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The Relational Concurrence of Global Warming and Economic Development: The Danger in Developing Countries

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Abstract

An attempt has been made to examine the concurrent relationship between global warming and economic development focusing on the danger it inheres in developing countries. To achieve this, the paper commenced with the conceptualization of global warming and economic development, the natural and human causes of global warming, the general consequences of global warming and the international initiatives directed at combating global warming. Also, the nexus between global warming and economic development was highlighted and specifically, the danger of global warming in developing countries was the major part of the discourse. Ultimately, the paper concluded that both developing and developed countries should sink their differences, cooperate maximally to conscientiously implement the strategies for combating global warming, so as to ensure that the means of subsistence for future generation is guaranteed.

Key words: Concurrence, global warming, economic development, Greenhouse gas, and environmental degradation.

Introduction

Global Warming has become the leading environmental concern and point of controversy among the human race. It is still being perceived as a mystery but many writers and scholars have been trying to demystify the phenomenon. Much of the contention now is on the causes of global warming between the optimists and pessimists. The latter contends that humans are the cause of all or most current global warming in the pursuit of their means of subsistence. While the former attributes a good part of the current global warming to natural cycle rather than human activity. Hitherto, this polarity is being reversed by those scientists who adopt a position of neutrality. They believe that global warming is the result of both natural and human activities but which is contributing more is still under investigation (Rougke, 2009:520-522).

Conceptual Discourse

Many scholars and writers have given various and varied definitions of global warming. Simply put, it is an average increase in the temperature of the atmosphere near the earth's surface and in the troposphere, which can contribute to changes in global climate patterns. In practical usage, global warming refers to the warming that can occur as a result of increased emission of greenhouse gases from human activities. Or it could also be referred to as a slight but noticeable increase in temperature at the planetary scale. With these conceptualizations, it is clear that the effects are not just merely warmer weather, but an erratic climate that if left unchecked could cause pervasive natural disasters and species extinction (Oyeshola, 1995:62).

Ruddiman (2005) conceives global warming as the process which deals with the heating up of the earth when the temperature of the earth rises. As he puts it, climate changes when elements like carbon dioxide, nitrogen oxide and water vapour trap the heat from the sunlight and thus increase the temperature of the earth. Global warming according to him affects all parts of the earth in different manners and it is one of the severe issues facing humanity today. Hence the scientist community is warning the world that it is a very severe issue that requires a serious attention.

For Budyko (2007), global warming is the unusually rapid increase in earth's average temperature over the past century primarily due to the greenhouse gases released as people burn fossil fuels. The global average surface temperature according to him rose from 0.6 to 0.9 degrees Celsius (1.1 to 1.6^0F) between 1960 and 2005 and the rate of temperature increase has nearly doubled in the last 50 years. Despite ups and downs from year to year as he explained, global average surface temperature is rising and that by the beginning of the 21st century, earth's temperature was roughly 0.5 degrees Celsius above the long-term (1951-1980) average.

In another vein, global warming as posited by Hoffman (1983) is the observed increase in the average temperature of the earth's atmosphere and ocean in recent decades and its projected continuation into the future. By his findings, global average near-surface atmospheric temperature rose from 0.6 to 0.2^0 Celsius (1.1 to 0.4^0F) in the 20th century.

On the whole, stemming from the above definitions, the concept of global appears to be missing and the emphasis is on warming. Therefore, one can say that global warming is simply the increasing temperature on earth that affects every part of the world whether developing or developed countries alike. Pertinently, the effect is felt everywhere but the degree varies from one region to another especially from the temperate zone to the tropical zone.

Causes of Global Warming

Global warming has been attributed to many causes. But for ease of comprehension, it is needful to look at them from two perspectives. They are the natural and human activities advanced by various writers.

Natural Causes: These are discussed under the following sub-headings:

1. **Greenhouse Effect:** This results from greenhouse gases which strongly increase the earth's temperature by 24% with carbon monoxide contributing to about 12% of it. These greenhouse gases emanate mostly from extraction, production and processing of fuel from its present location by mining, drilling, wells construction of dams, refining (refinery), oil spillages and some cases of electricity generation.
2. **Solar Activity:** The sun is the major source of energy to earth. Solar activity or variation is another cause of global warming which occurs

due to emission by the sun. When solar variation occurs, along with Earth Climate and affects the orbital force, the tendency is for the temperature to rise.

3. **Volcanic Emission:** Is an opening of the earth surface or rupture in a planet surface or crust which allows hot magma, ash and gases that are dangerous to human and environment to erupt or belch.

Human Causes: These are discussed in six fold:

1. **Burning Fossil Fuel:** Humans depend mainly on the use of fossil fuels in the pursuit of subsistence and industrial development. Fossil fuels are formations or materials formed from organic remains of prehistoric plants and animals. They are coal, oil and gas. According to Rourke (2009), coal provides around 28% of human energy consumption, oil provides 40% and gas 20%. These figures he said are subject to change with time. Other fossils exist but are still under investigation. These fossil fuels contribute greatly to human existence in the areas of Electricity generation and Transportation gas at power stations. But the main drawback of fossil fuel is pollution as it burns, it produces carbon monoxide which contributes largely to warming the Earth.
2. **Population:** There has been an explosive growth of population especially in the third world nations and thus creating enormous environmental pressure. These increasing numbers of people are being absorbed particularly in the developed countries by new industrial processes, whose wastes are causing environmental damage. While population growth and industrialization have given rise to urbanization, the movement of people from rural settlements to cities caused an explosive growth of energy use.
3. **Automobiles:** The invention of machines to replace human and animal power and various means of transportation has contributed strongly to the burning of fossil fuels which are the primary source of energy to automobiles. When fossil fuels burn, they emit massively carbon monoxide into the atmosphere.
4. **Deforestation:** This occurs as a result of the removal of trees from the forest and farmland in order to improve human wellbeing or the environment through the use of wood, in the creation of housing for

shelter or as fuel or coal, for pasture for livestock and for industrialization such as building for companies, schools, hospitals etc. Deforestation removes the shade against suns ultra-ray on the earth surface and thus destroys the green plants which do contribute to the manufacturing of oxygen.

5. **Smoke Belching Companies:** Factories that belch smokes are increasing in the quest of development in every country particularly in the advanced industrialized countries. Faring of gases from these factories releases much of carbon monoxide into the atmosphere which is detrimental to mankind.
6. **Use of Chemicals:** The manufacturing of chemicals and the use of fertilizers for agricultural purposes live behind great waste and pollution to the soil which in turn contaminate water, land and air. The use of some Toxic chemicals for processing or manufacturing also results in atmospheric pollution.

General Consequences of Global Warming

The general consequences of global warming are:

1. **Rising Sea Level:** According to Bryant (1995), when the weather gets hotter, ice melts. Global warming as he explained makes it warmer at the ice caps at the North pole and South Pole, causing great amount of ice to melt, letting all the fresh amount of ice to melt, letting all the fresh water flow into the ocean. As he further explained, tons and tons of ice will melt if it gets hot enough and this will cause sea levels to rise dramatically and can rise by as much as 1.4m, while low-lying coastal areas will flood and maybe even submerged. It is estimated he said that two-thirds of the World's population live within 150km of the coastline. Therefore, he believes that millions of homes and lives will be lost as coastal areas go underwater. In the words of Bryant, "many small islands are also in dangers, the sea water would flood farm areas and damage crops leading to all fall in food production and in some places, it is very crowded". So if they all have to move inland he believes there could be a shortage of space in certain areas and results in overcrowding.
2. **Extreme weather:** A change in temperature would mean a significant change in weather. Many places will continue to get warmer, especially

at night and in winter. As explained by Bryant, global warming can intensify winds, rain and storms and this would change the overall climate of Earth and many chain reactions would follow. Bryant believes that the climate of the future will be very different from the one we are having now. There are already reports of storms, rains and winds being much stronger in velocity than the ones we are used to having. They are said, uproot trees, blow down houses, flood entire towns and bring disasters. One can only imagine what disasters they might bring to humans when they become intensified.

3. **Droughts and floods:** When the temperature rises, water evaporates quicker and the evaporated water is likely to condense to form clouds and fall as rain or snow. However, the rainfall will not be evenly distributed. In dry areas where water is scarce and the plant life depends on water from lakes and rivers and increased evaporation is likely to worsen the dry conditions and a drought occurs. The plant life would then die and there would be less plants to take carbon dioxide out of the air. This would make crops die and hunger and or thirst would overtake many unfortunate people, famine might be an indirect result as food production will drop for crops might not be able to adapt to the extreme conditions in wet areas, more water will be evaporated and will eventually fall in these areas as rain or snow. This might result in floods. (Bryant, 1995:34-36).
4. **Ecosystems:** This will be stressed although some managed agricultural and forestry systems will benefit, at least in the early decades of warming. Uncounted valuable species, especially in the Artic, mountain areas and tropical seas, must shift their ranges. Many that cannot will face extinction. A variety of pests and tropical diseases are expected to spread to warmed regions. These problems have already been observed in numerous places.
5. **Increased carbon dioxide:** Increased carbon dioxide levels will affect biological systems independent of climate change. Some crops will be fertilized as will some invasive weeds. The oceans will continue to become markedly more acidic, gravely endangering coral reefs and probably harming fisheries and other marine life. (Ibid:37).

Evidently, these consequences will take several centuries to be fully realized, as the Earth settles into its new state. It is probable that, as in the distant geological eras with high CO_2, sea levels is said will be many tens of meters higher and the average global temperature will soar far above the present value, a planet grossly unlike the one to which the humans are adapted. Therefore, what can people do about global warming and what should we do?

International Responses to Global Warming

The concerns for environmental pollution problems are generally understood to be global in nature. As a result, the United Nations Environment Programme (UNEP) was set up as a major global environmental agency. Its main contribution aimed at combating the effects of global warming has been to coordinate the "Earth watch" network that gathers worldwide data on the environment and monitors any changes in the atmosphere that could pose warming and thus dangers. In these efforts, according to Rourke (2009), UNEP has worked closely with the world meteorological Organization (WMO), although as he puts it, both agencies remain information gathering more than rule-making organizations.

Despite some temporary benefits of global warming most notably increased food production due to more rainfall, longer growing seasons at mid to high latitude and fewer deaths associated with cold weather, the scientists believed that these benefits will soon be outweighed by increased flooding, hunger as well as more deaths and diseases worldwide. Against this, the international community has taken several steps to address or to at least mitigate the effects of global warming under the auspices of the United Nations (UN).

Recently, there have been success stories in respect of international initiatives to promote collective actions against global environmental degradation. Prominent among them are the 1972 United Nations conference on Human Environment (UNCHE), the 1976 protection of the Mediterranean Sea against pollution (The Barcelona Convention), the 1985 Vienna Convention for the protection of Ozone Layer, the 1989 Basel convention on the control of Trans boundary movements of Hazardous waste and their Disposal, the 1987 Montreal Protocol, the 1992 Rio convention (Earth Summit 1), the 1997 Kyoto Protocol, the 2002 Earth Summit II and 2010 Cancum Summit (Oyeshola,

1998:, p. 84). The highlights of the discussions and decisions of these conventions and summits centre around the following points:

1. agreement to ease pressure on the climate and to work towards a global solution through annual meetings to discussing policies;
2. encouragement of the development of national strategies, plans and policies and processes to combating environmental degradation;
3. alternative sources of energy to fossil fuels;
4. measures to totally phase out chlorofluorocarbons (CFCs)and other ozone depleting chemicals;
5. the need for the management, conservation and preservation of all types of forest and land;
6. commitment of nations especially the developed ones to cut greenhouse (GHG) emissions;
7. the need to converting to non-Ozone Depleting Substance (ODS) technologies;
8. binding standards and treaties requiring nations to reduce their emissions of carbon dioxide, methane and other greenhouse gases responsible for global warming;
9. establishment of multilateral fund (MLF) to provide financial assistance to developing countries especially those that abide by binding standards; and
10. monitoring and implementing agencies such as the United Nations Development Programme (UNDP), the United Nations Environmental Programme (UNEP), the World Bank (WB) and the United Nations Industrial Development Organization (UNIDO).

As can be seen, the international community is making strenuous efforts at solving environmental problems. Perhaps, the problem may be whether nations abide faithfully by the set standards and treaties of these conferences.

Economic Development

Economic development first became a major concern after the World War II. As the era of European colonialism ended, many former colonies and

other countries with low living standards came to be termed underdeveloped countries, to distinguish their economy with those of the developed countries, which were understood to be the United States of America, Canada, those of Western Europe, most eastern European countries, the defunct Soviet Union, Japan, South Africa, Australia and New Zealand. As living standards in most poor countries began to rise in subsequent decades, they were renamed "the developing countries.

Many writers such as Jhingan (2002) contends that there is no universally accepted definition of what a developing country is, neither is there one of what constitutes the process of economic development. Developing countries are usually categorized by a per capita income criterion and economic development is usually thought to occur as per capita incomes rise. A country's per capita income (which is almost synonymous with per capital output) is the best available measure of the value of the goods and services available per person, to the society per year. Although, there are a number of problems of measurement (which are beyond the scope of this paper) of both the level of per capita income and its rate of growth, these two indicators are said to be the best available to provide estimates of the level of economic wellbeing within a country and of its economic growth (Jhingan, 2002:3-5).

Akande and Azike (1997) define economic development as the process of growth in both absolute and real per capital incomes of developing countries and the basic fundamental changes in the structure of their economies so much that growth potential is generated from within a particular economy. They also defined it as economic growth plus change, the change being interpreted as the achievement of better health, better education, better standard of living and an expanded range of opportunities in work and leisure for the poor people. Put differently, economic development is a sustained increase in per capital production of goods and services accompanied by a perceptible qualitative improvement in the living conditions of the people, in productive techniques and in the social and institutional organization (Akande and Azike, 1997:406-408).

According to Kindleberget (2002), economic development implies both more output and changes in the technical and institutional arrangement by which it is produced and distributed. He made a clear distinction between economic development and economic growth. To him, the latter involves not only more

output derived from greater amount of inputs but also greater efficiency such as an increase in output per unit of input, while the former as he explicated goes beyond this to imply changes in the composition of output and in the allocation of inputs by sectors.

In the opinion of Friedman (2009), growth is "an expansion of the system in one or more dimensions without a change in its structure and development as an innovative process leading to the structural transformation of social system". To him, economic development is a wider concept than economic growth. In the words of Myrdal (2007), "economic development is related to qualitative changes in economic wants, goods, incentives, institutions, productivity and knowledge or the upward movement of the entire social system". As he explained, economic development embraces both growth and decline that economy can grow but it may not develop because poverty, unemployment and inequalities may continue to persist due to absence of technological and structural changes.

Generally, economic development is the attainment of socio-economic advancement of a community, state or country or parts of it at any given point in time. The properties of the concept of development may include:

1. increase in per capital income and its even distribution;
2. availability of employment opportunities;
3. increased supply of skilled manpower;
4. development of infrastructural manpower;
5. indigenization of economic activities as well as improved standard of living and stability;
6. diversification of economic activities etc. (Ibid,23)

According to Akande and Azike (1997), the objective of economic development is the improvement in the general level of applied technology and of human skills for increasing the production of goods and services within the framework of stated social goals. Jhingan (2002) analysed four ways by which economic development can be increased. They are:

1. the GNP in terms of real national income over a long period;
2. the GNP in terms of real per capita income over a long period of time;
3. welfare in terms of increasing flow of goods and services; and

4. social indicator in terms of basic needs such as Health, education, food, water supply, sanitation and housing. For Kuznets (2004), six major characteristics of economic development are paramount:
1. high rate of Growth of per capita production population;
2. the rise in productivity;
3. high rate of structural transformation;
4. urbanization;
5. the outward expansion of developed economies; and
6. international flow of men, goods and capital.

Akande and Azike (1997) assert that whatever the controversy over the appropriateness or inappropriateness of the expression such as underdeveloped; undeveloped; less developed, developing, poor, backwardness, one thing is in controvertible – that poverty, hunger, unemployment and squalor predominate in the countries so designated. Development therefore, as they explained implies a desirability for change, a rectification of this abnormal or undesirable situation. Thus, the issue of poverty and underdevelopment is so cardinal to the discussion of development that economic development has come to be regarded as referring to the problems of the developing countries while economic growth refers to the problems of the developed countries. With specific reference to the developing countries therefore, economic development can be viewed not as an end in itself but a means of an instrument of overcoming persistent poverty and a real hope for improvement.

Nexus between Global Warming and Economic Development

The linkage between global warming and economic development can best be comprehended from the analysis of the attributable causal factors of increasing temperature. They include fossil fuels, Automobiles, Deforestation, Smoke belching factories, use of chemicals and solar activity.

As revealed in the preceding paragraphs, the by-products of both natural forces and deliberate strategies by humans aimed at making the environment worth living are global warming and economic development. As nations pursue development, coal and oil-burning power plants as well as solar (in a minimal scale especially in LDCs) are heavily dependent on to generate electricity for use in residential buildings, schools, hospitals, business houses, stadia, offices, refrigeration and factories. Concurrently, just as fossil fuel power plants generate electricity, they also belch massive amount of greenhouse gases into

the atmosphere. While solar (from sun) which is used to generate electricity also bring about warming the environment.

Similarly, smoke belching companies that manufacture automobiles, cement, paints metallic rods and poles etc. for mobility and infrastructural development discharge substantial amount of greenhouse gases into the atmosphere. The importance of these factories and their products cannot be overemphasized. Thus, human efforts directed at attaining and sustaining economic development simultaneously translate into increased greenhouse gases which constitute the phenomenon of global warming.

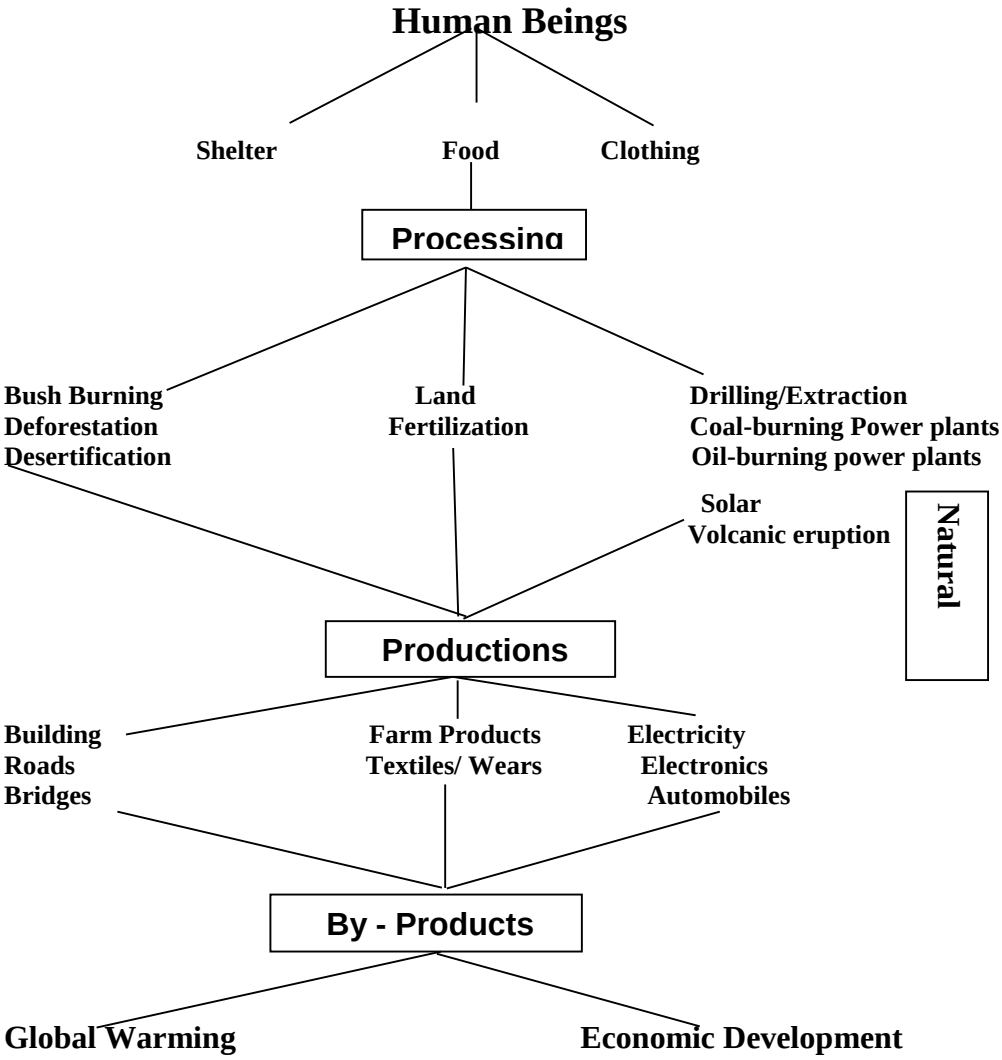
Also, deforestation inheres the utility for farming, rearing of livestock and settlements. Timber and Charcoal are derived from deforestation. Also, it is used for buildings, parks and other developmental projects. Concurrently, deforestation brings about changes in the atmosphere. It emits a high quantity of carbon dioxide and often leads to global warming. With deforestation, the absence of trees to evaporate away water results in a much drier climate.

Lastly, some chemicals like fertilizers are used to boost agricultural products. Some also that are toxic in nature are used for processing, manufacturing and preservation. Unfortunately, these chemicals contaminate the soil and water and also bring about atmospheric pollution.

From the foregoing discourse, it is obvious that there is a strong relationship between global warming and economic development. Both being the by-products of some natural designs and efforts advertently and inadvertently made by humans toward boosting their welfare and standard of living. Put mathematically:

NF + HF = ED + GW. While NF represents natural factors, HR – human factors, ED – economic development and GW – global Warming. The by-products being ED and GW which are positive and partially positive respectively in the subsistence and sustenance of biodiversity thus affirming the nexus between the two phenomena. The whole process starting with human beings in an effort to acquire the basic necessities of life through processing and productive activities leading simultaneously to global warming and economic development is depicted below diagrammatically.

Figure 1: Structure of the Nexus between Global Warming and Economic Development



Source: Osaghae, F.S.O. (2009). Environment in World Affairs. Benin City: Neraso Publishers, p. 15.

Specific Consequences on Developing Countries: From the general consequences discussed earlier, it is clear that no person on earth will escape

the effects of global warming. These effects are being and or will be felt in every region and at all levels of the society. Pachauri (2007) posits that it is the poorest of the poor in the world and includes people even in prosperous societies who are going to be the worst hit. According to him, people who are poor are least equipped to be able to adapt to the impacts of climate change and therefore, in some sense, this becomes a global responsibility. Specifically, the consequences of global warming as they impinge on the developing countries which is the thrust of this paper is presented below in four fold. They are:

1. **Desertification:** Many scientists believe that one of the consequences that is characteristic of global warming is the expansion of the world's desert, most notably Sahara. In fact, some scientists even believe that deserts are slowly retreating and the question being posed is how can water and life start to grow in these dry places due to warming trend?

   According to Haluzan (2011), the evidences that support this view are satellite pictures of North Africa that seem to show the pattern of areas of the Sahara retreat. As he explained, global warming would increase the temperature on earth and would result in more evaporation of the oceans and thus results in more rainfall. The more rainfall, there is the more deserts that are said likely to retreat making way for new life to flourish. In fact, this theory is based on the satellite view on only Sahara Desert. The question is what then will be the effect on Africa and other developing countries if satellite is beamed on all the deserts in Africa such as Libyan Desert, Namib Desert, Kalahari Desert and other regions worldwide. This in fact is a clear case of a looming humanitarian catastrophe, threatening ultimately the entire third world and indeed global security and survival (Haluzan, 2011, p. 12).

2. **Financial Commitment:** The cost of controlling global warming is astronomical. From the report (2009) of the UN sponsored Intergovernmental Panel on Climate Change (IPCC), projections of what it will cost to protect against the consequences of global warming range very widely. As explained in the report, the problem is that studies make different assumptions about how much danger there is from flooding, violent weather, the loss of agricultural land to arid conditions and many other factors that environmental pessimists and optimists stress and minimize respectively.

Also, the diverse cost estimates of preventing or repairing damage as explained in the report, to the pessimists, a recent study by the British government estimates that global warming costs could eventually rise 5% to 20% of the world's annual Gross Domestic Product (GDP), a level that is associated with world wars and the Great Depression. According to Rourke (2009), one economist predicts that global warming will cost the Economically Developed Countries (EDCs) less than 1% of their collective GDPs through 2050. Similarly, a Danish Scientist argued that the damage arising from global warming in the next half century would amount to be between $5 trillion and $8 trillion. If this is the case, it is obvious that the cost of controlling global warming is highly astronomical. With developing nations, the question is how can they raise such a huge amount in the face of their crippling economy? This then poses a serious problem and a real danger to them.

3. **Fuel Prices:** The effects of global warming on fuel prices constitute a major concern to developing countries. Most machineries, vehicles and plants that emit carbon dioxide, carbon monoxide and other greenhouse gases (GHGs) into the atmosphere use oil in their operations. Now that there is a clarion call to discourage the use and or cut down the use of GHGs, this thus meant a reduction in the use of Oil. Indeed, many countries arising from the series of international conferences on global warming have been given a mandate to deliberately reduce their carbon emissions. Perhaps, this is why Organization of Petroleum Exporting Countries (OPEC) raise alarm that mandated limits on carbon emissions might depress the price of oil, their principal source of revenue.
4. **Limit to Growth and Sustainable Development:** In 1972, alarms were sounded at the United Nations Conference on Human Environment (UNCHE), that the world would soon be out of fuel and other raw materials due to increasing consumption. This then made it needful to call for a limit to growth in world population, consumption and industrialization. This was particularly spelt out in the 1972 study by the Club of Rome entitled "The Limits to Growth". This concluded that economic growth would have to be halted in the late twentieth century if civilization was to survive (Rourke 2009:494).

By the time the Earth Summit was convened in 1992, the call for limit to growth was replaced with a call for sustainable development. This offered a middle path between no economic growth and unrestrained economic growth. There was the contention that the developed and developing countries could continue to expand their economies and avoid environmental disaster as long as they abide by the environmental policies that sustained the ecosystem (Ibid:495).

Despite the disagreement about the call to limit growth for survival, the continued existing environmental problems inherent in global warming made the warnings about the finiteness of key resources valid. Obviously, these environmental problems weigh heavily more on the developing countries since limit to growth and or sustainable development adversely affect their development. The question that readily comes to mind here is what growth will be limited in the developing countries? Is it their ailing economies where growth appears to be moribund? This in fact poses a serious danger for the developing nations in their quest for industrialization and economic development (Oyeshola, 1998:44-52).

Conclusion and Recommendations

Global warming has been posited as an increasing temperature on the earth that affects both developing and developed countries. The magnitude of the impact is what varies from one region to another but it is pertinent to say that it is a biotic scourge that pervades the entire universe. Until recently, global warming was conceived as an inscrutable phenomenon and it is still being perceived as a mystery by some writers. Contrarily, the writer postulates as revealed in the preceding paragraphs, that evidences abound that global warming is real. It is a problem of the rich and the poor irrespective of the region or the place domiciled.

Indeed, global warming will persist as long as it is an inherent problem in the process of providing the basic necessities of life and especially with the quest for a better living standard. The goals of every country among others are to be able to feed and cater for its increasing population and or urbanization, maintain and sustain a high standard of living for its people, develop skilled manpower and employment opportunities which are the indices of economic development. To achieve this, the nation needs surplus food and textiles,

buildings for residences, offices, hospitals, schools etc., electricity and electronics as well as automobiles, roads and bridges. To produce these infrastructure, oil and coal burning power factories, Drilling and extraction industries, construction companies, Textile factories, Agricultural ventures etc. are needful. These developments inhere such problems as oil spillage, smoke belching, desertification, bush burning, species extinction etc. which constitute global warming. The question that readily comes to mind is can these factories be closed to avoid these inherent problems? In the words of Rourke (2009), "if we closed all Linfen's polluting factories, the environment would clear up … but then a new problem would emerge – how would people afford to eat?".

Evidently, one can say cursorily that one of the international responses to addressing this problem was the adoption of the 1972 limit to growth in world population, consumption and industrialization, which was replaced in 1992 with sustainable development which offered a middle path between no economic growth and unrestrained economic growth. The contention that arose between developing and developed countries made the policies seemingly unimplementable especially with the position of the former which saw the policies as a halt on their development drive (Oyeshola, 1998, p. 94).

Truly, the developed countries as contended by the developing countries are majorly responsible for global warming. How they argued, can they sacrifice their development to solving problems that they are marginally contributors. While to the developed countries, global warming is a problem that require urgent resolution in tandem irrespective of the geo-political demarcation. Then, one is tempted to ask how long can this contention persist? If no shift on grounds by both sides, it may become an endless controversy with dire warnings of impending danger on the whole world especially on the developing economies as they strive to catch up with the developed economies. What is required now is conscientiousness on both sides. To continue to ascribe blame is suggestive of imminent catastrophe.

Pertinently, while the writer solicits for the understanding of the developing countries that the developed countries perhaps had crossed the equator before the realization, consciousness and the comprehension of global warming as an indispensable problem, the developed countries should as a matter of necessity assist the developing countries with the requisites such as the technology and adequate funds to secure their cooperation in the efforts to

mitigating the effects of global warming. Thus, the issue of the major or marginal cause of the problem in question should be deemphasized. Both developing and developed countries should cooperate maximally in formulating, embarking and implementing policies geared to peter out global warming. Some of these policies and or strategies are:

1. Re-orientation of the Citizenry;
2. Coordination of scientists' Reports;
3. National funds for global warming;
4. International funds for global warming;
5. Regulation of the use of greenhouse gases;
6. Control of bush burning;
7. Population control;
8. Strict adherence to binding targets;
9. Effective use of international monitoring Agencies; and
10. Alternative to fossil fuels (Osaghae, 2009, pp. 10-11).

However, if we agree that economic development plus global warming equal high standard of living which is the goal of any responsive and responsible government. It is therefore necessary for both blocs to sink their differences, cooperate maximally to conscientiously implement the strategies to combating global warming to ensure that the means of subsistence for future generation is guaranteed.

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