

Effect of climate change and global warming on management of business in Nigeria

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Abstract:

The focus of this study was on the Effect of Climate change and Global warming on Management of Business in Nigeria. Global warming due to increasing concentrations of greenhouse gases (GHGs) poses threats to human society by changing the living and working environment to which society has adapted over the generations. On the global scale, the rate and magnitude of predicted changes in climate are unprecedented in historical times. The broad objective of the study is to examine the relationship between Climate change and Global warming and Management of Business in Nigeria. Cross-sectional survey design was adopted in this study. A sample of 120 individuals selected from National Emergency Management Agency (NEMA) located in Enugu state, Federal Ministry of Environment located in Enugu too, as well as Centre for Environmental Management and Control (CEMAC) located in University of Nigeria Enugu Campus were used for the study. A structured questionnaire was designed to elicit data from the respondents. Using Spearman's rank correlation approach, the reliability of the instrument was ascertained and it gave value of 0.98. The validity of the research instrument was also ascertained. Among others, the findings of the research revealed that the root causes of climate change and global warming include astronomical variations, Milankovitch variations and human activities such as deforestation and bush burning, industrial and transportation emissions. It was concluded that climate change and global warming impact heavily on management of business in Nigeria. It was recommended that Government and Nigeria citizens should embark on the reduction of the transaction of emissions-intensive goods and services, increasing efficiency gains, increasing use and development of low-carbon technologies, and reducing fossil fuel emissions which can be achieved through the alternative source of Energy such as solar energy, geothermal, bio-fuel, and wind Energy.

Keywords: Climate Change, Global Warming, Management of Business and Nigeria

Introduction:

Climate change and Global warming are global environmental problems with serious local consequences, which pose significant potential threat to present and future business activities. Developing countries like African countries contribute a small percentage to the global greenhouse gases (GHG) emissions and there is so far no obligation on them to reduce their GHG emissions [1]. Yet they need to do so to ensure favorable environment for effective management of their businesses. Indeed, national priorities could be met simultaneously with climate change and global warming management. The reason is that GHG mitigation can have a positive impact on the economy through developing a clean pathway which will help reduce the growth of emissions [2]. Against the backdrop of growing environmental awareness of the interactions between business activities and their consequences, Climate change and Global warming represent part of other initiatives to raise awareness of all business stakeholders, policy and decision makers, physical, biological, social and environmental scientists about climate change and Global warming concerns [3].

For developing countries, including Nigeria, building Climate change and Global warming issues into business programmes and policies provide opportunity to heighten awareness of business activities. This is especially so because action depends on awareness. Coping with climate change and Global warming (i.e. adaptation) will involve new approaches to business planning. Both Climate change and Global warming require the adoption of long-term and comprehensive approaches to planning, development and management of business [4].

The Climate change and Global warming issues are key elements in ensuring sustainable business activities So, considerations of climate change and global warming in addition to sustainability and equity concerns into business places environmental management, climate change and Global warming management and reduction in a broader context [4]. Such considerations not only has the potential of significantly enhancing the capability of business planning but also, offer opportunity for business activities to be carried out in a more effective and convenient way [5]. Therefore, business managers at the initial stage should take into account Climate change and Global warming concerns. Business Managers require Climate change and Global warming assessment to provide them with the necessary scientific information for business decisions [6].

Processes and products of Climate change and Global warming decision making cover a wide spectrum, from the global negotiations and agreements to the micro level of firms and households. Arising from the above, therefore, this study investigated the effect of climate change and global warning on management of business in Nigeria.

Statement of the Problem:

Global warming due to increasing concentrations of greenhouse gases (GHGs) poses threats to human society by changing the living and working environment to which society has adapted over the generations. On the global scale, the rate and magnitude of predicted changes in climate are unprecedented in historical times. This therefore raises questions about their likely effects on business activities, physical resources, natural ecosystems and human activities especially with reference to future developments.

Climate change and Global warming issues are of worldwide significance. The projected changes are predicted to have adverse consequences for many regions of the world, impacting on business activities, water resources, agricultural productivity; and natural marine and terrestrial systems, coastal zones, human settlements and human health, infrastructure and industry, etc. However, it has been observed with dismay that developing countries including Nigeria, are particularly vulnerable to climate change impacts which are occurring when these countries have little adaptive capacity. It has been suggested by some writers that lack of scientific, technical, financial and, institutional capacity to evaluate the impact of climate change are among the reasons for the limited adaptive capacity These constraining factors may further frustrate the implementation of adaptive measures. The net effect of all these to a country in general and to business firm in particular are increased unemployment, low productivity, low capital accumulation, low economic growth and development, among others.

It was based on the above impact, consequences and problems associated with Climate change and Global warming that the researcher has decided to investigate on the Effect of Climate Change and Global warming on Management of Business in Nigeria.

Objectives of the Study:

The broad objective of the study is to examine the relationship between Climate Change and Global Warming and Management of Business in Nigeria.

The specific objectives of this study are to:

- Identify the root causes of Climate change and Global warming in Nigeria.
- Examine the effects of Climate change and Global warming on Management of Business in Nigeria.
- Ascertain the strategies to address the challenges of global warming and climate change on Management of Business in Nigeria.

Research Questions:

Based on the above stated objectives, the following research questions were drawn;

- What are the root causes and of Climate change and Global warming in Nigeria?
- How do climate change and Global warming affect Management of Business in Nigeria?
- What are strategies to address the challenges of global warming and climate change on Management of Business in Nigeria?

Scope of the Study:

The study is on the Effect of Climate Change and Global Warming on Management of Business in Nigeria. It was carried out between December, 2015 and February, 2016.

Significance of the Study:

The study is significant because it will help the researcher to identify the root causes of Climate change and Global warming in Nigeria, examine the effects of Climate change and Global warming and ascertain the strategies to address the challenges of global warming and climate change on Management of Business in Nigeria. The study will be useful to government and other policy makers in making and carrying out policies and decisions on issues bordering on Climate Change and Global Warming. It will also be useful to Nigerian businessmen and women in their day to day business decisions. The study will help other researchers carrying out study in the relevant field.

Methodology:

Research Design:

Survey design was adopted in this study.

Sources of Data:

Data for this study were collected from both primary and secondary sources. The primary data were collected from systematically planned questionnaire administered to the members of the sample.

The secondary data were obtained basically from journals, newspapers as well as texts and periodicals. The secondary data were adjudged to be reliable because they were published by renowned authors and authorities.

Population of the Study:

The population size for this research is 171 people which are the total number of the staff in the selected organizations of study namely, National Emergency Management Agency (NEMA) located in Enugu, Federal

Ministry of Environment located in Enugu too, as well as Centre for Environmental Management and Control (CEMAC) located in University of Nigeria, Enugu Campus. The various organizations and their corresponding staff strength are:

NEMA	84
Federal Ministry of Environment	69
CEMAC, University of Nig Enugu Campus	18
Total	171

Sample Size Determination

Using Taro Yamane’s formula at 5% error (as shown), we obtain the sample size to be 120.

Sample size

$$n = \frac{N}{1+N(e)} = \frac{171}{1+171(0.05)} = \frac{171}{1+171(0.0025)}$$

= 119.8 approximately 120.

Sampling Technique:

The 120 members were selected through proportionate stratified random sampling technique.

Research Instrument:

A structured questionnaire was designed to elicit data from the respondents

Data Presentation and Analysis:

Data Presentation

The data obtained were presented in tables and corresponding values expressed in percentages.

Data Analysis

Table 1: To Identify the Causes of Climate Change and Global Warming in Nigeria

Responses	Q ₁	Q ₂	Frequency	Percentage (%)
Strongly Agree (SA)	53	55	108	45.0
Agree (A)	49	48	97	40.4
Indifference (I)	8	6	14	5.8
Disagree (D)	6	6	12	5.0
Strongly Disagree (SD)	4	5	9	3.8
Total	120	120	240	100

Source: Field Survey, 2012

The first objective of this study is to identify the root causes of climate change and global warming in Nigeria. In the questionnaire section (refer to the Appendix), questions numbers 1 and 2 were used to address the objective.

From the table 1, 45.0% of the respondents strongly agreed that human activities, deforestation and bush burning are some of the identified causes of climate change global warming in Nigeria; and that climate change and global warning in Nigeria can also result from industrial as well as transportation emissions. Furthermore, 40.4% of the

respondents agreed to the above assertion; 5.8% were indifferent, 5.0% disagreed to the issue in question, while 3.8% strongly disagreed.

Table 2: To Examine the Effect of Climate Change and Global Warming on the Management of Business in Nigeria

Responses	Q ₃	Q ₄	Frequency	Percentage (%)
Strongly Agree (SA)	50	52	102	42.5
Agree (A)	56	53	109	45.4
Indifference (I)	5	5	10	4.2
Disagree (D)	6	6	12	5.0
Strongly Disagree (SD)	3	4	7	2.9
Total	120	120	240	100

Source: Field survey, 2012

The second objective of this study is to examine the effect of climate change and global warming on the management of business in Nigeria. In the questionnaire section (refer to the Appendix), questions numbers 3 and 4 were used to assess the objective. From the table 2, 42.5 % of the respondents strongly agreed that changing rainfall patterns and high flood incidence are some of the consequences of climate change in Nigeria; and that business operations are affected by these factors as well as drought and desert encroachment.

Furthermore, 45.4% of the respondents agreed to the above assertion; 4.2% were indifferent, 5.0% disagreed to the issue in question, while 2.9% strongly disagreed.

Table 3: To Ascertain the Strategies to Address the Challenges of Global Warming and Climate Change on the Management of Business in Nigeria

Responses	Q ₁	Q ₂	Frequency
Strongly Agree (SA)	56	50	106
Agree (A)	54	5	112
Indifference (I)	5	4	9
Disagree (D)	3	5	8
Strongly Disagree (SD)	2	3	5
Total	120	120	240

Source: Field survey, 2012

The third objective of this study is to ascertain the strategies to address the challenges of global warming and climate change on management of business in Nigeria.

In the questionnaire section (refer to the Appendix), questions numbers 5 and 6 were used to assess the objective. From the table 3, 44.2% of the respondents strongly agreed that reducing demand for emission-intensive goods and services; increasing efficiency gains and reducing fossil fuel emissions are some of the strategies to address the challenges of global warming and climate change on management of business in Nigeria; and that the management of various businesses will be enhanced if the strategies just mentioned are adhered to.

Furthermore, 46.7% of the respondents agreed to the above assertion; 3.8% were indifferent, 3.3% disagreed to the issue in question, while 2.0% strongly disagreed.

Summary of Findings:

Based on the analysis carried out, the followings findings were made:

- The root causes of climate change and global warming include Astronomical variations, Milankovitch variations and Human activities such as Deforestation & bush burning, Industrial and Transportation emissions.
- Some of the effects of Climate change and Global warming on the management of business in Nigeria include fall in business activities, destruction of certain goods and services and loss of interest in business activities resulting to low productivity.
- There are inadequate strategies to address the challenges of global warming and climate change on management of business in Nigeria
- Adaptation and mitigation strategies of global warming and climate change on management of business in Nigeria are grossly inadequate.

Conclusion:

Climate change and Global warming are global environmental problems with serious local consequences, which pose significant potential threat to present and future business activities. The effects of Climate change and Global warming have now become topics of serious considerations in carrying out business activities worldwide and in third world countries like Nigeria in particular. Reducing demand for emission-intensive goods and services; increasing efficiency gains and reducing fossil fuel emissions are some of the strategies to address the challenges of global warming and climate change on management of business in Nigeria.

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