Document from the 7th Africa Water Week, held in Libreville, Gabon, 29 October – 2 November 2018

A knowledge asset of the African Ministers’ Council on Water

This material is shared as a learning resource to promote awareness and good practice in the provision, use and management of water resources for sustainable social and economic development and maintenance of African ecosystems.

Copyright for this material rests with the authors.
Status of Hydro Climatic Services in the Lake Chad Basin

Mohammed BILA
Modeler
Lake Chad Basin Observatory
Lake Chad Basin Commission
Place de la Grandes Armees
N’Djamena
m.bila@cblt.org
www.cblt.org
+235 62 14 21 54
Outline

1. Climate & Hydrological Hazards
2. Monitoring Network
3. Challenges of Hydro Climatic Monitoring
4. Conclusion and Recommendations
2012 Flooding Episodes
Floods Hazard Problem

• Flash Floods
  • In 2012, in central and southern regions of Chad
  • In August 2012 & 2013, Maradi, Zinder and Agadez were affected with destroyed houses and farms
  • In Nigeria, States of Kano and Yobe experienced severed floods in August in 2012

• River Flooding
  • In 2010 & 2012, the cities and settlements of Ndjamena, Kousseri and Bongor were flooded.
  • R. Logone between Katoa, Bongor and Kousseri
  • R. Chari at Ndjamena
Monitoring Network

- Availability of 88 rainfall stations & 24 runoff stations
- Precipitation and runoff database since 1952
Challenges of Hydro Climatic Monitoring

• Obtaining up-to-date information on time, regularly and without gaps;
• Non-implementation on the agreement on data sharing and exchange;
• Lack of continuity in the participation of permanent specialists (Meteorologist, Hydrologist) in the annual meetings of the Technical Committee of Experts.
• Non-involvement of climate expertise in the meetings of the Technical Committee of Experts.
• Irregular meetings of the Technical Committee of Experts on issues such as “Promotion of a mutual approach towards water management”
• Low the density of network stations around in the Lake Chad Basin.
• Non-functioning of some existing stations.
• Lack of capacity for research to further monitor and evaluate climate phenomena in the Lake Chad Basin.
• Lack of collaboration between the meteorological departments of the riparian countries for improved monitoring of climate phenomena around the Lake Chad Basin.
Conclusion and Recommendations

• Enhance collaboration between the meteorological departments of the riparian countries for improved monitoring of hydro climate is necessary.

• Annual regional meeting of experts on hydro climatic services be initiated.

• Implementation on the agreement on data sharing and exchange should be on the agenda at the regional meeting of experts.

• Rehabilitation and upgrade of existing stations.

• Increase the density of network stations around the Lake Chad Basin.

• Increased capacity building and research to further monitor and evaluate climate phenomena.
Thank you for the attention