Ecotheology, Land and Sustainable Development

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Abstract: This paper is an attempt to mobilize the global Christian community to take urgent actions to preserve the natural environment from man-made destruction. As a grass root community institution, the church can provide the platform for sensitization, and public education on environmental safeguarding programs and projects. The study also enjoins the church to get involved in capacity building in the field of environment and sustainable development. The obligation of the church should metamorphose from sermon delivery to affirmative actions and practical involvement in the struggle to preserve creation.

1. Introduction

The world is facing a crisis of environmental degradation. Human beings have accepted fully the biblical command to subdue the earth. Forests and fields are being transformed into concrete and pavement, the earth energy exchange systems has been altered, loss of biodiversity, toxification of the atmosphere, land and water systems of the world. Some environmentalists have accused Christianity as the main source of environmental ruin. The command to subdue and have dominion over the earth is misinterpreted as a theological sanction for environmental devastation. Another theological impetus for environmental destruction is the eschatological and transcendent focus of Christian theology. For historic and biblical Christianity, there is a traditional song that echoes frequently the idea that “this world is not my home, I’m just passing through”. The preoccupation of Christian theology with the parousia and a heavenly home for the saints has affected Christian attitude to earthkeeping.

2. What is Land?

John Whittow (1984: 299) has defined land as: “1. The solid part of the earth’s surface; the continents. 2. A specified geographical tract of the earth’s surface including all it attributes comprising its geology, superficial deposits, topography, hydrology, soils, flora and fauna”. The study of the solar system shows that the earth is a small blue planet bathed in a film of white clouds and liquid water. There is reasonable distance between the sun and the earth; otherwise the temperature will not allow water to exist as, a liquid, a solid and a gas (Hamblin and Christiansen, 1998:5).

Earth’s surface is measured to be 500 million square kilometres that is, 193 million square miles, where four open systems interact. Each system occupies a “shell” around the earth and it is called a “sphere”. The abiotic (nonliving) spheres are the atmosphere, hydrosphere and lithosphere. The biotic sphere is called the biosphere, “The biosphere is so immensely complicated that its working are imperfectly understood, but it is known that any interaction of factors, however
insignificant, can produce repercussions whose chains often span continents or even girdle the earth” (Life for the Choosing 1969: 28).

Since the four systems are not independent unit in nature, their boundaries are merely transition zones instead of delimitations. The organizational framework for the four-part structure of geosystems show that energy is sourced from the atmosphere system, water and weather are moderated by the climate system. The lithosphere is the medium for earth-atmosphere interface, while soil, ecosystems and biomes are linked with the biosphere. The solar system recognizes only the earth’s biosphere (Christopherson 1997:12).

Earth’s history dates back to over 4 billion years. Physical geography shows that earth has faced a series of changing environment. Earth is a unique planet. It is the only planet in our solar system that can support life. There is a vast body of water in liquid form which is necessary for all life processes. There is also an atmospheric temperature range that permits water to occur in liquid form. Scientific studies have shown that the average global atmospheric temperature of the earth is +15 ºC. Comparing the earth with other planets, Adebisi Sowunmi (1994:150) avers that: “The other three terrestrial planets in our solar system do not support life – Venus is too hot and very rich in carbon dioxide, the atmosphere of Mars is mostly carbon dioxide, (96.5 percent), and Mercury is airless”.

Bradshaw and Weaver (1993:21) have this to say on the uniqueness of the earth in the solar system: “It is possible that this is the only planet in the universe on which life exists. The existence of life anywhere else has not been proven, and it is unlikely to be found in the foreseeable future, although many scientists say that there is a good probability that it exists somewhere in the vastness of the universe”. The surface temperature of the earth is determined through the planet’s distance from the sun and the composition of the atmosphere, oceans and continents.

It is only in the earth that a protective and transparent atmosphere in which the complex chemical changes required to produce living organism could occur (Bradshaw and Weaver 1993:21). The uniqueness of the earth means that it is a delicate treasure; humanity cannot escape if the earth is ruined. Despite historic differences and variations in cosmological views, every individual is duty bound to ensure that the human environment is not degraded nor destroyed. Rajula Watson (2004:6) has defined land as: “a community of soil, water, plant and every being living in mutual relationship- an earth community and in particular as earth a being created by God”. In this paper we shall use the words ‘land’ and ‘earth’ synonymously.

3. Biblical Perspective on Land

In the Hebrew Old Testament two words are commonly used to mean land, adamah and ha’aretz. Adamah means fertile soil or arable land –source of human survival. The first created human being was called ‘Adam’, which is a derivative of Hebrew root word adamah. Here lies the symbiotic relationship between human beings and land, “humanity was created out of the very stuff of the land on which it lives. The Bible affirms that humans formed out of the soil belong to the land” (Watson, 2004:20). Ha’arezt on the other hand designates the earth, which cover lands and seas. Ha’arezt can also mean a particular territory, region, country or dry land (Juan Alfaro 1978:51).

For many years the doctrine of land was pivoted on the subjective understanding and interpretation of Gen. 1:28 “Be fruitful and increase in number; fill the earth and subdue it”. In the 21st century biblical hermeneutics has developed over and above a one-sided interpretation of Gen. 1:28. The basic theological question is: to whom does the earth belong? The logical and semantic emphasis of the question has to do with the thorny issue of earth ownership and not possession.

Simply put, the question is: who owns the earth? Pastors and theologians all over the
world will take Psalms 24:1 “The earth is the Lord’s and everything in it” as the simplest answer. The second biblical answer to the question can be seen in Psalm 115:16 “The highest heavens belong to the Lord; but the earth he has given to man”. It is on the basis of these two scriptures that we will determine who the “Landlord” is and who is the tenant. John Stott (1984: 111) has rightly described Psalm 24:1 and Psalm 115:16 as double truth:

...the earth belongs to both God and man to God because He made it, to us because He has given it to us. Not, of course, that he has handed it over to us so completely as to retain neither rights nor control over it, but that he has given it to us to rule on his behalf. Our possession of the earth is leasehold, therefore, not freehold. We are only tenants; God himself remains the ‘Landlord’.

In Gen.1:26-28, we are told that man was created in the image and likeness of God with the divine mandate to rule and dominate the entire creation, “Fill the earth and subdue it”. Man has succeeded tremendously in the process of filling the earth with concomitant repercussion of population explosion which has become a global problem. Man has also recorded landmark success in subduing the earth. From food gathering and farming to the age of science and technology, man has conquered nature. There is a consensus among theologians that whatever experiment man is doing with nature and the environment, it is in obedience to God’s command.

The fabrication of tools, plant cultivation and stock-breeding in the Neolithic or New Stone Age created a permanent boundary between savagery and barbarism. Stott has argued that man in his progressive control of the earth has never invaded God’s private sphere to wrest power from him and exert independence and autonomy over God. Instead of usurping God’s cosmic sovereignty over creation, man has combine dependence on God with dominion over the earth. It was God who provided all the natural resources which man has harnessed for scientific and technological progress. God made the earth to be fruitful before man was given the mandate to subdue it.

Stott is of the opinion that man’s dominion over creation is in co-operative capacity. Man does not create the processes of nature, but co-operate with them. Man can plough, irrigate and fertilize the soil through crop rotation; he can improve the quality of his stock through selective breeding, and can produce hybrid grains through technology. The fact is that in all this activities man is only co-operating with the natural laws of fruitfulness which God has put in place. The biblical perspective on land is that God owns the earth. Man is only exercising a delegated dominion over creation. God has entrusted the care of the earth to man. God is the owner; man enjoys possession of the earth through divine favour. God is the landlord man is the tenant. Stott posits thus: “Man is not free to do anything he likes with the natural environment ‘Dominion is not a synonym for destruction’” (Stott, 1984 : 115).

4. The Biblical Foundation of Ecological Theology

The focus of ecological theology is to reverse and rectify any damage which traditional theology has done both to the earth and environment. It is no longer normal for Christians to be complicit bystanders, or participants in the degradation and defilement of God’s creation. Christian stewardship on earth covers responsibility to protect and preserve the created universe. Soul winning and humanitarian services without caring for the earth are a mistake that should be corrected urgently. The focus of Christian ecological commitment is not just ‘nature’ or ‘resources’ or ‘environment’, but God’s creation. Earthkeeping is not only a sacred trust, but a worshipful activity.

The Genesis account did not end with the command to subdue and dominate the earth. The church as God’s avant-garde with a kerygmatic, diaconic and koinoniac functions
should awake from slumber and read with contemporary hindsight and exigency Gen.2:15: “The Lord God took the man and put him in the Garden of Eden to work it and take care of it”. This is clearly a mandate for man to govern the earth in a responsible manner under God’s sovereignty. By implication, the responsibility in Gen. 2:15 does not only stop at the cultural mandate to build community through marriage and family, but it covers responsibility for the natural environment, the air, soil, water, plants and minerals. (Greenway 2000:25).

Stewardship of God’s creation is implicit in man’s nature as the image of God. “Image of God” here means readiness and capability of man to affect, modify and control the ecosphere. Gerry Breshears (2000:296) posits thus: “If we are responsible caretakers of God’s creation, then we must use the earth, the atmosphere, the land, the water so as to conserve and renew their systems as intended by God”. Starker Leopold has said that the only possible force that could motivate human effort to preserve the environment is the moral conviction that “we owe it to ourselves and to the good earth that support us to curb our avarice to the extent of leaving a few spots untouched and exploited”(qtd. in Life for the Choosing, 1969:26).

Human ecology is the study of how man interrelates with his home- the soils, the minerals, the water, the air, the animals and plants. Nature has immutable laws which we can only ignore or annul at our risk. Francis Bacon in the seventeenth century gave an operational definition of ecology: “Nature to be commanded must be obeyed” (qtd. in Emmel 1977:10). Even though the earth is a comparatively minor planet in size, it is large in our perspective because its shell of life- the biosphere- is so thin that it is virtually transparent (Emmel 1977:10). The earth is the home planet. The etymology of the word ‘ecology’ is the Greek oikos, which means home, house or the entire inhabited earth-oikoumene.

The science of ecology which originated in the practical environmental knowledge of man’s earliest ancestors was first defined by Ernst Haeck in 1869 as “The study of the relationship between the living being and his environment, both organic and inorganic (qtd.in Brun 1994-79-80). Thomas Emmel (1977:10), defines ecology as: “The study of the interrelationship of organism (including humans) with one another and with their non-living environments, as well as the study of natural systems built upon these relationships”.

Ecological thinking is propelled by the principle of holocenosis- the consciousness that natural factors exist as a vast complex and act as a whole rather than separately and independently. All living organisms are bound together in a vast system of interlinked and interdependent lives (Park 1936:1-2). At the beginning, ecology concerned itself exclusively with the study of animal vegetable species; it was only at the beginning of the twentieth century that ecological perspective was applied to the study of human beings and the human environment.

From 1930 to 1950, different academic disciplines developed various perspectives on human and urban ecology. Anthropology developed cultural and anthropological ecology. In the field of psychology, environmental or ecological psychology was established. Philosophy, economics and geography have all made tremendous contributions in helping to understand human behaviour and environment. The latest addition is clinical ecology which unravels the environmental causes of mental and physical illness (Randolph and Moss 1980:160-165).

5. Christian Environmental Concerns

The greatest Christian environmental concern is the world population growth and its impact on the planet’s resources and ecological systems. World population growth is concentrated in poorer regions of South Asia and Africa. The population of both China and India have already passed 1 billion. John Davis (1985:267) observes that the quadrupling of world population has led to a 14-fold...
expansion in the world economy, a 16-fold increase in energy use, a 13-fold increase in carbon dioxide emissions, and a 9-fold increase in water consumption.

There is also a growing public concern on the problems of deforestation and loss of biodiversity. It is estimated that over 40 million acres of tropical rainforest are loss annually worldwide (Bonnie et al 2000: 1763). Biologists have made a conservative estimate of biodiversity loss at the range of 30,000 species disappearing annually. Global warming is another protracted environmental problem. Scientists have attributed global warming to the burning of fossil fuels and emission of ‘greenhouse gases’ such as carbon dioxide into the atmosphere (Davis 1985:268-9). The warming effect has led to rising sea levels, which threatens the coastal areas.

The world is also witnessing shortage of adequate sanitation and access to clean drinking water in many nations of the developing world. Conservative estimate shows that 3 to 5 million children die of water related diseases in the third world countries, where it is reported that up to one half of piped water can be lost due to leakage, broken water mains or malfunctioning standpipes. Improper disposal of human waste in the third world countries have led to the spread of diseases such as hook worm, dysentery, typhoid and diarrhoea.

Pollution is an increasing source of human abuse of land. The drive to expand agricultural productivity has led to soil degradation. Irrigation does not only lower the water tables, it causes soil erosion, destroys wildlife habitat, salts the land and creates water logging. (Strada 1999:321). Michael Strada (1999:321) has identified causes of deforestation to include commercial logging, clearing of forests for human settlements, slash-and-burn techniques to clear land for crop rotation, large-scale chemical intensive export agricultural business and over population.

Globally, forests are disappearing at a rate of about 6.8 million acres yearly. Deforestation does not only result in the loss of trees. It also leads to biodiversity loss. The conservative estimate for the number of species in the world is 10 million. Biologist Edward Wilson has calculated biodiversity loss annually worldwide of plants and animals at between 4,000 to 6,000 species, which in turn reduces biological diversity and hinders natural adaptation (Strada 1999 : 321)

6. The Quest for Sustainable Development

What is development? For the economists, development is synonymous with economic growth measured in aggregate terms. A comprehensive definition of development was given by Walter Rodney (1972: 9): “Development in human society is a many-sided process. At the level of the individual, it implies increased skill and capacity, greater freedom, creativity, self-discipline, responsibility and material well-being ...” Another thought-provoking definition of development was given by the Latin American scholar, Luis Ramiro Beltran (1974 : 27):

Development is a directed and widely participatory process of deep and accelerated socio-political change geared towards producing substantial changes in the economy, the technology, the ecology and the overall culture of a country, so that the moral and material advancement of the majority of its population can be obtained within conditions of generalized equality, dignity, justice and liberty.

What is common in both definitions is that, the two scholars have applied a holistic perspective. Development is not just a technical, non-social thing as scientism would have us believe. It is the sum total of all improvements within the socio-political and economic systems. Development implies movement towards a goal. Since human reality is multifaceted, it is unreasonable to squeeze it into a dimension of economic growth.

The quest for alternative and more holistic developmental paradigm has led to the concept of sustainable development. “Sustainable development means that growth should, at least ideally, be carried on in such a way as to recycle physical resources rather than
The church should accept the challenge to restore the balance of nature. Geopolitical boundaries should not be allowed to hinder the restoration and redemption of the environment. The church should not wait for the emergence of a new theology of nature before confronting the problem of environmental degradation. The starting point is to carry out a comprehensive curriculum revision for Bible colleges and seminaries, to incorporate vital courses in ecology from the Christian perspective. Christian earthkeeping should be taught in all our junior seminaries while advanced courses in ecological theology should be offered in all advanced schools of theology worldwide.

The churches should evolve a new hermeneutic that is environment-friendly. Here we recommend that pastors should be exposed to regular ecological training in the form of seminars and conferences. The church should use the world media to mount campaign for the integrity, and moral obligation of scientists to know and to inform the public about the negative consequences of technological innovations. Like Schumacher we insist that technology should have a human face. Technology should not be allowed to provide a platform for the destruction of God’s creation (1973:138-151).

References