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# Impact of Climate Change on Nigeria's Business Industry: Mitigation and Adaptation

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**Abstract:** *This article focuses on the impact of climate change on Nigeria's business industry: mitigation and adaptation. The papers discussed concepts in climate change and related fields, including causes and effects of climate change, and issues of prevention, preparedness, and adaptation processes. The role that industry can play in preparing to prevent, adapt to and mitigate the impacts of climate change has been widely debated. Mandatory issues such as technical support. We conduct research aimed at improving the quality of future climate change projections, from national to regional to global environments. Given these issues, the authors saw the impact of climate change on the business industry as a clear call for strong and effective ways to address the impacts of climate change. Companies are encouraged to come together and use individual climate change research to form a powerful force to address the impacts of climate change on their businesses. Nigeria's Department of Metrology should seek to inform the business community in advance of anticipated natural and man-made disasters that may affect business, and to improve forecasts of future climate change, the private sector should continue research should be done in both the sector and the public sector.*

**Keywords:** *Climate Change, Business Industry, Mitigation, Adaptation, Global Environment.*

## 1. INTRODUCTION

The danger posed by climate change is a worldwide issue. This timely subject has aroused fierce discussion and concern among nations, scientists, environmentalists, and social activists. In fact, the controversies that follow debates around the world are astonishing and perplexing. According to Hepburn, O'Callaghan, Stern, Stiglitz, and Zenghelis (2020), the Glasgow Climate Change Conference in November 2021 will consider all the natural disasters of the second century and present solutions. Developed countries have united to find ways to meet



the challenges of climate change and mitigate its impacts. Not long ago, speculation of an economic catastrophe raged throughout the world, with some analysts claiming that Nigeria had avoided the impact of such an economic meltdown. It is critical to recognize that the problems of globalization have shaped the complexity of today's world and that Nigeria could not accept or remain in the past or better still maintain the status quo.

Through various innovative and extensive programs, the United Nations, of which Nigeria is a signatory, and other international organizations are at the frontline of ensuring that the globe is a better place to live. The Climate Change Knowledge Network is one such example (CCKN). This is a study that will monitor the influence of economic and climate change on the Indian agricultural sector. The International Institute for Sustainable Development (IISD), the International Center for Climate and Environmental Research (CICERO), and the Tata Energy Research Institute (TERI) are all working together to promote it. The research is unusual because it employs the concept of "double exposure," according to O'Brien and Totenko in Arness et al. (2020). This suggests that climate change and globalization are happening at the same time, with countries, industries, ecosystems, and social groups frequently feeling the effects of both.

According to Ojo and Baiyegunhi (2020), overcoming the adverse conditions it may pose in the context of climate change and its associated national problems will tend to crush many of the diseases plaguing Nigeria today. These diseases according to Ojo et al. include: "poor planning and implementation, inadequate resource allocation, corruption, outdated curricula, and poor government practices". According to Hassan, Kalin, Aladejana, and White (2020), the corporate industry is an unavoidable factor that requires meaningful efforts to address unemployment, climate change, and related issues. A well-researched climate change can provide tools to help Nigeria strengthen its knowledge, skills, attitudes and ability to adapt to a changing and fragile physical environment.

Natural and man-made disasters, such as rising chronic natural resource degradation, desertification, oil spills, floods, internal social disputes, and potential population displacement, are now common and escalating in Nigeria. In this framework, this article addresses the financial repercussions of climate change in Nigeria, covering conceptual issues, climate change causes and effects, prevention and preparedness, and adaptation to climate change.

### **Concept Clarifications, Definitions, and Issues**

Global Climate Change is an assessment of whether and why the global climate is likely to change and how these changes will affect investment by global businesses. A term that refers to research into how climate change affects climate change (Seddon, et al., 2020). According to Hepburn, et al., (2020), the United Nations Framework Convention on Climate Change states that, in addition to natural climate variability, climate change can result directly or indirectly from human activities that change the composition of the global atmosphere. shows that it is variable. observed over comparable time periods.

Changes in the global environment involve many problems. According to Hassan, Kalin, Aladejana, and White (2020), climate change is defined as a statistically significant change in the average climate state or its variability that persists over long periods of time (usually decades or longer). Climate change can be caused by natural internal or external processes, as



well as continuing human-induced changes in air composition or land use. The first rise in global temperature was recorded sometime in the middle of the twentieth century. Global warming has now become a major worry for humanity. Several scientists anticipate that in the near future, global warming will cause storms, agricultural failures, increasing sea levels, and volcanic eruptions. These apocalyptic forecasts became well known. This study is significant to adaptation and prevention issues because of the influence of climate change on the vulnerability of businesses, countries, and communities. Similarly, Malley et al. (2021) define vulnerability as "the ability to adapt to changing climatic conditions, as well as the amount to which climate change impacts or may alter a system's sensitivity".

Furthermore, Ojo and Baiyegunhi (2020) define vulnerability as: the influence of a system on climate change and the system's ability to adapt to climate change. A highly vulnerable system is one that is subject to only minor climate changes and has significantly limited adaptation potential.

Climate adaptation, on the other hand, is the process by which people minimize the negative effects of climate on their health and well-being by taking use of the climatic environment's opportunities (Shiru, et al., 2020). Additionally, Shiru et al. stated that adaptation to climate change entails changes in behavior or economic structures that minimize societies' sensitivity to changes in the climatic system.

A business industry is a grouping of enterprises that produce similar or related goods, services, or raw resources. It is a sector of a country's economy that generates similar services, goods, or raw resources, according to Aladejana, Kalin, Sentenac, and Hassan (2020). In general, industry classification requires any business to derive a significant majority of its revenue from industry-related activities. It is vital to note that a single company organization can be classified as belonging to two different business industries at the same time.

According to Akinsemolu and Olukoya (2020), there are currently more than 15 types of business industries in the world that are constantly affected by climate change, including "the transportation industry, the aerospace industry, the agriculture industry, the computer industry, the telecommunication industry, the education industry, the construction industry, the electronics industry, the manufacturing industry, the energy industry, the pharmaceutical industry, the healthcare industry, the food industry, and the news media".

### **Causes and Effects of Climate Change on Business Industry**

According to Haider (2019), while it may not appear so now, climate change is changing the planet so radically that all businesses will need to adjust. Climate change produces new economic risks, depletes traditional energy supplies, and raises new political issues.

To attract customers, retailers select eco-friendly consumables. Other businesses see the value of sustainability data and share it with investors (Nche, 2020). Furthermore, rather than waiting for the government to do so, some businesses are doing so voluntarily. Companies are gradually adapting in order to be solvent and viable in a climate-driven market. According to consultancy firm Consulting, these economic adjustments are responses to two categories of risk: value chain risk and external stakeholder risk.



## **1. Value chain risk**

The value chain, according to Aladejana, Kalin, Sentenac, and Hassan (2020), is the process by which a corporation adds value to a product. Product design, manufacture, cost, and distribution may all be part of this process. Companies who extract raw materials from the earth, process them in factories, set prices, and bring them to market, for example, have given the original material new value. Physical hazards, costs, and products can all be impacted by climate change at any stage in the value chain.

- **Physical risk:** Climate-related calamities such as floods, tsunamis, and droughts are examples of physical dangers (Eze, 2020). While we can't stop imminent weather disasters, we may prepare for physical risks by identifying our vulnerabilities and taking steps to reduce the most likely scenarios.
- **Prices:** Weather-related disasters may cause raw material and commodity costs to rise, and climate change may make these raw materials less available or accessible (Francis, 2014). As a result, there is less supply, increased demand, and higher pricing.
- **Products:** The ongoing climate change may have an impact on shopping habits. Consumers, for example, may prefer innovative energy sources and sustainable products over traditional systems and products. According to Nielsen, 73% of consumers would change their shopping habits simply to reduce their environmental effect.

## **2. External Stakeholder Risk**

According to Onyeneke, et al., (2020), external stakeholders are those who are involved in the company but do not work for the company. These actors bear the risk of rising costs related to climate change.

- **Rating Risks:** These risks stem from greater capital expenses as a result of climate change. Poor weather can have an impact on country-level ratings, which in turn has an impact on market interest rates. Most research show that this alteration is frequently detrimental.
- **Regulation:** As governments worldwide become more worried about climate change, they tend to place stronger regulatory obligations on corporations. These restrictions have the potential to complicate previously easy business operations or even subsidize "greener" competitors.
- **Reputational risk:** This is the risk that a firm faces because of its public image. Activities that are seen negatively by the public or that may aggravate climate change can harm a company's reputation and, eventually, its bottom line.

Climate change threatens the Nigerian economy. The negative consequences of global change, particularly on the insurance business, can be enormous. To defend against losses caused by large-scale natural disasters, insurers cover repair costs. Agriculture and agriculture-dependent industries will be impacted by reduced food output and increasing production costs, according to Balarabe and Hamza (2020). Water scarcity caused by harsh weather changes, melting glaciers, and decreasing winter precipitation could have a negative impact on industries that require water as an input. Steel, paper, iron, oil, textile, and chemical firms are among those experiencing higher water bills. The population's sensitivity to probable drinking water shortages is also taken into account. The call to turn away from greenhouse-emitting energy



means reducing the use of coal-fired and coal-fired gas power generation. This will reduce demand, drive down oil and coal prices, and reduce revenues for oil export-dependent Nigeria.

### **The Business Industry and Climate Change Challenge**

The intellectual framework of this section is based on presenting the various issues of climate change that affect the economy. In any case, according to Olatunde-Aiyedun (2020), there are established methodologies and risk management approaches that can help companies build resilience to climate risks:

1. Identify broad operational and strategic risks
2. Develop a detailed view of relevant risks
3. Develop mitigation strategies Must be changed.

Climate risk should be considered a core business risk and its mitigation should be considered part of business strategy. Because the impacts of climate change and the associated risks are constantly changing, risk analysis should be performed on a regular basis. These above steps can lead to investments in new technologies and entry into new areas of the industry. The following issues should be considered when addressing climate change in the corporate sector:

- i. Prevention, Preparedness and Adaptation
- ii. Government, School and Community Support.
- iii. Technical Assistance;
- iv. Research Programs;
- v. Changes in attitudes and ethics.
- vi. Vulnerable group in Nigeria.

Scientists agree that some of the effects of climate change cannot be stopped, but believe that stopping global warming can harness or slow the process . The way to reach this goal is to stop releasing carbon dioxide into the atmosphere.

### **Businesses should not act alone**

Businesses should not act alone toward other stakeholders, such as academia, regulators, government agencies, and the community. Insurance companies can also play an important role. Naturally, they want to protect their customers and can share their expertise and experience in risk management. According to Arnes et al. (2020), a group of 22 insurers met with the United Nations in his 2020 to produce a report outlining how the industry can help analyze and mitigate climate risks. The report recommends a more integrated approach to analyzing the holistic physical, transition and liability risks of climate change. This approach is one that insurers across the industry can adopt to better protect themselves and their insurers.

### **Bright future**

According to Ojo and Baiyegunhi (2020), climate change poses major challenges, but B. clean energy providers can seize opportunities According to the International Energy Agency, global renewable energy use will increase by 3% in 2020 compared to 2019, and renewables will account for 29% of global electricity generation, compared to 27% in 2019. occupiers. Existing industrial processes flourish.





### **Climate change risks**

According to Ogele (2020), the impacts of climate change are being felt in all sectors of the world. Actions to mitigate climate impacts are essential, but they also make financial sense. By taking action now, businesses can reduce the risks of climate change and even capitalize on the new opportunities that a greener future presents. As Elum and Momodu (2017) point out, businesses that identify and respond to climate risks today are more likely to not only survive but thrive in the new net-zero world.

### **Technical Assistance**

According to Ayanlade, Omotoso, Bisiriyu, Jegede, and Ayanlade (2020), both practitioners and experts provide technical assistance to consumers, businesses, and homeowners to reduce greenhouse gas emissions. We are well equipped to help you make decisions that help you save. emissions. Specific areas where technical advice is needed include consumer purchase decisions, transportation options, use of refrigerators and air conditioners with programmable thermostats, avoidance of purchasing second-hand refrigerators and air conditioners, use of smart meters, solar Includes use of energy efficient lighting options from energy options.

### **Research Program**

The scientific community has initiated an interdisciplinary project in the study of global change. According to McBean and McCarthy of Ayanlade et al. (2020), aimed at reducing scientific uncertainty, improving the quality of projections of future changes in global and regional environmental conditions, and ensuring better management of the planet's ecological resources. A program has emerged to answer a question of global importance. Practitioners as well as professionals and stakeholders can be partners in this effort. To ensure that Nigerian governments and institutions do not waste resources developing conflicting measures or ineffective policies and development programs that do not contribute to achieving climate sustainable development in the business sector; Collaborating on research is important.

### **Changes in Attitudes and Ethics**

Planning decisions for integrating human activity into the environment for cultural and aesthetic purposes are clearly understood. Planning homes, building parks, tending forests, and building agricultural systems in our cities is a process that should be subject to ethics. The way forests are managed depends on how cabinet makers do their jobs, and the same applies to farm workers. Practitioners as well as professionals and stakeholders can change attitudes and balance ethics and environmental stewardship through educational programs.

### **Vulnerable People and Places in Nigeria**

Adeniran, Otokiti, and Durojaye (2020), Africa will be most vulnerable to projected change as pervasive poverty limits adaptive capacity. It is an easy continent. For example, Nigeria, especially the agricultural sector, depends on rain quality during the wet season. Food security is therefore an important issue, as climate change makes droughts more frequent and a very serious threat. According to Elum and Momodu (2017), drought risk and vulnerability in Africa are likely hazards driving the location of climate change impacts. In Nigeria, people live in arid or semi-arid areas, coastal areas prone to floods and oil spills, especially coastal areas.



## **2. CONCLUSIONS AND RECOMMENDATIONS**

The devastation caused by climate change-related disasters around the world has failed national development and progress and destroyed hope for a better life for future generations. Upon hearing about catastrophes such as Katrina. There have been earthquakes in Italy, Japan, Haiti, and China. Tsunamis in Japan and Southeast Asia; oil spills in the Gulf of Mexico; we swiftly count our blessings and proclaim that such disasters are not our fate. But now, with dryness in the north and toxic garbage in Koko, Nigeria faces catastrophic degradation. In the south, there is dumping, oil spills, and flooding, as well as lead gas poisoning in Nasarawa. Economic practitioners, as well as experts and interest groups, need to position themselves so that they are not exposed to the challenges of climate change. Based on this research, we offer the following recommendations:

- i. The business community must unite to use individual climate change research to form a powerful force to address the impacts of climate change on business.
- ii. Nigeria's Bureau of Metrology should seek to notify businesses in advance of anticipated natural and man-made disasters that may affect businesses Principles set out for climate change mitigation.
- iii. Governments (national, state, and local) should be assisted by making the required legislation that will give effect to the principles set forth by UNESCO for adequate climate change remedies.
- iv. Continued research to improve projections of future climate change should be undertaken by both the private and public sectors.

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