

Tropentag, September 17-19, 2018, Ghent

"Global food security and food safety: The role of universities"

Climate Change Role's Against Food Security Infrastructures in Sub-sahara Africa

ADEMOLA ELEMIDE, ALAA ABOGHALY

Federal University of Technology Akure, Ondo State, Nigeria, Meteorology and Climate Science, Nigeria

Abstract

Food Security Infrastructures have been supporting the society of human being for their sustainable development by supplying safety against disease outbreak, convenience for daily life, business, sustainable natural and built environment.

The economic growth of sub-Sahara Africa has been supported by the development of disease outbreak prevention in infrastructures and their crucial role tends to be overlooked. The potential disease outbreak caused by climate change remains unrecognised by Politician and the budget for disease prevention under Africa government policy been reduced. Therefore, not only direct damages to hard structures but also indirect and intangible damages to societal systems should be counted. The measures are mitigation of greenhouse gases (GHG) and adaptation to climate based on the state of the art technologies. Indications of the global warming crises include the expansion of tropical zones, increased meteorological fluctuations, rising sea level, changes in seawater temperature and adverse effects on fauna and flora in sub-Sahara Africa.

The paper finds that the mitigation measures in design, construction, operation and maintenance and public procurement of Food security infrastructures including co2 emission trading will be needed to be studied. The measures are both structural and non-structural. The paper concluded that climate change is bringing about a historical crisis to human beings whose development has been supported by Food Security infrastructures and the very cause of climate change is the human desire for safe and convenient life. The development of Food Security infrastructures for their benefit has increased GHG emission and damage potential. The complex development of society has, in turn, complicated disaster damage in sub-Sahara Africa. Society requires three broad actions from researcher / engineers

- i. Proposal for adaptation measures to global Warming warning.
- ii. Proposal for mitigation of GHG to create Innovation for green and accessible food.
- iii. A comprehensive research for global warming warning with more accurate prediction in Africa.

It is urgent that adaptation measures be implemented in response to the intensification of natural disaster caused by global warming.

Keywords: Adaptation, food security infrastructures, global warming warning, mitigation

Contact Address: Ademola Elemide, Federal University of Technology Akure, Ondo State, Nigeria, Meteorology and Climate Science, The Federal University of Technology Akure Ondo State Nigeria Expressway P.m.b. 704., 340252 Akure, Nigeria, e-mail: elemideademola@rocketmail.com