

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
Assessing and Mitigating the Global Freshwater Crisis (6)

Author: Mr. Babagana BABAGANA  
KANURI DEVELOPMENT ASSOCIATION, Nigeria, babaganabubakar2002@yahoo.com

SPACE DATA APPLICATIONS IN PREDICTING, MONITORING AND MITIGATING CLIMATE  
CHANGE IN AFRICA

**Abstract**

In contemporary Africa Space data application for planning activities in the areas of Climate Change monitoring and mitigation, disaster risk management is very limited, hence the African continent continues to suffer as a result of this. The very few areas that are presently enjoying space data applications for development and for planning is the area of water resources management and only in some few African countries like Egypt, Nigeria, South Africa and Namibia.

NASA space data and satellite imageries were used to produce the various positions of the Lake Chad from 1963 to 2001 which planners and researchers in Africa are relying on in the fight against climate change and drought/famine forecasts for the Sahel region of Africa presently.

Suggestion/Recommendation

1. The United Nations Office for Outer Space Affairs (UNOOSA), the European Space Agency (ESA), National Aeronautical Space Agency (NASA), the Japanese Space Agency (JAXA) and others should use their resources and technical knowhow as well as capacities to raise awareness of the importance of using space data / applications on developmental activities in Africa especially related to this Lake by stakeholders so that accurate results can be obtained in researches for a better conservation and water management as well as in preferring long lasting solution to this issue in this part of the world.
2. The World Bank department on Land issues, governments, United Nations Environmental Program as well as UNOOSA and other relevant stakeholders on water management, climate change, space technology application and Land issues should assist in their capacities and technical know-how in encouraging governments, planners, decision makers and researchers to be relying on Space based technologies in their works.
3. The local communities should be mainstreamed in the capacity building activities on space technology application for their future community based decision makings.
4. Experts/relevant stakeholders on Land, environment and climate change should be organizing series of educative Conferences, seminars, workshops and training on Space data application for combating climate Change, disaster risk management, disaster response efforts, water management and conservation in this part of the world.