

# Climate Change - A Global and National Perspective: The Case of Nigeria

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## Abstract

The effect of climate change is felt everywhere and of concern to all around the world, even as solution is not in sight to it. The consequences have been felt more in some parts of the globe than others. Incidentally, this has weighed more on the under-developed nations of the world than the developed. Climate change is prevalent everywhere in Nigeria from the north where it has aggravated desert encroachment on the savannah belt, to the south where it has engendered ocean surge in the coastal areas, erosion in many other parts. These have resulted in colossal loss of lives and damage to properties. The government has been virtually helpless, or comatose, with an array of legislations which are best described as beautiful charters on the country's law books. This paper will examine some specific decisions of major conferences on this issue such as the Kyoto Protocol, among others, and see how these have taken care of the interests of these under-developed nations. It will review the roles and contributions of these nations in the scheme of things and critically examine the effectiveness of the proposed adaptation fund. It will conclude with recommendations.

**Keywords:** climate change, desertification, gas flaring, Nigeria

## 1. Introduction

Since over the past 250 years, humans have been artificially raising the concentration of greenhouse gases in the atmosphere at an ever-increasing rate. Human activities, mainly associated with the burning of fossil fuels have changed the chemistry of the atmosphere, which result is climate change, which is arguably the most persistent threat to global stability in the coming century. It is a global problem that requires global solutions, but the nature of the problems and its impacts require the active involvement of multiple national and local-level stakeholders in shaping and implementing the solutions. A lack of appropriate policies and legal frameworks may present barriers to the implementation of adaptation responses, and possibly increase the vulnerabilities of certain regions and countries, groups such as women and the poor. These and Inadequate institutional supports can act as a constraint to adaptation and limit access to much needed natural resources for both survival and adaptation to environmental change and climate variability (Climate Governance in Africa). Carbon emissions arising out of exploration, industrialization and urbanization are known to cause the planet to heat up, and the burning of fossil fuels creates carbon emissions as a by-product. The wanton damage to the atmosphere is being caused by both industrialized states and the developing states alike. The former cause air pollution through industrial and domestic heating plants, waste incinerators, nuclear plants, marine pollution through incessant dumping and discharges into the ocean of industrial and toxic wastes, either directly or through rivers flowing into the ocean of land-based industrial pollution, soil pollution by dumping dangerous wastes (UNEP Assessment Report on Ogoniland 2011) in third world countries (Note 1). Developing countries on their own contribute to pollution resulting in climate change by way of rapid population growth, increasing industrialization, massive urbanization which necessitates deforestation and chronic poverty, and use of obsolete industrial plants.

## 2. The Situation in Nigeria

Nigeria is influential in world's energy affairs as the world's sixth largest exporter of crude oil (Note 2). It has however, done very little to promote other sectors of the economy like the agricultural, extractive, etc., thus making less efforts in curbing its Dutch-disease, as oil dominates the export bag of the country (Osei-Frempong, 2010). Nigeria's proven oil reserves are estimated to be 37.2 billion barrels (The Punch 2011, July 26), claims gas reserves of about 187 trillion cubic feet, but has been a notorious flarer and venter of associated gas due to there

being no gathering infrastructure in place to utilize the feedstock. It is believed that Nigeria flares around 68.66 bcf/m (a little under 2.5mmcf/d of gas), and while difficult to quantify, this suggests that the country is burning away a potential \$15m/d (Nigerian Senate Passes Gas Flaring Bill). There have been numerous deadlines set for gas flare-out in Nigeria over the past decade, none of which has been met. Each deadline gets replaced by new one and the introduction of fines for oil companies that continue to flare has not proved enough of a deterrent. According to satellite research, worldwide 168 billion cubic meters (bcm), of natural gas is flared yearly. Nigeria accounts for 23 bcm, second to Russia. Flaring takes place in more than a hundred well heads in an area about the size of Britain (Note 3). Oil is of immeasurable importance to Nigeria as revenue from oil resources constitutes more than eighty per cent of the country's revenue. Nigeria is endowed with the tenth largest proven natural gas reserves in the world, and according to the World Bank, gas flared in Nigeria is equivalent to total annual power generation in sub-Saharan Africa (Obadina, 1999). Gas flaring adds about 390million tons of CO<sub>2</sub> in annual emissions. This is more than the potential yearly emission reductions from projects currently submitted under the Kyoto mechanisms. The cocktail of toxic substances emitted in the flares for over forty years including benzene and particulates has exposed the Niger Delta communities to health risks and property damage, in blatant violation of their human rights. The flares affect their livelihood and expose them to an increased risk of premature deaths, child respiratory illness, asthma and cancer, as well as acid rain. For example, "very conservative" assumptions using World Bank information on the adverse effects of particulates, suggest that gas flaring from just one part of the Niger Delta (Bayelsa State) would likely cause annually 49 premature deaths, 4,960 respiratory illnesses among children, 120 asthma attacks. These figures could be conservative estimates.

Flaring and other forms of environmental pollution and abuse are the causes of the perennial and incessant unrests which reached a crescendo with the incessant cases of kidnapping and abduction of expatriates and foreign nationals, employees of the oil Transnational Corporations, TNCs, working in the oil region, in the recent past years. These only abated to some extent since 2010, due to the amnesty programme executed by the Federal Government in 2009. With a level of seriousness and commitment by the government, a greater percentage of the militants came out and laid down their arms Government should therefore, take a bolder step further, by getting the oil companies to be committed in community development service in their areas of operation, and no form of agitation would be seen from the local communities.

The Nigerian state has actively connived and played along with Shell and these other oil TNCs to subjugate and decimate its citizens for pecuniary reasons. These actions of the TNCs and the state, Hobbes in his contribution termed as the "interaction of bodies with other bodies, human or otherwise, which create certain chains of causes and effects, and which eventually give rise to the human behavior that we can plainly observe" (Internet Encyclopedia of Philosophy) - the situation of unrest in the Niger Delta area of Nigeria. Shell has claimed among other reasons for continued gas flaring, dearth of infrastructure in gas gathering equipment and poor funding, because the Federal Government is not meeting its counterpart funding for the joint venture oil projects. One would like to query Shell's rationality on this assertion, as the oil giant returns billions of Dollars in profits every year, which it repatriates to its headquarters, instead of ploughing back part of its profits to enhance its production ventures. Shell's action is simply meant to intimidate Nigeria and further embarrass the country by further painting her black before the whole world. Government has thus given the oil TNCs a good ground of evasion of their corporate responsibility here. If all the government is ever interested in is the revenue from the oil, but is never willing to contribute its own quota in counterpart funding of projects in the sector, being in joint venture arrangement with the various oil TNCs, they will always hide under this guise to avoid their responsibilities to the host communities, while causing incalculable damage to their areas operation. It is evidently clear that Shell is only treating the Niger Delta area and indeed Nigeria with impunity, if its account herein is anything to go by: "In the BP Deepwater Horizon explosion in April 2010, 11 oil industry workers died, and a number were seriously injured. The incident led to the largest offshore oil spill in US history. The environment was damaged and people's livelihoods suffered. Following the accident, Shell supported the response effort by providing equipment, technical expertise, and facilities to BP. We also took immediate steps to confirm and reinforce the safety of our offshore operations around the world. Our view of deepwater drilling and safety procedures confirmed that Shell's approach is robust. (Royal Dutch Shell PLC Sustainability Report, 2010)" Shell here in its own account, rose up spontaneously in support of another oil company in disaster, whereas, in the Niger Delta, it would abandon its spillages unattended to. It would claim sabotage as the cause of the spill.

### **3. The Legal Regime on Gas Flaring in Nigeria**

The Nigerian government first moved to end gas flaring in 1969, when it ordered corporations to set up infrastructure to utilize associated gas. It later passed the Associated Gas Reinjection Act in 1979 (Note 4) that required oil companies to submit a detailed plan for utilizing all gas with an ultimate goal of ending all flaring by

1984. (Shell's Environmental Devastation in Nigeria) Since January 1984, the flaring of associated gas has been prohibited, except with written permission of the Minister. The 1984 legislation provides that gas flaring may only continue in any particular field(s) on the issuance of a certificate by the Minister following certain conditions under Section 3 (2) of the Associated Gas Re-Injection Act, which has so far been flouted.

Gas flaring in all its ramifications is a gross violation of the Nigerian constitution 1999. (Sections 33 and 34) Section 20 of the Constitution provides that: *The State shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria.* Notwithstanding that this provision comes under Chapter II of the Constitution, which is non-justiciable, it nonetheless, confers a legal burden on the Government not only to provide, but also to ensure that a safe environment is guaranteed to the people of the country. The actions of the Government of Nigeria as far as this issue of gas flaring and other forms environmental pollution are, run contrary to this provision. A Federal High Court had held that gas flaring is illegal and a flagrant negation of the fundamental human right of the people of the Niger Delta region. (Jonah Gbemreh v SPDC and Ors). The court had ordered the stoppage of flaring of gas in the region, yet the Government has not deemed it fit to enforce its own very enactments and regulations on the issue.

One clear problem with most of the legislations guiding practices in the oil and gas industry is the age of the statutes. For instance, the Petroleum Act, Cap. P.10, LFN 2004 (and its Regulations), the PPT Act, Cap. P.13, LFN 2004, and the NNPC Act, Cap. N123, LFN 2004 are 40, 50 and 32 years old respectively. The old age and archaic nature of these legislations imply that sectors and aspects of the industry like natural gas utilization and environmental issues, which have not gained prominence over the last 40 years have remained outside their purview, hence they are subject to the arbitrariness of regulatory authorities (Sodunke and Obebe). It is evidently clear that the government is paying lip service to gas flare-out. The government is simply insensitive to enforcing its own regulations and court orders by its laissez-faire attitude.

Happily, the Senate of the National Assembly passed the Gas Flaring Reduction Bill recently, which is awaiting concurrence by the House of Representatives. Section 1 of the draft Bill prohibits the flaring of natural gas in any oil and gas production operation after the commencement of the Act. Section 2 specifically prohibits the flaring of associated or non-associated gas after December 2010. (Draft Gas Flaring Reduction Bill) There is also a Draft Petroleum Industry Bill which is for an Act to establish the legal and regulatory framework, institutions and regulatory authorities for the Nigerian petroleum industry. The Bill is expected to establish guidelines for the operation of the upstream and downstream sectors. (Draft Petroleum Industry Bill) There is also, the Nigerian Gas Master Plan and Policy, which seeks to take care of a National Domestic Gas Supply and Pricing Policy and Regulations; a Gas Master Plan Infrastructure Blueprint.

#### **4. Desertification and Deforestation in Nigeria**

Desertification is one of the most complex challenges of our time. The northern part of Nigeria is endowed with a large expanse of arable land that has over the years proved a vital resource for agriculture and other economic activities. But the Sahara desert is advancing southwards at the rate of 6.0 per cent every year. Consequently, Nigeria loses about 350,000 hectares of land every year to desert encroachment leading to demographic displacement in about 11 states in the north. It is also estimated that Nigeria loses about US\$ 5.1 billion every year as a result of the desert encroachment (Special Report on Desertification in Nigeria). About 35 million people in northern Nigeria are suffering from the effects of desertification. (Desertification Threatens Economy, Food Security). As defined by the UN Convention, desertification is a process of land degradation in arid, semi-arid, and dry sub-humid areas resulting from various factors, including climatic variations and human activities; (UN Convention to Combat Desertification) a delimitation or destruction of the biological potential of land which can lead to desert-like conditions. Desertification contributes to other environmental crises, such as the loss of biodiversity and global warming. Desertification has been reported in Nigeria and other parts of West Africa since the 1920s. A combination of climatic factors and general increases in population and livestock pressure on the land and vegetation are accepted as the chief causes of desertification (Okorodudu-Fubara, 1998).

At the national level, there are only few laws which contain provisions that address the causes of desertification, such as deforestation, over-exploitation of natural resources, inappropriate agricultural practices, bush burning, etc. Such laws include the FEPA Decree, the National Parks Decree 101 of 1991, Cap N65, LFN 2004; the Environmental Impact Assessment (EIA) Decree 86 of 1992, Cap E12, LFN 2004; the Endangered Species (Control of International Trade and Traffic in Fauna and Flora), Decree 1985, Cap E9, LFN 2004; and the Nigerian Constitution, CFRN, 1999, among others. The most significant of these laws relevant to desertification control are the Forestry Laws, most of which are outdated and require instant review (Combating Desertification and Mitigating the Effects of Drought in Nigeria).

## 5. Global Efforts at Combating Climate Change

Efforts at containing the threats of climate change on the international plane started with the 1972 Stockholm Conference, which culminated in the setting up of the United Nations Environmental Programme, UNEP. There is the United Nations Framework Convention on Climate Change, UNFCCC, which was formed in 1992 as countries joined an international treaty to cooperatively consider what they could do to limit average global temperature increases (UNFCCC), and to set an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Among others, it provides for stabilization of greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system (Art. 2), it established the idea that global climate change was a common concern of humankind, it established that international response should take into account the principles of equity as described in the principle of common but differentiated responsibilities and respective capabilities, for sustainable development, precaution and cost effectiveness as prescribed in chapter 23 in terms of common concern and chapter 27 Equity (Bodansky, 2010). It is the parent treaty of the 1997 Kyoto Protocol.

Of particular importance among the several conferences is the 1997 Kyoto Protocol, KP. The KP is generally seen as an important first step towards a truly global emission reduction regime that will stabilize GHG emissions, and provides the essential architecture for any future international agreement on climate change. The major feature of the KP is that it sets binding targets for 37 industrialized nations and the European Union, for reducing GHG emissions (The Kyoto Protocol). These are known as the Annex I countries, which agreed to reduce their collective GHG emissions by 5.2% from the 1990 level. The protocol further established some market-based, flexible Mechanisms aimed at assisting the industrialized nations to meet their emission reduction targets. These include Emissions trading, otherwise known as the carbon market; clean development mechanism, CDM, and the Joint implementation, JI. The Protocol is designed in such a way as to assist countries in adapting to the adverse effects of climate change. It equally facilitates the development and deployment of techniques that can help increase resilience to the impacts of climate change (the Kyoto Protocol). It minimizes the impacts on developing countries by establishing an adaptation fund for climate change; accounting, reporting and review in order to ensure the integrity of the Protocol; and establishing a compliance committee to enforce compliance with the commitments under the Protocol (the Kyoto Protocol).

Another important treaty is the Treaty of Paris of June 17, 1994 on desertification controls in countries that suffer from serious water depletion and/or desertification, in particular in Africa is a universal UN treaty. There is also the Bali "Action Plan is a comprehensive package to take care of the issue of deforestation. The Action Plan agreed at the 2007 conference on the UNFCCC endorsed the vision that tropical forests should have greater value standing than cut down. It initiated studies into "positive incentives"- the provision of financial compensation for developing countries in return for measurable reduction in deforestation. This was by an approach known as "reducing emissions from deforestation and forest degradation", REDD, which was intended to be a prominent feature of any international climate change agreement that extends or replaces the Kyoto Protocol in 2012. Succeeding to the 2007 Bali Action Plan is the REDD+ concluded at the Cancun Conference 2010, which sets out in detail the sequence of preparatory steps that developing countries must follow, which tailored to each country's circumstances, envisage a national action plan, its implementation and eventual full-scale operation, which progress must be capable of being monitored and verified when it must be possible to monitor and verify progress by reference to a baseline rate of deforestation. The Cancun Agreements aims beyond the basic goal of reducing deforestation, but to slow, halt and reverse forest cover and carbon loss.

## 6. A Critical Comparative Analysis of Nigeria's Posture and the Global Efforts

In Nigeria, the effect of climate change has been with us for a while without being acknowledged by our government, which posit to feign ignorance by its attitude, carrying on in the manner of business-as-usual, which is not only grossly detrimental to the people of the country, but is of damnable consequences to the whole world. The question is how long will this country be allowed to continue like this? Other countries in its category like Russia have since realized that it cannot continue like that indefinitely, and has therefore, started at channeling its associated gas to profitable uses. Only recently, Russia inaugurated (Lubmin, Germany) a project- the Nord Stream Pipeline, which became operational in October 2011. The 1,224 kilometer gas pipeline running through the Baltic Sea to Germany was described as the first of Nord Stream's twin projects, which when fully operational in late 2012, will have the capacity to transport 55 billion cubic meters of Russian gas a year to the EU for at least 50 years (Russia, Germany Inaugurate Nord Stream Pipeline). Nigeria must break loose from its enslavement by the oil TNCs operating in the country like Russia, her partner in the nefarious act of gas flaring. But regrettably, the signs are just not there that the Nigerian government itself is any serious about it. Nigeria's Parliament- the National Assembly has passed a Bill to establish a national climate change commission responsible for managing

the effects of global warming, but several months on, the President is yet to sign the Bill into law (Fominyen, 2011). The importance of this Bill cannot be overemphasized, as it is in line with the actualization of the UN Millennium Development Goals on environmental sustainability (CRP Nigeria Newsletter). Presently there is no specific date in view for flare-out in Nigeria. If our global society is to preserve critical common resources- the atmosphere, clean air and water, animal populations, energy, fisheries-decision makers from many different nations must negotiate resource use that places global common interests ahead of local self-interests (Brett 2007:220). Several funds under different headings and for different specific purposes have been floated and several projects and programmes are being executed from these funds. Some of these funds include the UN Global Environment Facility incorporating Funds such as the Least Developed Countries Trust Fund, LDCF, the GEF Trust Fund, the Special Climate Change Trust Fund, SCCF, Copenhagen Green Climate Fund, The Kyoto Protocol Adaptation Fund, etc.

## 7. Recommendations and Conclusions

From all indications, Nigeria is at cross-paths with global efforts as enumerated in this paper on the issue of climate change, if at this stage it still finds it difficult to address the issue of ending the flaring of its gas. International efforts so far is more than commendable with the array of funding in place for developing nations and others alike to utilize in curbing the effects of the menace. The efforts of the EU and the other Annex 1 countries in meeting the emission reduction targets set under the Kyoto Protocol is commendable, while more is envisaged for 2012 when the KP expires. All efforts should be made to get nations like the US to make legally binding emission reduction pledge like all other Annex 1 countries, and developing countries too, should make emission reduction targets, as countries like China, which is the second biggest economy in the world is rated a developing country, likewise India, Brazil, South Africa etc. which are in the real sense of it are otherwise known as the “emerging economies”, which are by no means small economies.

A World Eminent Personalities Group might be created to champion the climate change campaign towards persuading all nations and interests in not only cooperating, but contributing by sacrifices and otherwise to the cause of combating climate change. Such a body might involve personalities like Herman Van Rompuy, Angela Merkel, Gordon Browne, Vladimir Putin, Barak Obama, Bill Clinton, Nelson Mandela, Kofi Annan, Olusegun Obasanjo, Lula da Silva, Felipe Calderon, Wen Jiabao, Manmohan Singh, Crown Prince Nayef, and such the likes.

It is imperative that nations like Nigeria contributing to the emissions should be barred from drawing any form of benefits accruing from those available for mitigation and adaptation under the climate change programmes. This will compel them to take drastic and urgent measures towards conforming with global efforts, as most of these LDCs and developing nations derive a greater percentage of their resources from foreign aids.

The developed nations should assist Nigeria in particular and other developing corrupt nations in checking the worrisome trend of corruption, by ascertaining and verifying the sources of funds from individuals, especially public officials and political office holders, and business concerns being used as “fronts” by these corrupt officials, before accepting deposits from such. This will considerably bring down corruption index, as laundered monies would remain in their economies, and would thus be more easily tracked and recovered from the culprits.

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## Notes

Note 1. Koko toxic waste dumping incident in Nigeria by an Italian outfit Gianfranco Raffaeli, in 1987, which resulted in the death of some persons in the community.

Note 2. See <http://www.ghananewsagency.org/details/features>

Note 3. This represents 29.32 per cent of the total 126.847 billion barrels held by the African continent, according to OPEC. Nigeria's reserves are next to Libya's reserves which stand at 47 billion barrels. See Ayankola, Martin, Nigeria Holds 29.32% of Africa's Oil Reserves- OPEC. Available at [odili.net/news/source/2011/jul/26/849.html](http://odili.net/news/source/2011/jul/26/849.html)

Note 4. Section of this Act requires the consent of the appropriate Minister, upon his satisfaction that utilization or reinjection is not appropriate or feasible in a particular field or fields.