



Drought Conditions and Management Strategies in Nigeria

Presented

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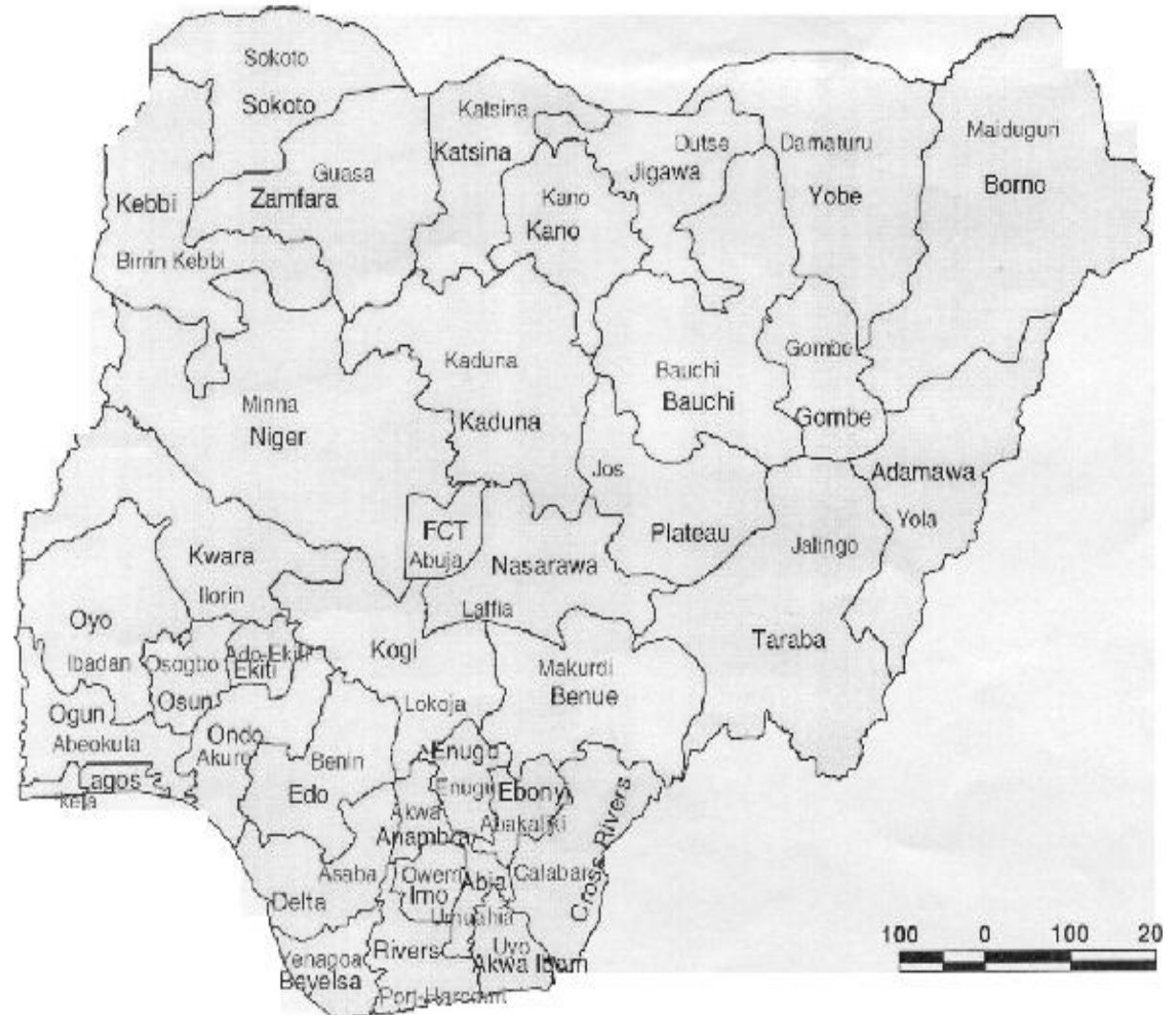
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BACKGROUND

- Droughts occur throughout the length and breadth of Nigeria.
- They are more frequent and much more severe in the Sudano-Sahelian States of *Kebbi, Sokoto, Zamfara, Katsina, Kano, Jigawa, Yobe, Gombe and Borno.*

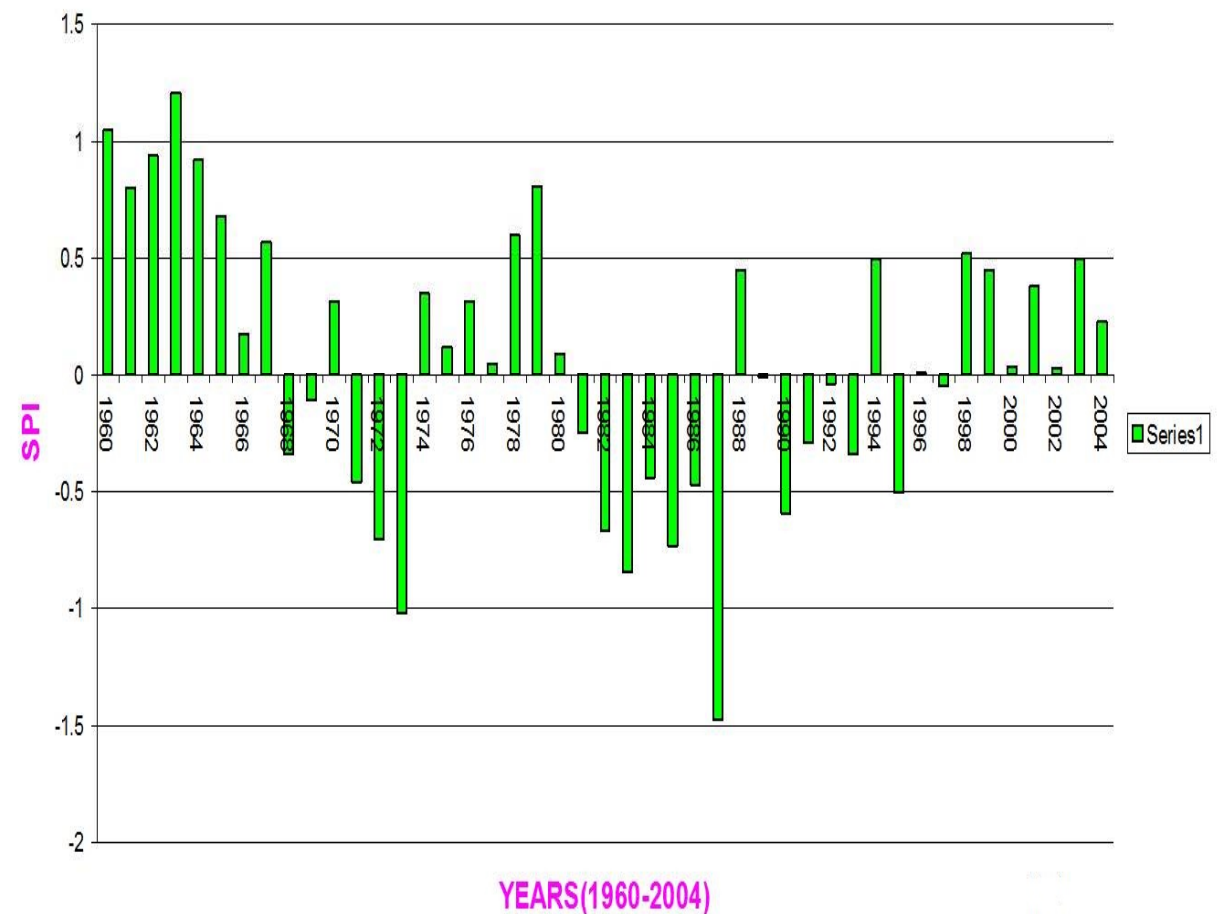
ADMINISTRATIVE MAP OF NIGERIA



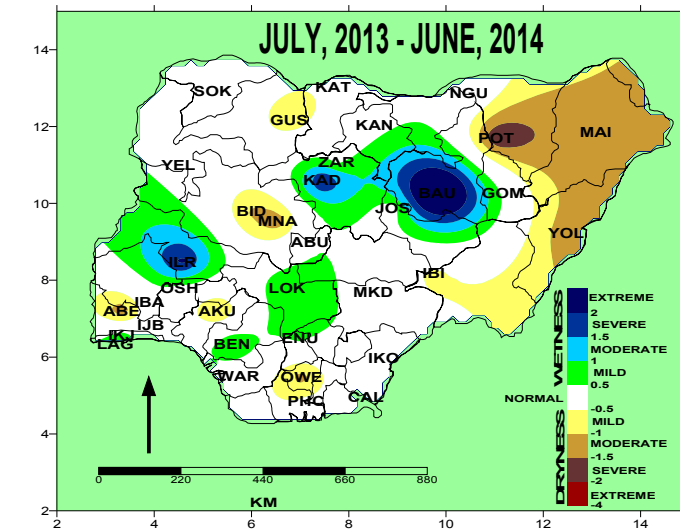
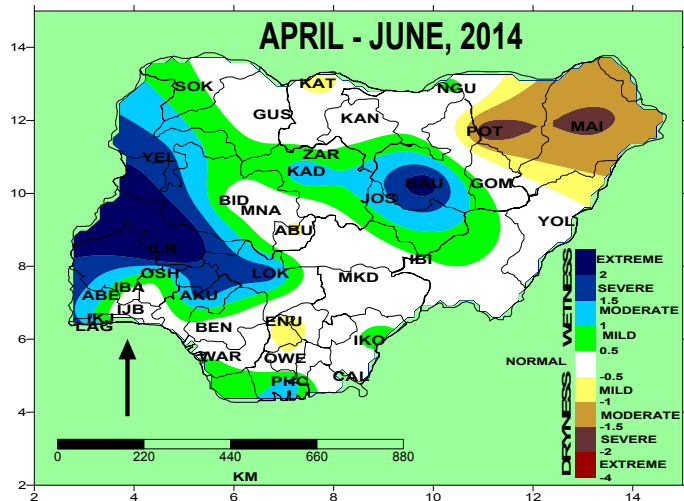
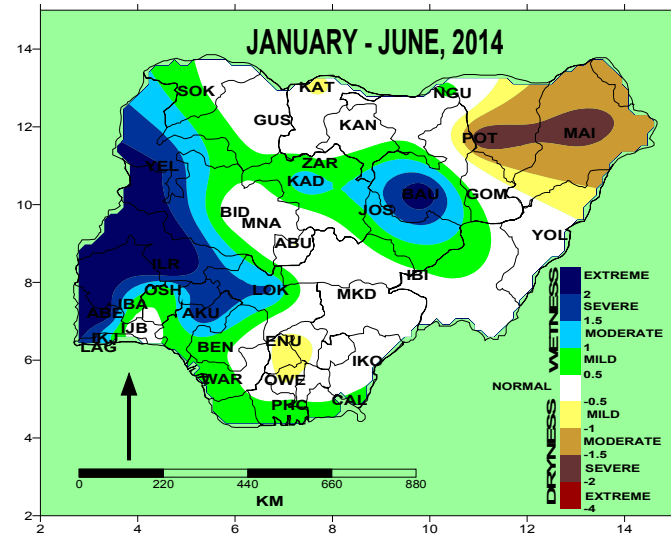
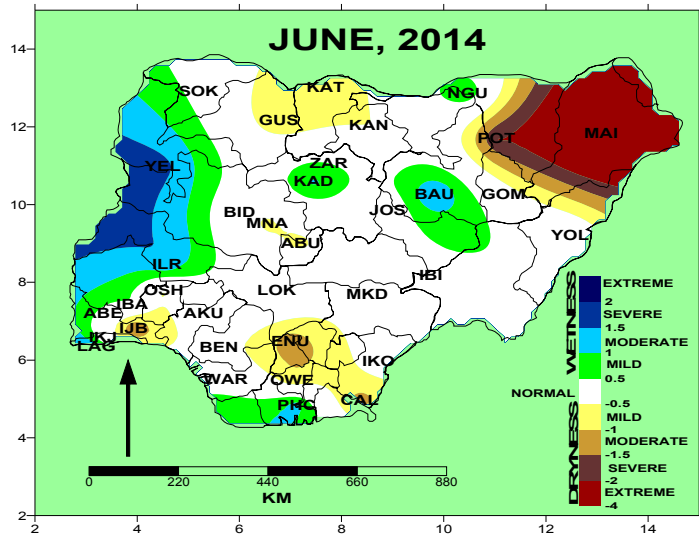
Drought Monitoring and Early Warning Systems

- Usually carried out by Nigerian Meteorological Agency (NiMet) and the Federal Ministry of Environment.
- The longest drought episodes in the region lasted for nearly a decade and half (1981-1997).
- The mean annual Standard Precipitation Index (SPI) values ranged between (-0.3 and -1.47) with 1987 recording the severest drought episode throughout the period under consideration. (figure 2)

FIG.2 MEAN ANNUAL SPI VALUES FOR EXTREME NORTHERN STATIONS



Weather bulletins like Flood and Drought Monitoring is one of NiMet's important early warning tools and are used to provide information on different types of drought.



Impacts of Drought

- A localized drought occurred in Yobe State in 2004 resulting in heavy losses in crops, livestock and fodder, fishing activities, biodiversity and livelihoods .
- The local government areas severely affected in the state included: Yusufari, Yunuri, Karasuwa, Machina, Geldam, Nguru, Bursari, Bade and Jakusko.
- The most vulnerable groups are Women and children.
- Influx of aliens from neighboring Niger Republic to the country led to drastic rise in the prices of commodities (Tab.2).

S/N	Commodity	Price/100kg(#)		Differentials	%tage shortfall
		Nov.2003	Nov.2004		
1.	Millet	1,600=	3,700=	2,100=	131.3
2.	Sorghum	1,350=	3,200=	1,550=	114.8
3.	Paddy Rice	3,000=	6,400=	3,400=	113.3
4.	Maize	2,200=	4,800=	2,600=	118.2
5.	Cow Pea	4,000=	5,200=	1,200=	30
6.	Groundnut	4,800=	8,000=	3,200=	66.6

Vulnerability Assessment

- **The Sudano-Sahelian regions of Nigeria are the most vulnerable areas to drought and desertification.**
- **The most vulnerable sectors to drought in Nigeria are water resources, agriculture and fisheries, energy, forestry and biodiversity.**
- **The women and children are the most vulnerable group.**

Emergency Relief and Drought Response

- The National Emergency and Management Agency (NEMA) is the institution mandated to handle disasters in Nigeria. The institution is responsible for providing relief in times of drought. Relief materials dispatched to affected communities are mainly food stuffs.
- In Yobe state, the drought that occurred resulted in the loss of about 3,142 metric tons agricultural produce. Relief materials given to affected communities amounted to about ₦40.4million. In addition about ₦120million was provided by the Federal Ministry of Environment for provision of irrigation equipment.
- The agency collaborates with stakeholders to undertake hitch-free direct distribution of relief to the affected persons. Stakeholders include: State Emergency Management Agency (SEPA), the Red Cross Society, NGOs, CBOs, affected Local Government Officials, Opinion leaders/Traditional Rulers of the affected communities and the Nigeria Security and Civil Defense Corps. The distribution of relief items is based on request from affected communities.
- In addition to NEMA, the Federal Government of Nigeria established the Strategic Grain Reserve as one of the coping measures to reduce risks of drought.

Drought Alleviating Practices

Responses embarked by government include the following;

- Institutional Arrangements leading to the creation of Federal Ministry of Environment and the Drought and Desertification Amelioration Department.
- Management of Water Resources by the establishment of River Basin Development Authorities to promote sustainable utilization of water resources in the dry land.
- Use of Drought tolerant (hybrids) crop varieties in the drought prone regions by farmers.
- Production of National Action Plan(NAP) as part of the National Economic and Environmental Protection plan and making the NAP Coherent with other environmental strategy and planning framework
- Linking the NAP with National, intra-Regional and local approaches. Measures taken within the framework of NAP include adequate Diagnosis of past experience

Drought Alleviating Practices

- New projects/strategies initiated as part of implementation process since the last NAP report in 2002 includes:
- Sand dune fixation
- Rangeland establishment
- Oasis inventory and rehabilitation
- Drought forecasting
- Formulation of drought and desertification policies
- Development of National drought preparedness plan
- Development of Drought and Desertification policy
- Rainwater harvesting
- The Great Green Wall program to halt desert encroachment
- Preparation and implementation of the National Biodiversity Strategy and Action Plan (NBSAP) to halt the loss of biodiversity.

The Need for Knowledge and Skills on Drought Management

- Strengthen the capacity of the Federal Ministry of Environment (Drought and Desertification Amelioration Department) to coordinate activities for combating desertification and mitigating the impacts of drought. This will enhance response effectiveness, adequate preparedness planning and maximize mitigation efforts.
- Capacity building for drought monitoring, assessment and forecasting particularly for NiMet as an institution using climate elements in this respect for proper implementation of Drought monitoring and preparedness plan.
- Upgrading and modernizing the hydro meteorological observation networks.
- Strengthen the capacity of the Federal Ministry of Environment (Department of Forestry: Conservation) to undertake Biodiversity Assessment and Economic Valuation of Biodiversity for proper management of biodiversity at all times and its integration into national accounting and planning.
- Enhancing synergy, cooperation and networking between various hydro-agro-meteorological sectors, and other relevant stakeholders .

THANK YOU FOR YOUR ATTENTION