

# Impact of climate change in Nigeria



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**N**igeria contributes a small quantity of green house gases to the depletion of ozone layer, emitting 100 million metric tons annually with a global rank of 43rd in the list of global emitters. The breakdown of emission in the country is estimated below gas flaring 30 per cent, transport 30 per cent, generators and lamps 20 per cent, industry 12 per cent and deforestation 8 per cent.

The operation of generators totaling nearly 80 million in number not only emits green house gases but also adds indoor death caused by monoxide and intolerable noise pollution. Nigeria's environment suffers from a number of environmental challenges

such as acute deforestation, expansion of the Sahara desert in North forcing 100,000 families to migrate to south Nigeria as environmental refugees and environment pollution caused by gas flaring and production of crude oil in Niger delta.

People living in Niger Delta region have become vulnerable as a result of erratic weather conditions and unpredictable rain fall. It is estimated that Sahara desert has been advancing into ten northern states at an average rate of 600 meters per year affecting nearly 60 million people on account of loss of 0.4 million ha of farm land due to desertification, deforestation, overgrazing, acid rain fall, respiratory diseases and higher temperature.

Furthermore, research has shown that along the Nigerian coast, the sea level has increased at the rate of 46.2 cm between 1960 and 1970. Increasing sea level due to global warming has been threatening people living in low lying coastal areas of South West Nigeria, particularly in Lagos.

Half of the population accounting nearly eight million faces the danger of sea erosion in coastal region of Lagos. The natural protective system in the form of mangroves in the coastal area and wetland ecosystem in many parts of Lagos have been reduced considerably mainly due to sea erosion and human settlement.

As a result of these extreme climate events, eighty seven million farmers face the problem of food security and deepening rural poverty.

Climate change interacts with human health in diverse ways. Those least equipped to respond to changing health threats-predominantly poor people in poor countries- will bear the brunt of health setbacks.

Generally, ill-health is one of the most powerful forces holding back human development potential of poor households and the overall impact of climate change will be negative as attested by the reports of World Health Organisation.(WHO) Extreme climate events provide another set of worst threats. Floods,

droughts and the storms bring in their wake increased health risks such as cholera and diarrhoea among children depriving their physical and mental growth. Thus, climate disasters are the most potent forces sustaining low human development traps in Nigeria.

The Minister for Environment has stated that the government would be raising 40 million trees comprising mainly of economic species across the various eco-climate zones of the country to combat diversification as well as to provide jobs to Nigerian youth. Among the Nigerian states, only Cross River state has been pursuing the Reduced Emissions from Deforestation and Forest Degradation (REDD) programme successfully for the last few years.

Green house gas emission of Nigeria, if reduced through the implementation of nearly some 750 projects identified by the World Bank under Clean Development Mechanism, (CDM) it would fetch the country 20 Euros per ton of green house gas which would lead to nearly one billion Euros as carbon credit which could be traded at the global carbon market for a 100 million tonnes of carbon emission reduction in Nigeria.

As a response to the growing disasters caused by the climate change, a bill for establishing a National Cli-

mate Change Commission has been passed by the National Assembly and sent for the assent of the President during December, 2010. The bill has not become a law till date and in all probability, it would be returned to National Assembly. In the absence of a commission, Nigeria is yet to formulate a suitable national climate change policy and strategy and the likely cost of this delay will be huge for the farmers, investors and the economy as a whole.

However, in compliance with the requirement of Kyoto protocol, a Presidential Implementation Committee has been established under Federal Ministry of Environment for clean development Mechanism activities in Nigeria.

The Committee while promoting CDM provides guidelines, procedures and keeps a register of approved CDM projects. For the formulation of a national strategy, various projects are being undertaken across the three agro-ecological zones of Nigeria, mostly the coastal and rain forest zones in the south, the Nigeria Sahel and northern savannah. The projects will test local adaptation strategies that include finding alternatives to deforestation, controlling erosion, conserving water and developing long term community adaptation plans.