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Climate Change and the Church: An Eschatological Perspective

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ABSTRACT

Man has had various form of religious belief, worship and teaching on the origin of the earth and man. This background has accounted for the variant culture and response to nature, the environment and climate change and relationship with believed Creator. Judaic religion and its offshoot of Christian religion constitutes a body of believers and worshippers that have established a belief system and teaching on the origin of man and the earth to which they have ascribed to the creative power of a supreme being known among them as the Almighty God. Some other religions have worshipped the elements and forces of nature eg the sun, moon, stars, mountains, rivers, wind etc that themselves greatly influence the environment and climate. Climate change is the net effect of recorded weather conditions over a given period of time regarding atmospheric conditions, temperature variations, meteorological and earth structural changes etc measured in regularity and pattern. Eschatology is the Christian believe in the events that will culminate in the end of life forms on earth. Climate change and religion are as old as man and coexist. This study examines this relationship with reference to eschatology. Climate change is caused either by the activities of naturaly occurring events of the elements or the activities of man. The system approach and empirical exposition on the doctrine of eschatology as propagated by the Church vis-à-vis climate change effects was adopted. Study outcome have pointed to a clear relationship between climate change and church teaching on eschatology.

KEYWORDS

the earth; climate change; church; end time; eschathology

INTRODUCTION

Early scholars like the Italian Pliny the Elder (real name is Gaius Plinius Secundus) and the Greek Columella had before the year 88 AD posited that the activities of man affects the natural environment, ecosystem and changes in climate conditions (Neumann, 1985). From ages past there has been a noted and strong relationship between man, climate and the environment and this relationship has continued to generate cyclical changes in planet earth. Akpan et al (2012), has noted that this relationship has been more harmful to the environment and the ecosystem than otherwise. Man and society inclusive of religious groups etc have equally responded to climate change vicariously at different times. Climate change dates far back to the beginning of man and relates with man`s belief and worship system known among the religions. The Christian Church has since inception about the year 33 AD continued to promote knowledge acquisition and dissemination, and have actively followed this up in the postulation of theories based on their doctrines about the origin of the earth and man, and its acclaimed endtime. According to Egbulie et al (2011), the growing effects of climate change on land, the environment (ecosystem), human health and sociology,

economic development and sustainability of man on planet earth is fast presenting grave challenges and concerns.

Relying on the doctrine of eschatology, this paper marches contemporary climate change with biblical teaching and belief regarding an endtime theory of the earth. Climate change can generally be described as the net effect of changes brought about by the various factors that affect and influence earth temperature, weather conditions, wind effects, elemental and earth structural changes etc that bring about biological, chemical, and geologic (structural) actions and reactions observed over a reasonable time frame. Such noted observations have to be consistent and regular over a given period of years to be called a climate change and not a weather flash. Thus climate change is presented as an attestation of the overall system changes ie the sum result of different component changes which produces an entirely new pattern of cause and effects in climate conditions. The source action (cause) and effects are cyclical. Fussel (2007), upheld that environmental vulnerability and sustainability underlies and defines climate change systems and its management. Hammer (2000), held that global climate conditions operate in a cyclic system made up of sub-systems that encompass the environment and its natural ecosystem, the elements and earth structure. The earth and man have since ages past lived and shared in a symbiotic relationship. The human system factor as in the adopted response technology and strategy; the operating economic, political, socio-cultural paradigms of the society constitutes a study in climate change evaluation and discourse. The diversities of climate change, its dynamic nature and predictability challenges in the case of naturally occurring events have made an excursion into the field of climate change a herculean task. Thus Trenberth et al (2002), held that this situation has been largely responsible for the absence of a concise theoretical framework that is all encompassing and embracing of all the variant forces on climate conditions and perspectives consequent on the conceptualisation of the subject.

Climate change is derived from the systematology of cause and effect in planet earth. The earth and its structures have had a first time inertia (energy form) at the beginning as the source matter and then later is influenced by elemental and motional forces that has caused climate change at global and regional levels. The nett effect of these changes which is in a continuum also alter the physical, chemical, biological and geographic statics of the earth. According to Lasaga (2014), the elements consist of the water mass (hydrosphere), the earth crust (lithosphere), the air mass (atmosphere) and the meteor (the heat, solar, fire source) all of which are constatntly under motion to balance the state of matter at any given time. One of such nature balance is the pressure (P), earth mass (Volume) and temperature (T) relationship so called the PVT equation. Ribes et al (2020), described climate change as a statistical distribution of weather conditions inclusive of the forces of the element and the earth crust. Padilla (2009), held that the elemental forces of the sun, moon, star, oceans etc hold the key to understanding nature and the environment while Macauley (2010) postulates that climate change is basically caused by naturally occurring activities of the elements and the actions of man. Elemental changes affect temperature, ocean currents, wind, radiations etc that in turn cause naturally (elemental) occurring events such as earthquakes, hurricanes, landslides, volcanic eruptions, floodings, cyclones, drought etc and they also affect and influence plant biotic processes, animal life, physio-chemical cycles, and structural changes in earth surface and subsurface. The frequency of occurrence and impact of elemental changes have in recent decades become a grave concern to man and the environment, a situation that is already threatened by man`s unmitigated exploitation of natural resources and habitats (anthropogenic) activities.

RESEARCH METHODS

With respect to climate change, the earth is a complex system of interconnected and interrelated activities, processes and natural cycles. The response of man to changing climate conditions is also part of the complex system that has to do with man`s belief system, culture, knowledge base and technology, environment and financial capacity within secular and religious society. The system approach identifies and aggregates major interconnections within a group to produce an acceptable pathway for study, research, adaptation, education and management hence its adoption in this study. This work relates the endtime theory (eschatology) of the earth as propagated by Christian religion to climate changes. Drawing from the system approach, the methodology of biblical citation and empirical expositions regarding the earth and related literatures has been used to buttress the facts of climate change and Christian believe in a cataclystic end time theory of the earth. The emerging syntax is a world of study and knowledge in the quest for situating man within the compass of complex earth and climate change vis-à-vis religious beliefs and postulations.

RESULTS AND DISCUSSION

Working Definition of Climate Change and Eschatology

Climate change has been severally defined and some of the definitions have been based on perspectives. The United Nations Framework Convention on Climate Change (UNFCCC) Article 12 defined Climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods". The Inter- Governmental Panel on Climate Change (IPCC) in her 5th assessment report to the United Nations defined climate change as " a change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties". Technically, the UNFCCC definition places emphasis on the cause of climate change and ascribes this cause to the activities of man on earth also known as anthropogenic activities whereas the IPCC definition captures the cause and effects (properties) of climate change. Some scholars have however seen climate change from the social perspective that involves its socio-economic impact on man, the perspective of his response strategies and the question of sustainability of human life and the environment. Werndi (2016), noted that climate change is about statistical distribution of weather conditions over time for regimes of varying external conditions, properties or parameters.

Eschatology is generally referred to as the doctrine of the last things (last days) and entered into Greek and Christian theology and literature to mean the belief and teaching on the end of the earth and man. Oxford English Dictionary defined eschatology as "the part of theology concerned with death, judgment and the final destiny of the soul and of humankind". This theological belief is prominently advocated by the Christian church to depict the end of man on planet earth under the prophetic auspices of the second coming of Jesus Christ to the earth to judge man, receive those that believe in Him and destroy the non-believers thus ending this earth regime. Christian religion spoke about this sudden day of the end of the heavens and the earth and all that is in it (2 Peter 3:10).

Climate Change: A System Approach and Conceptualisation

Cradock-Henry et al (2020), postulated that the earth is complex in creation and nature, and is made up of systems of activities of several processes and natural cycles. These activities are interconnected and interdependent and are classified into two distinct causes (sources) which are those activities that are undertaken by man eg farming, deforestation, bush

burning, industrial productions associated with pollutions etc and those that are generated by naturally occurring (elemental) events eg cyclones and hurricanes, earthquakes and volcanic eruptions, geological fractures, flooding, windstorm, mudslides etc. The processes include the chemical, biological, atmospheric and geological while the cycles include the carbon dioxide, oxygen, hydrogen and nitrogen natural cycles. The nett effect of these activities with respect to weather conditions and temperature changes is what is generally known as climate change. Global warming is the nett effect of systemic operations of the earth resulting in increasing global earth temperature and is one of the chief drivers of climate change. Each unit activity operate in a system within the whole. Dugan et al (2018) proposed the adoption of system methodology in the evaluation of options for selection of mitigation or adaptation pathways in responding to climate change and its effects. Dryzek et al (2011), noted that the stakes are high and complex in global response to climate change as the pathways are studded with high technology intermix, political economics, interconnectivity dimensions and multi-sectoral impacts and implications. Ingwesen (2013), proposed the adoption of a system approach in responding to climate change positing that this approach is better as it integrates all the scientific domains that constitute the cause and effects of climate change. Essentially, the system approach option recognises and accommodates the dynamic shifts in climate change and its parameters (effects) over time.

Climate change as a word was first used by the World Meteorological Organisation (WMO) in 1966 almost a decade before the environmentalist (green) movements emerged in Europe and America in early 1970s to raise the flag of awareness on climate change and its impact on man and the environment. Since then global efforts by man has increased in studies and response activities on climate change and its effects (Milfont, 2012). The fronts are gradually focussing on climate change vis-à-vis the issues of environment and its social impacts. In conceptualising this subject, this study seeks to derive a generalised and acceptable approach to climate change issues in relation to biblical teachings and doctrines on the subject. This study has identified two distinct response approaches to climate change. Firstly is the pro sustainable development advocates (the socio-environmentalist school) who believe in and propagate climate change adaptation for mitigation and long term sustainability plans for human life on earth. The second group is evidently those that believe in the biblical end time theory of man on planet earth by an omnipotent force (God) to which they posit that neither man nor the elements can deter its occurrence. This two approaches constitute the conceptual crux of examination of climate change adopted in this study.

Origin of the Earth: The Perspectives

The theories of creationism and evolution are the two main contenders in any study of the origin of the earth and man (Alexander, 2014). While creation theory principally rely on religious belief, doctrines and teachings; evolution relies on pseudo science explanations on changing earth biogeny, chemistry and geology. This position therefore holds that creation is the cause and thus precedes, while earth changes are the effects in creation. Creationism is principally represented by the biblical Creator-God theory of the Judaic religion while the evolutionary is represented by the theory of evolution by natural selection championed by Charles Darwin (1809-1882) and Alfred Russel Wallace (1823-1913). The work of this two scholars and later adherents came to be known as the Darwinian evolution theory. The Creation theorists believe that the earth, humans and other life form, the entire universe and the elements are supernatural acts of a superior being (Crouch, 2010) hinging on a divine deity creation account recorded in Genesis chapters 1:1 and 1: 26. Some scholars have supported creationism positing that the universe and living organisms are divine acts of creation and that there is a superior being that created, known as the Creator God. Scott

(2009), in his taxonomy using calculated scalar age of the earth and other chronological continuum measures postulated the supremacy of the creation theory over evolution. This said superior being have been identified, accepted and named by the various religious sects according to their belief and worship system. From the very beginning, the Christian Church has identified this Deity-Omnipotent Creator as God, recorded in the bible creation account of Genesis chapters 1 and 2. In stating this claim, the Chistian bible account began with Genesis chapter 1:1 stating that "in the beginning God created the heavens and the earth".

This sets the platform for a belief in a single Creator God and earth creation, from the very beginning, that does not compromise evolutionary belief. Genesis Chapters 1 and 2 describes vividly and in a set order of activities how God (the Judaic bible God) created the heavens, the earth and all that are therein, including the rivers and seas, the earthcrust, cosmotologies (firmaments, sun, moon, stars, galaxies etc); the animals, birds, beasts and fishes; the herbs and vegetations (the environment, ecosystem) set in the seven days creation plan, of which man was finally created to rule and have dominion over the earth and all the creatures therein (Genesis 1: 26-27). In the Noahic era destruction account of the earth and all living forms through a great flood, only Noah and his family of eight (8), and the pair of male and female species selected of all birds, fish and animals into the floating Ark survived the flood. This event recorded in Genesis chapter 7: 1-22 has generally been known as the Noahic flood geology theory wherein a sudden physical change came upon the earth that consumed left behind vegetation, floral and faunal life, and indeed affected the entire earth stuctures and parameters. This singular event ofcourse set the tone for the environmentalist acceptance and application of the creation theory and Noahic destruction era account of the earth and its environmental impact and implications which some scholars have termed as the beginning of climate change on the earth (Kinley, 2014 & Vox, 2017).

However, outside of the Christian church some other religions do not believe or accept the Judaic bible (Genesis) creation account neither its cataclystic event of the flood that changed the face of the earth nor the prophecy of a sudden end of the earth and man. Numbers (1993), held that among the creationist group, there is those that believe in the Genesis chapters 1 & 2 creation account while others believe in an earlier "earth and human existence" before the Genesis creation account and era. Again there is a group that believe in the version of an intelligent design creationism as a way of escaping from accepting the Deity-God creator of the heavens and the earth account stated in the bible book of Genesis. Some other authors have however believed in the sin agency theory adducing the sin of man against the Creator- Diety (Genesis chapter 6: 12-13) being responsible for the flood destruction with its cataclystic climate change and effects (Barnett, 2015). This study is however not focused on the sin theory rather on climatic changes on the earth and its relationship to Christian biblical prophecies.

Hawking & Mlodinow (2010), have argued in the opposite of the creationists, positing that the big bang theory rather than a divine creation is responsible for the emergence of the universe. The big bang theory supports a sudden burst of the world of matter that began to grow and expand to the present complex state of the earth which is more in comformity with the theory of evolution by Darwin than the creationist. Jean-Baptiste, Lamarch (1744-1829) is credited as the originator of evolutionary theory of species transmutation, a believe that in evolution all species are related and over time grow and expand to the complex nature of matter today. Evolutionists believe in the genetic progression of species that change the phenotype of the organisms. Charles Darwin is reckoned as the greatest exponent of the theory of evolution, but in his famous work "On the Origin of Species" in 1859 (pp 488) he was recorded to have observed that "light will be thrown on the origin of man and history" indicating a futuristic consideration of the facts of evolution. Earlier, Charles Hutton (1737-

1823) is noted as one of the proponents of the earth and its geology being a product of some natural forces and not by a creative force. Futuyma (2011) saw evolution as the biological changes in the properties of group of organisms over the course of generations. Conclusively, the theory of evolution is in contrast with the theory of creationism thus setting the table for argument on the acceptability of either of the theories with respect to the origin of the earth and man.

The Church: Doctrine of Eschathology and the Apocalypse

In the Bible book of Luke 21: 11-25 and Matthew 24: 6-7, Jesus Christ spoke exhaustively of the changes (signs of great perplexities) and cataclystic observations that shall take place in the earth to bring about its end. The sun, moon, stars and cosmotologies; the seas, oceans and its activities; the beasts, fishes, birds and vegetation (earthly habitations) and indeed man and the earth as foretold in the scriptures above shall pass away in a cataclystic consumption. The bible book of Revelation chapter 8:7-12 further anchors that earth nature and the environment, the cosmos and solar system shall suddenly crash and give way in conformity with Christian eschatology. This event shall bring about the end of the earth and man as earlier prophesised of Christian doctrine.

A study and exposition (interpretation) of Christian bible chronology, clearly illucidates that the passage of time is measured in generation dating from the events of creation (Genesis 1:4, Genesis 5:1, Joshua 22:27, Psalms 145:4, Daniel 4:3 and Luke 21:32 among other biblical references. There is however attempt by protagonists of the christain creation account to reject the chronological (generational) order of events by God to pave the way for a creation science and an intelligent design belief of the earth now rooted among some religious adherents.

The Apocalypse taken from the Greek word “Apokalypsis” means unveiling or a disclosure of great magnitude and impact, a prophetic revelation of catastrophic dimension about the earth that is capable of bringing about instability in world systems. Thus the theory of Christian faith eschatology is related to the doctrine of apocalypse. Isaiah, a major Judaic prophet, foretold of this doom day many years before the birth of Jesus Christ (the beginning of the Christian Faith). In the book of Isaiah chapter 13:9-11, the prophet did state as follow:

> 9. *Behold the day of the Lord cometh, cruel both with wrath and fierce anger, to lay the land desolate: and he shall destroy the sinners thereof out of it.*
> 10. *For the stars of heaven and the constellations thereof shall not give their light: the sun shall be darkened in his going forth, and the moon shall not cause her light to shine.*
> 11. *And I will punish the world for their evil, and the wicked for their iniquity; and I will cause the arrogancy of the proud to cease, and will lay low the haughtiness of the terrible.*

The above citation establishes the apocalypse and fact of a doom`s day ahead of man and the earth in line with Christian belief on eschatology. By way of exposition, the statements imply a sudden devastating, consuming and catastrophic event; one of utter visitation for judgement by an Omnipotent Power. Those who pass the test of righteousness shall be rewarded with another world while the sinners (failures) shall go down with the present earth system. Again, the sin theory comes aboard when considered alongside with biblical expositions on the last day visitation for reward or punishment. By climate change and environmental expediency, this visitation shall bring upon the earth, unpredictable as in exactness of date and hour, a gory and wholesome alteration of global temperature and earth parameters.

Climate Change and Eschatological Perspectives

In discussing the matter of eschatological perspectives and the end time prophecies, certain key events come to mind. According to Judaic teaching, God (the omnipotent) in his wisdom has used flood (great waters) and fire to execute his will among men and in the earth. The great floods of the era of Noah is the first and the most disastrous as it affected the entire earth. The consequences of that event certainly spelt environmental and climatic changes upon the surface of the earth. For citation, the building of the Tower of Babel by Nimrod and his brethren (Genesis 11:1-9) and its sudden collapse and scatter by God spelt another earth structural disaster with implications for the environment and man. In a more omnious show of overriding authority and power, the use of fire and brimstone to burn down all human and other lives including physical strutures of the land of Sodom and Gomorrah (Genesis 19:24 -25) by the Judaic God eminently point to a cataclysm of wastes that came out of the ruins of those cities. All of the above citations are clear cut out cases of structural and environmental degradations by an omnipotent power with serious climate change impacts. Thus the theory of the yet to come great tribulation cited in the book of Revelations chapter 2:22 and God`s plan of judgement upon the earth and man are in agreement with the acts of this Judaic God already demonstrated on the earth. Both past destructions by this Omnipotent God and the one yet to come hold catastrophic impacts on earth environment and climate change. The great tribulation is a generational (age) chronology of the end time (last days) and the events of unwholesome happenings that will accompany it. In Revelation 12:12, God warned of the calamity that will visit the earth upon his victory over his enemy, the devil. Observedly, the sin agency theory continues to appear with its accompanying punishment as shown by the expositions on the various destructions executed by God upon man and the earth, portending environmental and climatic changes with serious implications for man.

Climate Change Effects (Impacts & Implications)

The nett effect of climate change include global warming, radiations, reduction of the ozone layer, extreme weather conditions, deglaciations, oceanic activities, flooding, geologic and structural altercations, earthquakes, hurricanes, cyclones etc that have negatively imparted on teresterial and aquatic life; human life, health and safety. Climate change effect is a global phenomenon that has today become drivers of public policy on the environment, economy, governance, technology, human sustainability and development. Drawing from the subset of the Niger Delta region of Nigeria, the effect of climate change has been synchronous with oil/gas companies operations and associated pollutions on the land, water and air (Niam, 2014). In her 2018 annual report (pp. 175-311) the IPCC alarmed that an additional global temperature increase of 1.5 degree celsius above present value means disaster and cataclysm for human life on earth. The issues of drought and famine in the Horn of Africa (Eriteria, Ethiopia, Sudan, Somali) has been clinically related to the effects of climate change in that region (Sorenson, 2016). According to Olagunju (2015), the depleting water resource in the Chad Basin of Africa (Nigeria, Cameroun, Chad Republic, Niger and Central African Republic) is due in part to effects of climate change. In the two cases cited above, there is the problem of regional food insecurity, social insecurity and associated demographic challenges. Taking the example of Bangladesh, India and China in Asia, perennial flooding related to moonson precipitations as effects of climate change have caused untold damage to the environment and human life (Loo, Billa & Singh, 2015). In the Artic region and parts of Canada the effects of global warming has generated warmer and wetter periods coupled with deglaciation and flooding. In parts of Europe and America there is the challenge of increased temperature, heatwave and flooding. The GermanWatch Institute in her 2020

annual climate risk index report posted the following figures: Sri Lanka (19.00), India (18.17), Madagascar (15.83), Germany (13.83), Phillipines (11.7) and Japan (5.5) on the climate risk scale ranging from zero.

Parker (2013), has condemned the growing consumerist attitude and industrialisation by man as being responsible for deforestation, pollutions and environmental degradation of the earth. Earlier, Bunker (1990), stated that the degrading activities of man in the once ecosystem rich Amazon Basin of Brazil is responsible for the negative climate change effects in that region. According to Ite et al (2013), this same acts of human exploitation of natural resources without concern for adequate revegetation and regeneration has been responsible for the damning effects of climate change in the Niger Delta region of Nigeria. Globally the implications of climate change has become complex in nature and dynamics resulting in the depletion of the ozone layer, global warming and high radiations, environmental pollutions, human health risks, flooding, drought, famine etc that have collectively challenged human development. According to Ziervogel et al (2006), the impact and implications of climate change is the greatest threat facing mankind today.

Climate Change and the Way Forward

Globally, authorities are in agreement that the sustainability of man on planet earth depends on man winning the battle atleast to some reasonable extent, with climate change (Brown et al, 2007). Not withstanding the enormity of the challenges of climate change upon man and the earth, which by implication includes the religious and secular society, some authorities are still believed in a way out (way forward) for survival. Flannery (2015), among other scholars have raised hope for survival of man on planet earth due in part to emerging global (United Nations, others), and Nation States and corporate world synergies in capacity building and strategies, technology and empowerment in the battle with climate change. The application of appropriate strategies to tackle the world of rapidly changing climate change regime remains a viable option (Harris et al, 2006), as against reliance on historical experiences. Earlier, Agenda 21 arising from the global Earth Summit of 1997 have raised frameworks for climate change combat (Dodds, 2019). While the two contending theories of creationism and evolution still hold their grounds, as the earth lasts, man has to do something for survival. Climate change as a global issue and concept can more aptly be handled under the Sustainability factor. Thus sustainable development holds the ace (Magni, 2017) in the new paradigm to address climate change vulnerability, impact and response resilience in terms of adaptation and mitigation, through the UN global 17point Sustainable Development Goals (SDGs). Sustainability is the key to effective response and management of climate change (Bhatarasa & Nyamwanza, 2018) while Gemeda et al (2015) earlier posited that economic (financial) powers, capacity building (quality education and communication), climate friendly technology and effective governance system constitute the approach determinants. These determinants have been generally classed under the social, economic and environmental sustainability factors. Under global initiatives, the likes of the World Economic Forum annually held in the city of Davos in Switzerland and the Conference of the Parties (COP) are efforts at nation States unity and agreement in policy and action to check the menace of global temperature increases and climate change. Most welcomed outcome of COP-26 (the 26th series of COP held in Glasgow, Scotland in Nov 1-12, 2021) was the agreement by America and China, two major world powers, to back the UN Climate Change Conference (COP) initiatives. Religious groups including Judaism and the Christian Church that came out of Judaism; the Islamists, Hinduist, Budhists etc are in agreement and support of human efforts to check global warming and temperature escalation above human survival threshold.

CONCLUSION

Religion has a great influence in the relationship between man and the environment. Equally, teachings on escahatology have pointed to a strong relationship between climate change and the religionist belief on the subject. As the earth remaineth, both religionist (the creationists) and evolutionists are agreed that climate change has become a global menace and threat to human life on planet earth. The two global ideologies are also agreed that efforts should be geared by man to check this menace and threat.These positions above predicate the findings of this study.

Recommendations

Based on these grounds, the following recommendations have been offered:

- Sustainable development approaches and synergy at global, nation State, corporate, societal, religious and individual levels remain a viable option that should be sustained for effective adaptation and mitigation of climate change and its effect.
- Disaster risk management, minimisation (reduction) policies, measures and strategies should be leveraged upon to manage naturally (elementally) induced climate changes.
- Green energy policies as it concerns reduction in carbon emissions, other pollutants, environmental degradations etc are key to checking the menace of anthropogenic (human) activities
- Climate change issues should be incorporated into national political electioneering debate and manifesto by political parties for accountaibility to the people for policy and governance. Nigeria on Thur 18th November, 2021 signed the National Climate Change Bill (2021) into an Act that will pave way for the establishment of a National Council on Climate Change to drive national (political) policies on climate change
- Global template on climate change approaches should be domesticated to incorporate local needs and working traditional methods of adaptation and mitigation
- Appropriate research, technology and funding; capacity building, effective education and communication on environment; social justice, equity, fairness etc and access to same; poverty alleviation and sustainable livelihood etc constitute a win-win ticket and panacea on sustainability of the earth and man on the issues of climate change.
- An inclusive approach and effective maximisation and sustenanace of the elements of climate change chain (systems) is recommended.
- Christian religious authorities to partner other bodies and agencies for the sustainance of the environmental prameters by adopting practices that will promote sustainability.

REFERENCES

Akpan, G. P; Basher, A.K & Zamare, U.S. (2012). An overview of the impact of Man - Environment relationship on Human Health in Nigeria. *International Journal of Geography and Environmental Management.* 1 (8), 1-8

Alexander, D. (2014). Creation or Evolution. Do we have to choose? Monarch Books.

Barnett, L. (2015). The theology of Climate Change: Sin as agency in the enlightenment`s anthropocene. *Journal of Environmental History.* 20 (2), 217-237

Bhatasara, S & Nyamwanza, A. (2018). Sustanaibility: A missing dimension in climate change adaptation in Africa. *Journal of Integrative Environmental Science.* 15 (1), 83 -97

Brown, O; Hammill, A & Mcleman, R. (2007). Climate change as the new security threat: implications for Africa. *International Affairs.* 83 (6), 1141-1154

Bunker Steven. (1990): Underdeveloping the Amazon: Extraction, Unequal Exchange and the failure of the Modern State. Published by Chicago University Press

Cradock-Henry, N.A; Connolly, J; Blackett, P; Lawrence, J. (2020). Elaborating a system methodology for cascading climate change impacts and implications. Methods X Vol. 7 (2020) 100893

Crouch, C.L. (2010). Genesis 1: 26-27: As a statement of humanity`s divine parentage. *Journal of Theological Studies.* 6 (1), 1-15

Dodds, F. (2019). The Wayforward: Beyond Agenda 21. Routledge

Dryzek, J.S; Norgaard, R.B; Schlosberg, D (2011). Climate Change and society: Approaches and responses. The Oxford Handbook of Climate Change and Society

Dugan, A.J; Birdsey, R; Mascorro, V.S; Magnan, M; Smyth, C.E; Olguin, M & Kurz, W.A (2018). A system approach to assess climate change mitigation options in landscapes of the US forest sector. *Carbon Balance & Management.* 13 (1), 1-14

Egbule C L, Nzeadibe T.C, Chukwuone, N.A & Agu V.C (2011) : Climate Change Awareness and Adaptation in the Niger Delta Region of Nigeria. Published in AFRICAPORTALS 2011 p. 32

Flannery, T. (2015). Atmosphere of hope: Searching for solutions to the Climate Crisis. The Text Publishing Australia.

Fussel, H.M. (2007). Vulnerability: A generally pplicable conceptual framework for climate change research. *Global Environmental Change.* 17 (2), 155-167

Futuyma, D. (2015). Expnad or Reverse? The evolutionary synthesis today. *Quarterly Review of Biology.* 86 (3), 203-208

Gemeda, D.O & Sima, A.D. (2015). The impacts of Climate Change on African continent and the way forward. *Journal of Ecology & the Natural Environment.* 7 (10), 256-262

Harris, J.A; Hobbs, R.J; Higgs, E & Aronson, J (2006). Ecological Restoration & Global Climate Change. (2006), 170-176

Hammer, G. (2000). A general system approach to applying seasonal climate forecasts. In Application of seasonal climate forecasting in agriculturaland natural ecosystem (pp. 51-65). Springer. Dordrecht.

Hawking, S & Mlodinow, L. (2010). Grand Design. Batam Books.

Ingwesen, W.W; Gonzalex, M; Garmestani, A.S & Templeton, J.J (2013). A system perspective on response to climate change. A US Environmental Protection Agency Papers, 196. University of Nebraska-Lincoln, USA.

Ite, A.E, Ibok, U.j, Ite, M.U & Petters, S.W. (2013). Petroleum exploration and production: past and present environmental issues in Nieria`s Niger Delta Region. *American Journal of Environmental Protection.* 1 (4), 78-90

Kinley, J (2014). As it was in the days of Noah. Harvest Housing Publishing.

Lasaga, A.C (2014). Kinectic theory in the Earth Sciences. Princeton University Press.

Loo, Y.Y; Billa, L & Singh A. (2015). Effect of climate change on sesonal monsoon in Asia and its impact on the variability of monsoon rainfall in Southeast Asia. *Geoscience Frontiers.* 6 (6), 817-823

Macauley, D. (2010). Elemental philosophy:Earth, air, fire and wateras environmental ideas. Suny Press. 2010

Magni, G. (2017). Indigenous knowledge and implications for the sustainable development agenda. *European Journal of Education.* 52 (4), 2017

Milfont, T.L. (2012). The interplay between knowledge, perceived efficacy and concern about global warming and climate changes: a one year longitudinalstudy. Risk Analysis: an *International Journal.* 32 (6), 1003-1020

Neuamann, J. (1985). Climate change as a topic in the classical Greek and Roman literature. *Climate Change.* 7 (1985), 441-454

Niam, S.O. (2014). International oil/gas environmental framework and the precautionary principle: The implications for the Niger Delta. *Journal of Internatioal and Comparative Law.* 22 (1), 22-39

Numbers, R.H. (1993). The Creationists in modern American Protestantism and its world. Vol. 10 Fundamentalism and Evangelism.

Olagunju, T.E. (2015). Drought, desertification and the Nigeria Environment: A Review. *Journal of Ecology and Natural Environment.* 7 (7), 196-209

Padilla, J.R. (2009). Seamul Heaney`s elemental eccopoetics: earth, water, air and fire. *Journal of Eccocriticism.* 1 (2), 21-30

Parker, G. (2013): Global Crisis: War, Climate Change and Catastrophe in the 17th Century. London Review Books. 37 (5), 29-30

Ribes, A; Thao, S & Cattianx, J (2020). Describing the relationship between a weather event and climate change: A new statistical approach. *Journal of Climate.* 33 (15), 6297-6314

Scott, E.C. (2009). Evolution and Creationism: An Introduction. Greenwood Press London

Sorensen, J (Ed). (2016). Disaster and Development in the Horn of Africa. Springer

Trenberth, K.E ; Karl, T.R & Spence, T.W. (2002). The need for a system approach to climate change observations. *Bulletin of the American Meteorological Society.* 83 (11), 1593 -1602

Vox, L. (2017). Existential Threats: American Apocalyptic Beliefs in the Technology Era. Philadelphia, University of Pennsylvania Press

Werndi, C. (2016). On defining Climate and Climate Change. *British Journal for the Philosophy of Scence.* 67 (2), 337-364

Ziervogel G, Nyong G, Osman G, Conde C & Dowing, T. (2006): Climate Variability and Change: Implications for Household Food Security in Enete, A.A & Amusa, T.A (eds) Challenges of Agricultural Adaptation to Climate Change in Nigeria: a Synthesis from Literature

All Bible Quotations are taken from the King James Version