THE PLANET EARTH: COSMIC ARTICULATION TO PROVIDE FOR LIFE FORMS

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Abstract

The phenomenal explosion of a chunk dating approximately 14 billion years ago sparked off series of sequential formations in the cosmos with complex inter-relationships one of which is the solar system to which our precious and unique earth belongs. The latter has articulately transformed through morphological changes and today is the only home of lifeforms including man. This article using secondary sources of data and personal observation as framework for descriptive analysis examines basic features of the earth which have made it the home of life such as an impressive atmosphere, relation and revolution, solid body, water supply sources and vegetation among others. The paper further takes a glimpse into some environmental issues that pose challenges to the planet's sustainability such as population growth and other sources of environmental degradation such as pollution. The article finally suggests careful management of environmental resources in such techniques as forestation, recycling of recyclables, cloud seeding and irrigation agriculture among many others as measures to enhance the effective functioning of our planet earth for a more efficient support to the teeming life forms that thrive on it.

Keywords: Environment, Sustainability, Water, Management

Introduction

The earth, our home planet is the third planet from the sun after Mercury and Venues beyond which is Mars, Jupiter, Saturn, Uranus, Neptune and Pluto in order of distance from the sun.The planet was formed as a family member of the solar system some 4½ billion years ago which tallies with the approximate formation of the solar system in line with celestial events and their history. According to Krauskopf and Beiser (2008), the entire cosmos all began by gravitation of cosmic particles in mainly hydrogen and helium, a big fire ball which translated to intense compression and subsequently explosion. This phenomenal explosion of an unimaginably hot dense chunk was triggered primarily by excessive pressure which has come to be formally called "the Big Bang". The big bang is therefore the result of internal pressure from the two gasses and the resultant explosionthat sent particles scattering in different directions into space.

It is interesting to note here that these fragments as they scattered kept moving away from each other at speeds proportional to the distances between them thereby resulting in unimaginably vast expansion in the size of the universe, also most often referred to as the cosmos in astronomy. Meanwhile detailed measurements of the rate of expansion of the cosmos suggest that before the big bang, matter, life, space and time were all locked up tightly in one big chunk some 13.8 billion years ago, (Bennett, Donahue, Schneider and Voit, 2008).

The foregoing analysis is a clear indication that the vast expanse of the universe as seen today in the form of billions of galaxies was one big chunk whose explosion sent same particles of hydrogen and helium into space. In time, the particles started undergoing same process of gravitation thereby sticking up into galaxies, stars and planets at which time the earth was also formed in the solar system as a planet revolving around the sun alongside other planets while the sun revolves along its orbit around its star system of the Milky Way Galaxy, (Raven, Berg, Johnson, 1998). Meanwhile upon formation of the earth which is approximately the time when the solar system was formed about 4½ billion years ago, the entire physical environment of the cosmos had no life sustaining ingredients as only hydrogen and helium were present in nature. This according to Benneth, Donahue, Schneider and Voit (2008), implies that the earth had little or no atmosphere at its formation as virtually all the gases that make up the present-day atmosphere of the earth especially oxygen was absent. This explains why the pioneering life forms of the planet lived under the waters in order to survive the unimaginably scorching heat that prevailed on its surface.

Today, the planet earth has phenomenally metamorphosed to become the only celestial sphere that hosts millions of species of lifeforms including man with a population expected to hit 8 billion people by mid November 2022,(United Nations Population Division, 2022). It is of great interest to note that through this process of cosmic metamorphism, the lifeforms have periodically evolved from a low cadre involving primitive bacteria and algae based in water through a higher order terrestrial articulation of which man has emerged through his numerous species of apes such as home-habilis, homoserines and much later homo-erectus to a highly sophisticated human society based in the evolution and application of advanced scientific and technological apparatus in routine lifestyles and for studying events that occurred billions of years before him. According to Kaushik and Kaushik (2014), this is a spectacular turning point in human history as the human society does not just seek to know the complex past regarding the environment but also goes extra miles in strategizing on how to enhance the natural environment of the earth for sustainability and ultimately a more meaningful life on his part. This is because the quality of the earth's environment translates directly on to the quality of human life.

It is against the background of the foregoing that this paper undertakes to examine the phenomenal articulations that have made the earth, a once lifeless planet to one with great diversity of flourishing human and wildlife with about8700 species comprising 6.5 in terrestrial ecosystems and 2.2 in marine or aquatic ecosystems, (Yeqiao 2020).

Conceptual Clarification

In this segment of the paper, some key words have been clarified within the context of the paper and not strictly as contained in the dictionary. Among them are the following:

Earth The earth is a planet in the solar system and the third from the sun. It is the only planet with a life-friendly atmosphere and contains a solid body enriched with water and vegetation. As such, it supports a wide variety of life forms including man. With a spherical shape and an equatorial circumference of over 40,000km, it rotates on its axis in 24.25 hours causing time differentials at different places east and west including day and night, deflation of winds and ocean currents as well as high and low tides at coastlines. The planet also revolves around the sun at approximately 107,000km per hour causing seasonal changes over its surface.

Cosmic Articulations - The term cosmic is a world expressing a relationship with the cosmos, that is the entire universe. Cosmic articulations as used here therefore

refers to the orderly manner in which the universe is organized for the smooth operation of its attributes such as the galaxies and star systems with their components such as the solar system with their components such as the solar system involving the sun and the planets that operate within its gravitational field, Benneth, Donahue, Schneider and Voit (2008) define cosmic as phenomena whose occurrences are associated with a universal magnitude.

Life forms – These are the various forms of life that exist on the earth. They include marine and terrestrial lives. The entire flora and funa is included.

Stellar Recycling-This refers to the phenomenal formation of new generation stars from dust particles scattered in space by the explosive death of original stars which undergo gravitation and eventual attainment of nuclear fusion. The new generation stars as the word implies are usually more embracive in their content of environmental nutrients. For instance, original stars had no oxygen and other nutrients.

Gravity -This is the power of attraction exerted by a heavenly body upon another or other heavenly bodies that tend to pull freely suspended objects to them. For instance, the sun's gravity attracts all the nine planets and keeps them revolving around it within its gravitational field. The earth's gravity holds the moon revolving around it. The earth's gravity also attacks objects thrown up back to its surface. A stone thrown into the air or a bullet fired into air returns to the surface all under the force of gravity. The moon's gravity draws ocean waters resulting in extreme high and low tides.

Gravitational Field-This refers to the range of spatial distance within which the spectrum of gravitational force of a given heavenly body is felt. For instance, the entire spatial distance from the sun through its nearest planet mercury up to the earth and to the furthest planet Pluto falls within the spectrum of the sun's gravitational field.

The Big Bang-This refers to the phenomenal explosion of an unimaginably hot ball of gases which scattered its contents of matter, space and time about from which stars and star systems eventually evolved approximately some 13.8 billion years ago. It is believed that the solar system is a product of subsequent formations from this initial explosion that occurred. According to Krauskopf and Beiser (2008), the Big Bang theory on the formation of the universe suggests a sudden beginning and continuous expansion in the size of the universe based on which calculations fix a definite beginning when the expansion started.

The Earth as Custodian of Lifeforms

Form all indications of cosmic structures, the present-day earth as related to the big bang, it is clear beyond the shadows of doubt that the entire universe with its numerous galaxies and star systems including Milky Way Galaxy to which the Solar System, a system of the Sun and nine planets which revolve around it within its gravitational field was formed without life forms. How then has the earth, the third planet from the sun and family of the Solar System emerged with the evolution of a multiplicity of life forms?

A Massive Solid Body

It is interesting to note that unlike many other planets, the earth has a sizeable solid body which supports flourishing vegetation and provides platform for the operation of many routines of life. This solid body derives basically from gravitation, collapse and death of first-generation stars in phenomenal explosions that scattered cosmic particles into space from which new generation stars and planets could be formed through stellar recycling. According to Martini, (2014) the new generation stars might no longer be only gaseous in nature but would manifest elements emanating from the 2 percent (%) other gases earlier converted to heavier elements at formation of the Solar System. This implies that solid borders including such planets like the earth and Mars, with their potentials of life are included in the possible further articulations. Thus, the earth and the diversity of life forms it supports including man are all star-stuffs having originated and evolved from physical and biochemical precipitations from dust clouds and other ingredients of stars that lived and died billions of years before the formation of the solar system.

Meanwhile on the solid body of the earth, thrives a variety of life forms such as organisms in the soils, vegetation, animals and man. It is on this that the teeming human population carry out agricultural activities for their survival and stamp out settlement alongside many other socio-economic routines without which life would have been meaningless. This quality of solid body explains why the biggest and more massive planet, Jupiter and others massive ones like Saturn, Varmus, Neptune have no life on them. The same absence of a solid body makes Jupiter to spin very fast on its axis such that a day on it is only 11hours as against 24 on the earth,(Krauskopf and Beiser 2008).

Water and Water Supply Sources

The presence of water on the earth is ofgreat significance. It is worthy to state here that though water represents only about 0.5% of the earth's mass

(Chapman & Reiss 1995), it is central to the survival of all life forms. However, beyond the issue of centrality to survival, where and how has water become a component of the earth? According to Piani and Paris (2021), water may have been embodied in the rocks that originally formed the earth. Meanwhile, liquid water covers more than 70% of the earth's surface, with about 95% of it in oceans and seas while the remaining 4% in glaciers, ice caps, ground water, lakes, rivers, soils and the atmosphere (as well as in the mantle of the earth. Another school of thought has it that water was probably introduced into earth by meteoroids and asteroids striking the earth from outer space. Again, the hydrogen component of the earth also presupposes that parts of the planet's water derive from within its structural articulation.

Meanwhile of greater relevance is the fact that the mere possession of water and water supply sources is a spectacular cosmic feature that enables the planet to support life forms. For instance, deep down at the bottom of the ocean, chemical reactions between hydrogen and carbon-dioxide produced simple organic compounds which latter metamorphosed into primitive marine life too delicate to withstand the scorching heat of the surface sun thereby explain how the pioneering life forms originated under water and lived under water for millions of years until further structural metamorphism occurred giving then a double ability to migrate to terrestrial environments and that to live in water, (Chapman and Reiss, 1995). Similarly, all life-forms greatly depend on availability of water to survive. Infact, the human body cannot carry out some metabolic functions without water, just like others like plants and animals. All plants require water to germinate, grow and develop into maturity just like animals do. Thus, the possession of water by the earth is therefore a special articulation to enable the planet function effectively as the home of all life forms including man who cannot survive without water. The human body needs water to function apart from the fact that it is approximately 65% composed of water.

Similarly, lots of human routines depend largely on water availability. Water is needed for domestic activities of cooking and washing. It is also needed for agricultural productivity and industrial operations. Water has thus, made the earth wholesome.

A Functional Atmosphere

The earth is the only planet that has an efficiently articulated atmosphere. The earth's atmosphere is typically an envelope of gases comprising nitrogen, oxygen, carbon dioxide and many others which all work to enhance life on earth.

According to Sharp and Dobrijevic (2021), the earth's atmosphere consists of five (5) main layers from the lowest to the highest which extends from above sea level up to about 16,000km where it fades into outer space. The atmosphere consists of about five layers all well articulated to provide for and protect life on earth. For instance, the lowest layer of the atmosphere which is the troposphere extends from the surface to about 16½ km. This layer has all the weather elements that work on one another to bring about convenience and enhance the conditions under which life becomes possible. As such all processes that lead to rainfall operate here.

Above this layer is the stratosphere. This sphere according to Wright and Boorse (2011) operate under very calm conditions due to the ozone processes which safe guide against ultra-violet solar radiations thereby shelving off excessive heat from the sun. Due to its relative calmness, the stratosphere provides best options for international and domestic flights within its lowest layer. This layer of atmosphere extends from 15-52km above the surface. On the otherhand, the mesosphere gradually fixes in from 53km to 85km above stratosphere. The mesosphere is characteristically very cold due to the phenomenon of adiabatic lap's rate where atmospheric temperatures decreasewith increasing altitude and thus records – 10^0C most times. This layer of the air is also a transitional belt where at its top, temperatures begin to increase with increasing altitude.

Among the foremost functions of the atmosphere beyond providing ingredients of life for life forms and protection, the atmosphere has an ill-defined layer referred to as the ionosphere. This layer which is very active cuts across the mesosphere, thermosphere and occasionally the exosphere. It is an electro-magnetic layer with positive and negative charges. By virtue of its cosmic properties, it conducts radio waves guiding it to follow the contours of the earth thereby enhancing broadcast on radio and television both on local basis using low frequencies and international basis through high frequencies on long wave lengths and short-wave lengths respectively, (Bennett, Donahue, Schneider and Voit 2008). Of interesting note too is the fact that the earth's atmosphere through its numerous waves provides a forum for transmission of sound waves which enables sound including our voices to be moved from one source to another. This phenomenally means that without the atmosphere, there can be no communication between people no matter how close they stand or how high a sound volume is, it would not move out of its source, (Abagnali and Fabbri, 2008).

Furthermore, the atmosphere constitutes a dense layer above life forms whose friction burns out incoming solid bodies from outer space such as comets, asteroid or meteoroid. Otherwise, these could strike and destroy life on massive

scale. The moon for instance has no atmosphere and thus provides free-landing tickets for this debris from outer space when they miss or ship off their orbits. The strike force explains the numerous craters on the moon. The moon good enough has no life form on it that could otherwise get destroyed whereas the earth which hosts multiple life forms has an atmosphere which is particularly articulated for life support and protection, (Gilmour, 2020).

Rotation and Revolution

The earth as home of life forms including man is particularly articulated to provide for rest after a day's work. The phenomenal spinning movement of the earth around its axis which takes 23 hours, 56 minutes and 4 seconds to complete one turn naturally provides day and night during which mankind operates daily routines as day light lasts and takes some rest as darkness set in respectively. Meanwhile, the earth rotates at a speed of approximately 1,670km per hour. This is derived by dividing the equatorial circumference of the earth which is roughly 40,075km by the length of day, meaning that the earth rotates faster at the equator and at a speed that no airplane or jet has ever moved while at 45^0 North and South, this speed is about 1,180km, (Martini, 2014).

On the other hand, the earth also exhibits a second type of movement which is called revolution, the movement around the sun is done along a definite orbit which is elliptical in shape and lasts 365 days. To get the speed of revolution, we first take the distance from the sun (149,597,870km) or 92,955,807 miles, this is called the astronomical unit. The circumference of a circle is 2xnxr. Thus, the earth travels about 940 million km. since speed is derived by distance travelled over time taken, then 940 million divides by 365.25 days and then again dividing answer by 24 hours. Thus, the earth travels 2.6 million km a day or 66,627 miles per hour or 107,266km/hr. as it revolves. Yet, upon all this, we hardly feel the movement due to our relatively small size compared to it. Similarly, we do not see stars as racing objects in the night sky relative to this speed. This is because of the enormous distances between us and the stars.

Meanwhile, the movement results in seasonal changes by which, man's activities are determined. The four seasons of winter, summer, spring and autumn all translate to numerous human activities in tropical temperate and Polar Regions of the earth, (Pickering and Lewis, 1997).

Symbiotic Interdependence

It is interesting to note that both the biotic and Abiotic spheres of the earth manifest a symbiotic interdependence, where attributes of the physical environment

interdependent on one another and or the biotic environment for mutual co-existence, (Jarrett, 2019). One of the most critical interactions in an ecosystem is photosynthesis which is a base chemical reaction that drives most life on earth. For instance, life forms in all their ramifications are classified into producers, consumers and decomposer all of which perform critical and indispensable roles in sustaining the entire segmented whole. Thus, plants and algae produce energy through photosynthesis (in sunlight), consumers eat up other organisms for their energy. In this bracket are animals and man. From there, decomposers break down remains of plants and animals thereby returning nutrients to the soil. For decomposition to take place, the presence of water and soil under the action of living things (micro and macro organisms).

From the foregoing, it is clear that both the biotic and Abiotic components of the earth are brought together for the effective functioning of the planet. Within the context of the interactions, the soil according to Chapman and Reiss (1995) needs water and organic matter to boost its value whereas living organisms including man needs the soil to sustain. This complex inter-dependence manifest in a multiplicity of ways. Within the Abiotic sphere of the earth for instance, the soil gets nourishment from water to boost its quality and value. In the same vein, evaporation from the soils helps to build up rainfall thereby adding water sources, (Trikat 2010). Similarly, plants grow up on the soil where they thrive on the soil nutrients and manufactures energy through the biochemical process of photosynthesis from sunlight. The death and subsequent decomposition of these plants however returns nutrients to the soil under the auspices of water.

On the other hand, this same interdependence exists within the biosphere where man and some animals eat plants but only to die afterwards, decompose and return nutrients to the soil for luxuriant growth of plants. Again, when plants grow luxuriantly and attain maturity, the human source them as raw materials for general socio-economic development in agricultural and industrial as well as recreational activities. Furthermore, even within the animals' kingdom, some are carnivorous and feed directly on others. According to Ricklefs (1992), Bakar, Osman and Bachok (2015), life forms especially the humans must view the natural environment as a special commodity and power house that requires delicate handling and efficient utilization since this long-standing interdependence within the attributes of Abiotic and biotic environments of the earth is a rare cosmic articulation to enable life forms thrive on the planet sustainably.

Threats to Earth's Sustainability

In the course of routine interactions among the life forms of the earth on the one hand and between life forms especially man and the earth for survival, the planet is increasingly getting subjected to pressure that end agers its sustainability. Among such issues and challenges emanating from the interactions include the following.

Pollution

This refers to the addition of any substance or form of energy to the environment that rates faster than it can be dispersed or stored in harm.ess form. Pollution cuts across water, land and air attributes of the environment. The issues that surround pollution steam from human desires to improve on his well being through advancements in agriculture and industry where land clearing by use of herbicides and industrial wastes/dust tend to introduce chemicals into our waters, lands and the air we breathe in. the increasing number of vehicles, machineries, and factories in association with world population increase have in recent time aggravated the pace of environmental degradation in many parts of Sub-Saharan Africa, Asia and the Oceanic where mitigating measures are not in any way commensurable with the rate of degradation and corresponding implications on environmental and human health (Lavanya, Dhankar, Chikara and Soni, 2014).

Water for instance, which was hitherto considered as abundant has increasingly become a scarce commodity in developing nations. According to Ayaturan, and Altan (2018), this is due to increasing demand for irrigation and the expanding scope of factories which emit dust and gaseous substances into the air and water. Whereas the former depletes water sources, the latter tends to pollute and additionally deplete thereby translating to a scenario of water scarcity.

Deforestation

As earlier noted, the expanding wave of agricultural and industrial outfits has immensely contributed to massive depletion of vegetal resources. Before the development of human civilization, the planet earth was 60 million square km of forest. Today, less than 40 million remain, (Aquino and Bologna, 2020). On the other hand, the forests of the world or vegetal resources serve the planet earth and consequently the life forms thereof through special roles like oxygen production, carbon storage, soil conservation and nutrients cycling with the environment which go a long way to facilitate atmospheric purification and mitigate climate change. The forest also serves as home to many of the earth's terrestrial biodiversity, supply water and provide a source for livelihoods for the human society both as

food and income sources. Consequent upon such key roles played by the forests or trees generally within the terrestrial ecosystem, it becomes unlikely to even imagine the survival of many species of life forms including the humans themselves when the last three of the earth disappears.

Meanwhile alongside this trend of global deforestation are environmental complications of soil erosion and its attendant loss of farm lands as well as damage to property, loss of biodiversity where valuable flora and funa are brought under extinction thereby adversely affecting some aspects of socio-economic development such as tourism and recreation with the revenue and incomes thereof and disappearing/diminishing pride among nations and nation states or countries. In the same vein, a status-quo of disappearing forest is usually closely associated and accompanied by drought and desertification. This is because the moisture that disperses to the atmosphere through transpiration and its role in enhancing the rain formation process is phenomenally curtailed. This gradually reduces the amount and duration of rainfall in affected localities which in time leads to extreme draughts and or full-scale advancements of desert attributes, (Kaushik and Kaushik, 2014). From all indications against the background of this paper, the earth with increasing loss of its vital components is tending towards depreciation thereby degrading in its cosmic articulation to provide for life forms and of course calling for decisive intervention.

Soil Erosion and Degradation

This is the active displacement of the upper layer of soil thereby degrading it by the erosive agents such as running water, ice and wind as well as snow and plants. Soil erosion goes a long way in adversely affecting the environment and human activities. According to Sarbapriya, Ishitya (2011), the humans have increasingly factored the process and pace at which erosion proceeds. For instance, on a fresh spot, land clearing involving massive removal of trees and scrubs usually expose soil to the rain-splashing pressure which in the course of time unconsolidated the soil and removes it away in a gradual succession. This land clearing menace is always one of the first step in farming, industrial locations and settlement or urban expansion in man.

From all indications, natural conditions already exist that provide potentials for environmental catastrophes. These include steep slopes, flood plains, flash floods etc. Anthropogenic activities rather aggravate their occurrences and to some extent also initiate them. The cultivation of crops along slopes for instance tends to hasten the pace of soil erosion along the slopes.

Landslide

These are sudden movements of weathered materials down slope under the influence of gravity. The materials essentially include rock debris, earth or soils. According to Obong, (2007) Landslides are often triggered by disturbances in the natural stability of a slope either through the application of weight in a disproportionate manner or underlings of slopes through cultivation of crops or excavation for mining purposes which over-steepening of the bases of such slopes. Similarly, inflow of water and over-loading of slopes through accumulation of debris either by refuse dumping or other constructions all contribute to serious landslide cases.

Whatever the cause, landslides have a long-term history of bringing about natural and socio-economic devastations on the planetearth. Blockage of drainages, damage to property and loss of lives are among the main effects of this environmental mishap. It is interesting to note here that increasing world population has intensified the magnitude of occurrence of many environmentalcatastrophes. This is due largely to the fact that human activities have also intensified proportionately thereby translating to increased imbalance in the conditions that safe-guard against the occurrence of these catastrophes.

Beyond the aforementioned environmental issues and challenges that tend to bedevil the earth's ability to sustainably shelter life forms and mankind are flooding, lightning and thunder-storms, earthquakes and volcanic eruptions among other odd occurrences. All of above stated constitute natural hazards within the earth's environment and as such pose danger onto life forms of all sorts.

Conclusion

This paper has examined the planet earth from perspectives of personal observation, experience and documentary sources. Among other things, the paper focused on some of the earth's physical properties or characteristic features that make the planet to effectively function as the only home of man and other multiple life forms among all the other planets of the solar system and the entire cosmos. Special note is however made of the fact that apart from natural processes, the earth's teeming life forms and mankind in particular are alarmingly offsetting the delicate balance of nature that has for long made the third planet from the sun unique as the pride of nature hosting 8.7 million species of life forms and a substantial yet to be discovered. This is basically through agriculture and industry which though are fashioned up for his meaningful life style with agriculture as

source of food and income while industry for supply of goods and services, (Lugazo 2017).

The two anthropogenic activities have reduced the earth to such an extent that environmental catastrophes have heightened which in turn tend to hunt man and until the odd trend is reversed, the earth shall one day completely cease to function as home of life forms but phenomenally turn into a death trap for same.

Towards Enhancing the Earth as Home of Lifeforms

Having x-rayed the numerous complex articulations of the earth which make it the only home of life forms in the entire universe and the vital role they play in sustaining life in the face of numerous threats against the planet emanating from anthropogenic activities, the following measures are suggested with the view to boosting the planet's ability to effectively support life.

Among the foremost, large scale forestation programmes are hereby suggested. The forest as already noted in this paper plays important roles such as cycling of environmental nutrients, purifying the atmosphere and boosting rainfall processes, (Trikat, 2010). Against this background, it is clear that all life forms especially mankind are stakeholders of the vegetal cover of the earth and must therefore do everything possible to protect same. By helping to reverse the ugly trend of forest depletion, the planet's functioning efficiency would be enhanced and the entire life forms would at the receiving end of the inherent benefits.

Secondly, the control of pollution is imperative in order to save the earth's nutrients and enhance the planets sustainability. Pollution has adversely affected earth's waters, land and air. All bio-degradable wastes can be buried aground while solid waste materials that do not easily rot away can be recycled thereby converting them into other uses. Additionally, the introduction of e-library in educational institution can reduce amount of paper wastes that would be discarded into the environment.

Furthermore, poverty reduction is also among the front-line efforts aimed at phenomenal enhancement of the earth's sustainability. It is interesting to state here that the poor according to Ayo (2012) live a lifestyle that depends directly on the earth's natural environment. As such, they are also accountable for much of the disappearing attributes. For instance, the poor live by cultivating the soil on a permanent basis which loosens if making same more prone to erosion. They also clear land thereby exposing same to speedy weathering process that leads to degradation. The poor similarly harvest fruits, leafy parts of plants as well as stems and roots for food and income. It is common place to find fuel-wood in many rural

areas of Sub-Saharan Africa on sale as a steady employment. Thus, they contribute to large scale deforestation. The poor are yet still, the main brains behind vandalization of development efforts/projects. It is therefore imperative to minimize poverty in any meaningful efforts involving projects aimed at saving the planet earth. This is simply because the poor have limited aspirations and do not value investments especially those of long-term affiliations, (Todaro and Smith 2011).

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