Brief on the Lake Chad Basin Joint Workshop on Earth Observation and Capacity Development for IWRM at River Basins in Africa

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Hydrologic & Conventional **Basir** Libye Algérie Niger Tchad Şudan Nigéria République Centrafricaine Cameroun

Eco-regions of Lake Chad Basin

Legend

Lake Chad Basin Ecoregions

Cameroonian Highlands forests
East Saharan montane xeric woodlands
East Sudanian savanna
Jos Plateau forest-grassland mosaic
Lake
Lake Chad flooded savanna
Mandara Plateau mosaic
Northern Congolian forest-savanna mosaic
Sahara desert
Sahelian Acacia savanna
South Saharan steppe and woodlands
Tibesti-Jebel Uweinat montane xeric woodlands
West Saharan montane xeric woodlands
West Sudanian savanna



Eco-regions (14) of the Active Watersheds



Biodiversity

- 38 million people in 2009
- Flora that generates 2.5 million tons of assorted grains per annum
- 20.3 million Bovine, Ovine, Caprine, Cameline, Equine, Asine and Pocine in 2010
- Fish species of 26 families with potential catch of 295,000 tonnes/annum
- 65 wild animal species & 400 birds many migratory
- Many internationally protected areas





Challenge II: Population Pressure







Lake Chad Basin Commission

- Created: 22nd May 1964
- Headquarters N'djamena, Chad Republic
- Current Member States:
 - Cameroun (1964)
 - Niger (1964)
 - Nigeria (1964)
 - RCA (1994)
 - Sudan (2000) Yet to ratify
 - Tchad (1964)
 - Libya (2008)

Structure

- The Summit
- The Commission (2 Ministers per country)

- The Executive Secretariat

Mission

Integrated Land and Water Resources Management



Fort Lamy Convention

- Member States are required to abstain from measures likely to affect other Member States, such as:
 - alter the water budget,
 - affect water quality,
 - Influence integrated water resources management
 - limit downstream access to water
- In practice this wish has remain elusive and the potential for conflict is high.

IWRM Process – Began 2004

- Multi-Stakeholder, Inter-Sectoral Joint fact finding - TDA
- Led to a Prioritised list of Transboundary Problems
- 1. Changes and variability of hydrological regimes and fresh water availability
- 2. Water pollution
- 3. Invasive species
- 4. Decreased viability of biological resources including fish stocks
- 5. Loss of biodiversity
- 6. Loss and/or modification of ecosystems
- 7. Sedimentation in rivers and water bodies as a result of upstream land degradation

STRATEGIC ACTION PROGRAMME (SAP) 25 - YEAR

- The SAP consists of Objectives, Indicators and Targets
- SAP Ecosystem Quality Objectives
- EQO I: Improved water quantity and quality in the Lake Chad Basin
 - Indicator: Lake Chad is maintained at a sustainable level with reference to the base year (1990); A measurable decline in levels of the main contaminant groups in the water, sediment and biota
- EQO II: Restoration, conservation and sustainable use of bioresources in the Lake Chad Basin
 - Indicator: Measurable and sustained increase in human development indices in the Lake Chad Basin
- **EQO III:** Conservation of biodiversity in the Lake Chad Basin

SAP Ecosystem Quality Objectives

- EQO IV: Restoration and preservation of ecosystems in the Lake Chad Basin
 - Indicator: Measurable increase in restored aquatic and terrestrial ecosystems
- EQO V: Strengthened participation and capacity of stakeholders, and institutional and legal frameworks for environmental stewardship for the Lake Chad Basin
 - Indicator: Enhanced involvement of stakeholders in the NAPs and SAP implementation



INVESTIMENT PLAN 5-YEAR CYCLE

- Actions broken into 5-year cycles
- There will be revision of targets and indicators within each 5-year cycle
- First cycle of 2012 2016 has a preliminary estimate of € 42 Million



National Action Plans

- H
 - 15 years, \$122,762,651
- Cameroon NAP 15 years, \$185,260,000
- Niger NAP

- 15 years, \$118,298,554
- CAR NAP 3 years, \$4,464,096
- Nigeria NAP 15 years \$ 357,021,421
- Total Estimated Budget \$788 million



Lake Chad Basin Water Charter

- Fundamental commitments of the Water Charter;
- 1. During low waters periods, reserve a minimum low water flow for the tributaries flowing into Lake Chad
- During high water period, reserve a minimum amount of flood waters to ensure that the basin's wetland areas are inundated
- 3. Restrict the proportion of abstractions from the inflow to the Lake Chad
- 4. Adapt groundwater abstraction to aquifer capacity
- 5. When necessary, create fishing reserves in part of Lake Chad and/or its tributaries.
- 6. Share data and ensure smoothly-run exchanges of information

LCBC Needs

- Formalising the generation and exchange of information using GEO principles between Member States.
- Data and models to enforce the Member States commitment to the Lake Chad Basin Water Charter
- Data and information to monitor the implementation and progress of IWRM, actions and plans developed within the SAP framework.

Thank you for the attention

