AN ASSESSMENT OF GLOBAL CLIMATE NEGOTIATIONS OF THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

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ABSTRACT

This paper examined the factors that are responsible for the long-drawn-out efforts towards achieving globally binding long-term agreement on reducing the emissions of greenhouse gases. The paper argues that the economic consideration of the contending countries is the main reason for the failure to achieve a long term globally binding agreement on the reduction of the emissions of greenhouse gases. Yet, an examination of the politics of global climate negotiations cannot be comprehensive without looking into the scientific basis that in part influences the positions of the negotiating parties. The paper is therefore divided into three sections. The first section provides an exploration of the issues in contention over the science of climate change and the major conclusions of the Intergovernmental Panel on Climate Change (IPCC) on the climate questions. The second section explores the history of the global climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC).While the third section examines the link between the political/economic considerations and the failure to achieve globally binding agreement to cut the emissions of greenhouse gases. The findings revealed that, although the economic consideration of the developed industrialized countries takes precedence over environmental security challenges, the contention over the science of climate change also play a significant role in playing down the urgency with which the threats posed by climate change need to be treated. Consequently one of the recommendations of the study is that, the most vulnerable countries to the impacts of climate change must reconsider their strategies before the next climate negotiation in Paris in 2015.

Key words: Climate change, United Nations, Framework convention

INTRODUCTION

The concerns over the inability of the parties to the United Nations framework Convention on Climate Change (UNFCCC) to achieve a long-term agreement on greenhouse gas emissions reductions is partly informed by the growing global energy demands (which some projections expect to double by the year 2050), and partly because of the continuous heavy reliance on fossil fuels as the main sources of energy. There are currently 195 Parties to the United Nations Framework Convention on Climate Change (UNFCCC), with a nearly universal membership. The main objective of the Convention is to achieve the stabilization of greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the

climate system. The United Nations Framework Convention on Climate Change is the parent treaty of the Kyoto Protocol which is the first protocol agreed to by some of the signatories to the UNFCCC at the Third Conference of the Parties (COP3) in Kyoto, Japan in 1997. The Kyoto Protocol was ratified by 192 of the UNFCCC Parties; came into force on the 16th of February 2005 after the required number of countries that ratified the protocol had deposited their instruments of ratification. For the first commitment period of the Kyoto Protocol which expired in 2012, 37 States, consisting of highly industrialized countries and some countries in transition to a market economy had legally binding emission limitation and reduction commitments. In other words, some of the Annex 1 (developed) countries agreed to cut their emissions of greenhouse gases to the level of their 1990 levels by 2012 but exempted developing countries (Annex 2 countries).

In 2012, the Doha Conference of the Parties to the Kyoto Protocol adopted an amendment to the Kyoto Protocol, to serve as the second commitment period under the Protocol. However the second commitment period falls short of the expectations of the Intergovernmental Panel on Climate Change (IPCC), and many other stakeholders globally.

The science of climate change provides the basis for reaching any global agreement. However, there are two major issues in contention among climate scientists that have direct and indirect bearing on the global efforts to cut the emissions of greenhouse gases. The first contention is over the question of whether or not the climate is changing. The debate over this question has largely been settled. Climate change is now globally recognized as a fact of the 21st Century and most of the climate change optimists have been 'converted'. Consequently much of the focus of the debate shifted to the question of - why is the climate changing. Hence the contention is between the climate scientists who are convinced that climate change is driven by human activity through the emission of greenhouse gases into the earth's atmosphere and those who are not convinced that climate change is caused by human activity.

Consequently while the mainstream climate scientists and environmentalists are pushing for legislations particularly within countries that are the major emitters to cut the emissions of these gases especially the main greenhouse gas Carbon-dioxide (CO_2), the climate change optimists or global warming skeptics such as Idso and Singer (2009) and McLean (2009) have the view that nothing can be done to halt or reverse the current global warming trend.

As it stands, most governments across the world have accepted the conclusions of the mainstream scientists including the past and present administrations of the United States of America, as presented by the Intergovernmental Panel on Climate Change (IPCC) that, global warming is caused by human activity through the emissions and concentration of greenhouse gases in the atmosphere. Hence global efforts are made through the platform of the United Nations Framework Convention on Climate Change (UNFCCC) to achieve global agreements to cut the emissions of these gases. The central objective of the paper therefore is to examine and analyse all the factors that have hindered a speedy achievement of a globally binding greenhouse gases emissions reduction agreement.

MATERIALS AND METHODS

The data is essentially ex-post facto data; obtained largely from reports of the negotiating parties to the Conferences of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) as well as climate science data obtained mainly from reports of the Intergovernmental Panel on Climate Change (IPCC). Analysis and interpretation of the data was done qualitatively.

HISTORICAL OVERVIEW OF CLIMATE NEGOTIATIONS

Over the past several decades many international conferences were organized to highlight the effects of man's activity on the environment and the danger posed by climate change. For example the 1972 Stockholm Conference (The Stockholm Conference on the Human Environment), which according to Leroux the outcome of which characterized the global situation as "The two worlds of Man, the Biosphere he inherited and the Techno-sphere he created are in disequilibrium and virtually in conflict and man finds himself in the middle of that conflict" (Leroux: 2005: 26). Also important was the World Climate Conference which took place in Geneva Switzerland in 1979- which further confirmed climate change as a common global and urgent problem and therefore issued a declaration that called on governments to work towards addressing this problem.

However, besides the 1987 Montreal protocol that saw the phasing out of the substances chlorofluorocarbons (CFC) which are responsible for depleting the ozone layer which prevents ultra-violent sun rays from reaching the earth, the first global conference organized to address the concerns on climate change and which primary objective was to create a platform on which international treaty can be achieved to tackle the threats that climate change poses to the environment by the United Nations was the Rio de Janeiro in Brazil conference in June 1992: the UN Conference on the Environment and Development (UNCED).

According to Bert Bolin- The first Chairman of the Intergovernmental Panel on Climate Change (IPCC), the First Assessment Report (FAR) of the IPCC kick started the process of creating the United Nations Framework Convention on Climate Change. In other words, the IPCC First Assessment Report provided the basis on which the UNFCCC was created. (Bert Bolin: 2007: 69). The Rio Conference was therefore the first global conference that aimed at creating a long term international agreement to tackle challenges of climate change. The outcome of which was the first global environmental treaty known as the United Nations Framework Convention on Climate Change United Nations Framework Convention on Climate Change (UNFCCC).
Article 2 of the UNFCCC states the objective of the Convention thus:

> *The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner (United*

Nations Framework Convention on Climate Change-UNFCCC, 1992) See Appendix 3.

Although the Rio UNFCCC Treaty did not set any binding limits on the emission of greenhouse gases on any individual country, many important provisions are contained in the Convention that will facilitate the eventual setting of binding limits on the emissions of greenhouse gases. For example Article 17 (Protocols) paragraph1provides that "The Conference of the Parties may, at any ordinary session, adopt protocols to the Convention". This provision provides the mandate for the upgrading of the Treaty towards achieving the objective of the Convention.

Consequently since the Rio conference, regular review of the implementation of the convention through the Conferences of the Parties (COP) and the negotiation of new agreements, protocols or accords in line with the provisions of the convention are being carried out.

THE ISSUES IN CONTENTION OVER THE SCIENCE OF CLIMATE CHANGE

There are several questions that climate scientists are contending with, with regards to climate change. One of which is why is the climate changing? This section of the chapter will examine the issues in contention over this question; which is yet to have universal consensus. On the one hand of the disagreement over this question are the mainstream scientists who are convinced that climate change is caused by the emissions and concentration of greenhouse gases in the atmosphere, the biggest of which is carbon dioxide ($C0_2$), emitted through the burning of fossil fuels like coal and oil in generating electricity, industrial productions, exhumes from motor vehicles and many other uses. Therefore they argue that, the continuous emission of these gases into the atmosphere is dangerously interfering with the climate system; consequently climate change is caused by human activity. They therefore warn that, if dangerous climate change is to be avoided, the emissions of the greenhouse gases must be cut and stabilize around 2^0C of the Earth's pre-industrial temperature (Dessler, 2012: 170).

The views of this group of scientists is officially represented by the Intergovernmental Panel on Climate Change (IPCC) a United Nations sponsored intergovernmental body that also serves as a network of some of the world's climate scientists and experts. Established by the World Metrological Organization (WMO) and the United Nations Environmental Programme (UNEP), the IPCC therefore represents the mainstream understanding and interpretation of climate science over the issues of climate change. The Charter of the IPCC is: "..to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation" (IPCC principles).

The objective of the IPCC is to provide a summary of what climate scientists know about climate change and how confidently they know it for policy makers and the general public (Dessler: 2012: 207). Thus far the body has produced five rounds of main reports: the First Assessment Report (FAR)-1990; the Second Assessment report (SAR) -1995; the Third Assessment report (TAR) -2001; the Fourth Assessment Report (AR4) -2007 and the Fifth Assessment Report (AR5)-2013 which is the latest and which maintains the findings and conclusions of the Fourth Assessment

Report, and several other Special Reports updating current state of knowledge on the science of global warming and climate change.

According to the Fourth Assessment Reports, on the question of global warming and the influence of human activity in the changing climate, the answer to the question is an unequivocal *Yes* (Solomon *et al*: IPCC: 2007:5). On the second question, (i.e. the extent to which the concentration of atmospheric greenhouse gases is responsible for global warming), the conclusion of the IPCC is that, "most of the observed increase in global average temperatures since the mid-20th century is *very likely* due to the observed increase in anthropogenic greenhouse gas concentrations". Adding that, this is an advance since the Third Assessment Report's conclusion that, "most of the observed warming over the last 50 years is *likely* due to the increase in greenhouse gas concentration" (Solomon *et al.*, IPCC, 2007:10).

Likelihood according to the IPCC's principles of reporting the degree of confidence in the Fourth Assessment Report "refers to a probabilistic assessment of some well-defined outcome having occurred or occurring in the future, and may be based on quantitative analysis or an elicitation of expert views." Very likely represents the probability of the occurrence/outcome of 90-99% probability and likely represents 66-90% probability (Parry *et al.*, IPCC, 2007:21).
On the other hand, are the scientists that have dissenting views to that of the mainstream climate scientists (refer to as global warming skeptics), who rejected the conclusion that global warming is out of the natural cycle of the Earth's climate variations. In addition to the main argument of the global warming skeptics which is anchored around some of the unknowns or the uncertainties in the science of climate change, data from Earth's past climate indicate that, the Earth has experienced periods of both cooling and warming over several millennia in Earth's climate history (Leroux, 2005). Hence they argue that, the current warming of the Earth falls within the natural cycle of the variations of the Earth's climate; that the current climate change is nothing out of the ordinary and therefore the changes that are taking place cannot be stopped by cutting the emissions of greenhouse gasses.

The debate and sometimes heated disagreements that ensued between the two camps since the Intergovernmental Panel on Climate Change (IPCC) was established 1988 is still alive and yet to be resolved. The most recent significant 'altercation' between the two groups of scientists was in November 2009 when it was alleged that a key temperature dataset that show the prove of global warming which the IPCC used, provided to it by the Climate Research Unit (CRU) of the University of East Anglia in conjunction with the UK's Hadley Centre for Climate Prediction was manipulated.

In a paper titled: Climate Science Corrupted: *How the IPCC's sponsor, the UNEP, and key IPCC individuals have misled Governments into supporting the notion of manmade warming*, John McLean (2009) accuses the scientists working for the IPCC of using "questionable data, weak evidence, wild assertions, failure to abide by its own procedures, distortion of the normal peer review process, mendacious statements of some of its senior people" (Mclean, 2009:3).
Also in response to the IPCC Fourth Assessment Report (AR4) some of the leading critics of the IPCC like Fred Singer and Greg Idso led the response of the skeptics in producing the skeptics' version of the state of knowledge on climate change, titled: *Climate Change Reconsidered- 2009*

Report of the Nongovernmental Panel on Climate Change (NIPCC). In the report Idso and Singer reiterated that, "in many instances conclusions have been seriously exaggerated, relevant facts have been distorted, and key scientific studies have been omitted or ignored" (Idso and Singer, 2009: iii).

Hence a point by point response was made against the IPCC's Fourth Assessment Report. For example one of the suspected causes of global warming which the climate scientists considered is solar radiation being one of the factors from the sun that control the climate. According to Forster, *et al*although solar physicists have observed an 11 year variation in the sun's outputs of approximately 0.1 percent over the last four decades (p.132), the scientists are convinced that, the differences in radiative forcing estimates between the present day and the start of the industrial era for solar irradiance changes, and that volcanoes are both insignificant to the differences in radiative forcing estimated to have resulted from human activities. Consequently, "in today's atmosphere, the radiative forcing from human activities is much more important for current and future climate change than the estimated radiative forcing from changes in natural processes" (Forster, *et al*. 2007: 137)

In response to this the NIPCC report states that, "The role of solar activity in causing climate change is so complex that most theories of solar forcing must be considered to be as yet unproven. But it would also be appropriate for climate scientists to admit the same about the role of rising atmospheric CO_2 concentrations in driving recent global warming" (Idso and Singer, 2009:5).
In addition a petition project was undertaken, signed by 30 thousand scientists in the United States of America in which they urged the U.S government toreject the global warming agreement; the Kyoto protocol signed in December, 1997, and also any other similar proposals. They argue that, if the U.S ratifies the protocol and limits its emission to meet the obligation under the protocol it will harm not only the environment, but also hinder the advance of science and technology, and damage the health and welfare of mankind. Because according to this group of scientists there is no convincing scientific evidence that human release of carbon monoxide, methane, or other greenhouse gases is causing or will, in the foreseeable future, cause catastrophic heating of the Earth's atmosphere and disruption of the Earth's climate. They further argue that, there is substantial scientific evidence that increases in atmospheric carbon dioxide produce many beneficial effects upon the natural plant and the animal environments of the Earth (Global Warming Petition Project).

On the other hand the IPCC scientists and other scientists who agree with the assessments of the IPCC have also been firing back at the dissenters. Dessler and Parson for example state that, the actions of the skeptical scientists is fraud with dishonesty because it was a classic example of a situation in which "policy actors who want to influence decision making process do employ biased or inaccurate arguments, anecdotes and stories, invocation of powerful symbols, appeals to emotion or prejudice, flattery and manipulation, promises and threats, deals to exchange support on other issues, and sometimes – although these are illegal in most nations – bribery and coercion" (Dessler and Parson, 2006: 36).

In another instance Dessler dismiss most of the global warming skeptics as people who lack the necessary expertise in climate science. Suggesting that not everyone's opinion counts when it comes to evaluating competing claims on matters of science because even an expert in a related field is not the same as an expert in that field. For example "a person with a Ph.D. in physics without specialized knowledge of the climate would not be qualified to be an expert on matters of climate. That also goes for weather forecasters – climate and weather are different, and being an expert in weather would not qualify someone to be an expert witness on climate. The reverse is also true, so I, despite being a professor of atmospheric sciences, would not qualify as an expert in weather" (Dessler, 2012:9). And that, a close evaluation of the dissident scientists on the lists of the numerous petitions in the internet reveals that in almost all cases they should not be considered experts on climate (Dessler, 2012:11).

Dessler further emphasize that, the procedures for selecting the individual scientists that produced the IPCC's reports are based on standard procedures: because the IPCC assembled large writing teams of scientific experts and have them write, as a group, a report detailing what they know about climate change and how confidently they know it. Stressing that, the reliance on large writing groups reduces the possibility that the erroneous opinions of an individual or a small group make it into the report. Also to minimize the possibility that the group of scientists writing the report are biased in some direction, the scientists making up the writing teams are not drafted by a single person or organization; they are nominated by the world's governments. Hence he concludes that, the only way the IPCC's writing groups would be biased in some direction is if all of the world's governments nominated biased individuals. This he points out is very unlikely, particularly because some of the world's governments are very concerned about climate change whereas others would be very happy if climate change disappeared completely as a political issue. Consequently he charged that, the only reason that advocates (global warming skeptics) put such transparently unqualified people forward as experts is that legitimate experts with the desired opinions are not available (Dessler, 2012 :10).

Dessler also emphasised that, the IPCC statements were endorsed by other assessment organizations, for example the American Association for the Advancement of Science, the American Chemical Society, the American Geophysical Union, and the American Institute of Biological Sciences, the American Meteorological Society, the American Society of Agronomy have all endorsed the IPCC's statements on why the climate is changing (Dessler, 2012:10).

As mentioned above, there are several issues in dispute over the science of climate change. However what is clear is that climate scientists have established that the Earth's climate has experienced bouts of warming and cooling over many millions of years from the Earth's geological history. Also scientists have also identified the (natural) mechanisms or the physical processes by which the changes in the Earth's climate over the past many millions of years occurred. Some of the causes identified include tectonic motions, solar variations, orbital variations and internal variations (Dessler, 2012). Hence to find the answer to the question-why is the climate changing, all the identified natural mechanisms or physical changes are considered. And, according to Dessler scientists have ruled out that the present day warming are not caused by these natural causes because changes that occur due to natural events take a long period of time to take place:

millions of years in some cases, while the current changes that are occurring are rapid; occurring within decades.

For example Tectonic changes which Dessler defined as the movements of the continents that can substantially alter the arrangement of the continents across the Earth's surface and as such changes can directly lead to large changes in the climate through several mechanisms cannot be responsible for the present day climate change. Because these movements take millions of years to cause any significant change in the Earth's climate system, and there is no evidence indicating that that is the case (Dessler, 2012:103).

Also considered in the Earth's natural climate variability was orbital variation. This natural mechanism by which the distance of the Earth in relation to the Sun changes which also brings about changes in the Earth climate. However, like the other factors considered by the climate scientists, orbital variation is also ruled-out because it takes many millions of years for the mechanisms involved to bring about any big changes to the climate system as is being witnessed over the last few decades.

Another candidate considered in the search for the answer to the question-why is the climate changing is what is referred to as the internal variability of the Earth. This is the change that occurs in the Earth's climate system that is driven by the internal physics of the system rather than the external energy changes affecting the Earth. This mechanism which causes the Earth's climate to change is also ruled-out as the possible reason for the changes in the Earth's recent changes. Because according to Dresser "the record between 1000 AD and 1800 AD shows nothing similar to the rate and magnitude of warming of the 20th century. Thus, the paleoproxy data do not support internal variability as a cause of the recent warming" (Dessler, 2012:108).

As it stands today governments across the world have accepted the explanations of the IPCC that, global warming is real due to climate change and is caused by the emission of greenhouse gases, mainly carbon-dioxide (CO_2) through the burning of fossil fuels. And that, climate change is imbued with environmental security problems that could jeopardize the livelihoods of hundreds of millions of people across the world not only in the developing countries of the South but also in some of the developed countries. It was in realization of this that the United Nations resolved to tackle the climate change challenge by means of a global treaty which would ensure that the emission of the greenhouse gases are halted and stabilized at the level the scientists say is safe. This is because, given that to cut the emissions of the greenhouse gases that are causing climate change, particularly carbon-dioxide necessarily mean cutting back the burning of fossil fuels which account for over 90% of the world sources of energy. And this will be particularly difficult task to achieve without a global treaty.

OBSTACLES TO ACHIEVING GLOBAL AGREEMENTS ON REDUCING THE EMISSIONS OF GREENHOUSE GASES

Given the United States of America's energy consumption, which is put at nearly 25% of the total global energy consumption, the U.S can be considered as the most important country when it comes to the global efforts to cut and stabilize the emissions of greenhouse gases. Although the

United States did not ratify the Kyoto Protocol, it voluntarily agreed to cut its emission by 7% by its 1990 level. The United States is an observer in all the Conferences of the Parties to the Kyoto Protocol by virtue of its having ratified the UNFCCC.

The main issue in contention in all the efforts to achieve legally binding agreements centered on the economics of growth fuels in energy production. The United States of America protested against the Kyoto Protocol saying that it is not fair to the U.S because the cost of compliance would stress the U.S's economy and at the same time citing the non-inclusion of China among the Annex 1 countries (China is currently the second largest economy in the world and the fastest growing economy as well). While on the other hand the group of 77 Annex 2 (developing) countries led by China argues that the developed countries have the historic responsibility to pay their carbon debts. Because the current concentrated greenhouse gases in the atmosphere, was accumulated over the past two centuries from the industrial activities of the West. Also, the current carbon footprint of the developed countries is far greater than that of the developing countries. Hence for the sake of equity Annex 1 countries should shoulder the responsibility of reducing the emissions of the greenhouse gases to the required level; at least for a considerable part of this century.

The Kyoto protocol expired in 2012 and prior to the termination date efforts were made in subsequent COPs since 2008 to agree on a second Kyoto commitment period. However the much hoped 2009 Copenhagen Conference of the Parties (COP15) did not produce a new accord that was agreed to by all signatories of the UNFCCC. The same problems that prevented the Copenhagen conference from achieving a new all-inclusive accord to replace the first Kyoto protocol also prevented new agreements in Cancun Mexico (COP16) 2010 and in Durban South Africa (COP 17) 2011. According to some analysts what prevented new agreements from being achieved was essentially the insistence of the developed economies led by the United States of America to change the UNFCCC guidelines or rules of procedure in arriving at decisions. For example, according to Martin Khorthe UNFCCC rules of procedure are based on the bottom-up approach, from Copenhagen to Durban the developed countries have managed to arm-twist the developing countries by changing the procedures to a top-bottom approach. Hence decisions in these conferences were not collective but the host countries only selected a handful of countries to make decisions on behalf of the rest. This change of the rules has affected the outcomes of these conferences. Because "the developing countries made considerable concessions and sacrifices at Cancun, while the developed countries managed to have their obligations reduced or downgraded" (Khor, 2012: 92). This suggests that the first principle of the UNFCCC which guides the actions of all the 195 states who are signatories to the UNFCCC has been jettisoned. Article 3 paragraph 1 of the UNFCCC states that; The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

The 2012 Conference of the Parties (COP 18) took place in Doha Qatar from the 26th November to 8th December 2012 which also served as the 8th Meeting of the Parties to the Kyoto Protocol (CMP8). Two of the main objectives set out for the Doha Conference are: to achieve the formal adoption of the second commitment period to the Kyoto Protocol and to continue the momentum towards achieving a new legally binding agreement for 2020. In Section I paragraph 4 of the

Decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, (released by the UNFCCC Secretariat 28 February, 2013) it was decided that the second commitment period will begin on 1 January 2013 and that it will end on 31 December 2020.

CONCLUSION

Some analysts believed that, the Doha Conference of the Parties (COP 18) 2012 and the 8th Meeting of the Parties to the Kyoto Protocol (CMP8) has fall short of the expectations of the IPCC in the agreed second commitment period of the Kyoto Protocol. What the IPCC recommended was an aggregate cut of between 25-40% cut in the emissions of the greenhouse gases. What came out of the Doha Conference were far less legally binding commitments than what was obtained in the first commitment period of the Kyoto Protocol: Canada, Russia, New Zealand and Japan who were in the Annex 1 parties category (i.e. with legally binding commitments) opted out of the Annex 1 category in the second commitment period leaving the Protocol to control only 15% of the global emission of the greenhouse gases (see paragraphs 13, 14, 15 and 16 on pages 9 and 10 of Appendix 4).

What the outcome of the Doha Conference indicates is that, for the next seven years i.e. between 2013 and 2020 even if the emissions of the greenhouse gases remain as 'business as usual' the temperature rise across the world could go into what Kevin Anderson describes as "climate change going beyond dangerous-brutal numbers". According to Anderson, this is because scientists understanding have remarkably improved on how the impacts of climate change are likely to unfold since 1990 when the IPCC First Assessment Report (FAR) was released and the 2^0C was set as the 'guard-rail' between acceptable and dangerous climate change. Consequently what is clearer now is that, "not only do the impacts occur earlier than had been thought, but the set of impacts considered to be just about acceptable corresponds with much lower temperatures". Consequently the impacts of 2°Care more serious than previously thought, and hence the 2°Cguard-rail lies in far more dangerous territory. "Certainly, it could reasonably be argued that 1°C rather than 2°C should become the *de facto* appropriate target" (Anderson, 2012: 10-20).

In essence the current situation in the efforts to cut the emissions of greenhouse gases particularly since the Kyoto Protocol came into effect indicate that the world has failed to stop global warming trend. And as Anderson clearly explains in the quotation above, the world is heading towards a global mean temperature rise of 4^0C. And as he warns, "Without radical and immediate mitigation, we are likely to see global emission increases of 3-5 per cent per year from 2012. We are fast heading in the wrong direction, accelerating towards the cliff rather than breaking and steering away from the edge (Anderson, 2012: 20).

In order to achieve the ultimate goal of global greenhouse gas reduction to the levels the scientists say is safe, African countries and particularly West African countries must review their approach and strategies in subsequent conferences of the parties to the Kyoto 2 protocol at the international climate negotiations. This is because current approaches are not producing the desired results. The industrialized countries have maintained their emissions levels; a global greenhouse gas emission is business as usual even though some of these countries have also started feeling the destructive impacts of climate change. The approaches of African countries which appear to be more of

passive participants need to be changed: a collective bargain approach in which the position of Africa is presented should be in place before the 2015 Paris Climate Change Conference.

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