back.

If we are to guard against the sure-to-be reality of self-destruction through environmental degradation, there is need to stand against man-made climate change through our activities. This calls for a reflection and review of how we relate with nature and the universe in general, since every human activity has impact on the balance of the created order. Mitigation of climate change becomes a non-negotiable issue, although major polluters are set to veto major decisions that seek to regulate activities that contribute to environmental degradation. Such polluters would rather, in a politically correct way, state that 'there is a discernible human effect on global climate' other than lose out on the trillion-dollar-a-year oil and coal industries from the industrialised nations that are the big energy consumers and the fossil fuel producers.¹⁷ These nations are the major promoters of scepticism about climate change to the extent that even highly trained scientists will consider it a 'hoax'.¹⁸ This is made possible through advanced

¹⁵ *Climate Change and Its Implications: Which Way Now?* (London, UK: Commonwealth Foundation, 2007)14

¹⁶ Okonski, ADAPT or DIE: The Science, Politics and Economics of Climate Change. p.207

¹⁷ Godrej, Dinyar, *The No-Nonsense Guide to Climate Change*, (Oxford: New Internationalist Publ. Ltd, 2007) 90

¹⁸ The author, who believes there is indeed climate change due to the current unpredictable weather patterns due to loss of crop yields he has personally experienced in recent times, was shocked to hear what a

media and publicity campaigns by lobbyists and politicians that are in most cases bank-rolled and paid hefty sums of money from multinational companies. Such bodies will also under the guise of environmental concern promote donations and finance projects in poor countries of the world at costs that cannot in any way reconcile with the destruction and degradation caused. The ethical questions that arise for the non-polluters are whether they should receive such donations. With the majority non-polluters being in the poor countries of the world, we are tempted to swallow the hook and the bait. In this, we become causalities. On health, it has been noted with concern that:

Although predictions are difficult and complex, some studies suggest increases in death toll figures for climate change-induced diseases to as high as 185 million lives only in sub-Saharan Africa by the end of the twenty-first century.... The potential ravages of climate change are so severe that they could nullify efforts to secure meaningful and sustainable developments in poor countries. At worst, they could send the real progress that has already been achieved spinning into reverse. No other issue presents such a clear and present danger to the future welfare of the world's poor¹⁹.

Countries and communities considered 'poor' and 'backward' need to seriously reflect on their riches in terms of the pristine environment they would be enjoying were it not for their being taken advantage of through unfair trade deals and agreements. Indigenous communities have always had means of coping and working with and through nature to conserve the environment. Through natural orders and seasons, such communities can cooperate with nature through rituals and ceremonies, taboos and a myriad of procedures that are traditional that seek to maintain harmony and order in the universe. It is important to note that climate change and poverty are deeply intertwined and it is the poor nations of the world that mostly face the wrath of nature once there is an upset or imbalance.

Aware of the havoc unleashed on the environment, the rich and developed countries have come up as 'champions' of environment protection. However, some of their responses lack life-supporting and asserting. For example, a look at the Sustainable Development Goals (SDGs) which are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity, aspects that deal with climate change as mitigation policies do not smack of any enforcement procedures. It remains to be seen as who will enforce the integration of climate change in broader development policies, regulate emission levels, set prices, and charge taxes for emissions, or even oversee strict adherence to agreements on emissions. The call for responsible action should find a solid ground on the religious and spiritual view of the universe as a created order for the sustenance of life, and as a gift of God to humanity. Concern for the universe should be anchored in sacralising nature rather than the instrumental attitude emanating from secular societies of our time. In a manner that seeks discernment, theologians need, more than ever, to raise to the occasion and lead advocacy campaigns in providing real solutions to climate change.

The themes to consider here would be, among others: renewable energy, alternative clean energy, and poverty reduction, mitigation of climate change, restoration of nature and the protection of the universe from all that would threaten its support for life. We cannot be when there is loss of biodiversity, the evolution of new diseases and allergies, floods, and pests, wild fires, and sweltering temperatures, hunger, and water loss through the unbridled human actions. Deforestation is on the increase as desertification is the consequence. The unquenchable thirst and greed for exploitation is not just a threat to others, but even to those who engage in environmental degradation. It is those who see the divine hand in creation who should take on the challenge to stand in the gap, remind and awaken the conscience of all that Mother Earth has been raped and left for dead, and like in the parable of the Good Samaritan (Luke 10:25-37), She needs us to nurse her wounds as choose to make losses and

male Christian Nigerian Russia-trained engineer in Stavanger working with an international oil company in Norway had to say on the subject of climate change and the oil industry, where he (the engineer) denied

any linkage at all, and if there is any change in the world climate other than what would be expected with growth and human development.

¹⁹The Climate of Poverty, (Christian Aid, May 2006) 3

sacrifices for Her regeneration and ability to support life. The death of Mother Earth will automatically lead to our own death.

With the written scriptures, Christians should lead the way in all policies, processes and programs that work for mitigation of climate change, with the view that humanity was given custody or stewardship of the universe, and we shall give account on how we have lived in and with the earth.