

Presentation

Presentation from the 2009 World Water Week in Stockholm
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WORLD
In Stockholm,
August 16–22, 2009 **WATER**
WEEK

Adaptive Water Management in the Lake Chad Basin

Addressing current challenges and adapting to future needs

Seminar Overview

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World Water Week 09 - Stockholm - 20 August 2009



Objective of the Seminar

This seminar will address the current **challenges** in the Basin and will explore opportunities for an **Adaptive Water Management** and possible **future strategies** to be adopted to replenish the Lake and to safeguard its surrounding livelihood.

- Contribute to the effort of formulation of adaptation plans with a clear basin action plan.
- Help the capitalization of enough knowledge to respond to the current and future challenges in the basin.
- Help the call for larger commitments and contributions from the international community to save the lake.



From Sirte 08 to Stockholm 09:



[...] Strengthen existing river and lake basins organizations to promote sustainable water resources development and management through support to infrastructure projects [...] to the benefit of the continent.

Sirte 2008 Declaration

- The shrinkage of Lake Chad is an imminent world disaster if no action is taken soon.
- The causes of the shrinkage, the environmental degradation, and the social threats are both global and local.



Concrete and urgent solutions are to be taken not only by LCBC and its member countries but with the active and sustained support of international community.

Saving Lake Chad is a concern for all!



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Water Transfer from Oubangui to Lake Chad

- The aim of the water transfer project is to construct a navigable channel using some inflows **from Oubangui to supply Lake Chad** with water.
- This arrangement will have **multiple goals**:
 - River transportation (trade)
 - Hydropower generation
 - Irrigation development
 - Rehabilitation of fisheries
 - Agro-industry in the region
 - Barrier against Sahara desert encroachment

The Feasibility Study of Water Transfer Project (September 2009)

- Solution of low water support.
- Impact of reduced flow of the Oubangui river
- Impact on Lake Chad
- Final quality of water
- Impacts on the socio-economic activities
- Effect on the ecosystems and public health



Climate Adaptation Systems



- Reduced effectiveness in spontaneous adaptation and coping strategies due to:
 - Increasing population
 - Poverty
 - Illiteracy
 - Climatic related risks and related losses
- **Planned adaptation** is crucial:
 - More knowledge of current adaptation
 - Better forecasting & warning systems
 - Increased donors' funding on CC adaptation technologies
 - More capacity building efforts
 - Information pooling and data exchange
 - Close cooperation amongst all stakeholders in lake Chad



Aquifer Recharge and Storage

- High level of evapotranspiration caused by the high temperatures which limits the natural recharge.
- High evapotranspiration involves surface water but also groundwater.
- The storage of surface water into the underground could help to reduce evaporation.

Injection Wells

Surface Infiltration

- Any conservation methodology like artificial recharge can be applied at **small scale**, when the needed volumes of water do not significantly reduce the river discharge.
- Medium to large scale systems require large volumes of water that are also needed for the preservation of the Lake Chad level.



Small Scale Technologies



- 75-80% of the farming population is smallholders
- Staple foods
- Weak connections to markets

New technologies to:

- Improve the productivity
- Enhance livelihoods of small-scale farmers
- Improve water use (efficiency & conservation)

- But small scale technologies are **not a panacea** !
- The challenge is:
 - to adapt these technologies to **local circumstances**
 - to plan and implement them in the much broader framework of **agricultural and rural development**



Seminar Programme

- 9:30 Water transfer project: More emphasis on the intra-basin environmental and socio-economic impacts.**
Mr Michel Dimbele-Kombe, Director of Water Resources and Environment, LCBC
- 9:45 Application of climate adaptation systems and the improvement of predictability systems.**
Dr Haruna Kuje Ayuba, Head of Department of Geography, University of Maiduguri, Nigeria
- 10:00 Aquifer recharge and storage systems to halt the high level of evapotranspiration.**
Dr Sara Vassolo, BGR, Germany
- 10:15 Appraisal and up-scaling of water conservation and small-scale agriculture technologies.**
Mr Amadou Allahoury Diallo, NEPAD
- 10:30 Questions and Panel Discussion**
- 11:30 Open Debate**

