

*Seminar on "National Trans boundary Water Resources Management" in Africa, Accra - Ghana*

*from*

*26<sup>th</sup> to 30<sup>th</sup> March, 2012*

**Elaboration of an International Water Charter in order to define a framework for Water Resources Management and prevent conflicts in the Lake Chad Basin**



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Lake Chad Basin  
Commission**



## **PREAMBLE**

**The Water Charter for the Lake Chad Basin is aims to integrated, equitable, coordinated management of the Basin's shared Water Resources and Environment which is contributing to improving the life quality of peoples and facilitates the implementation of the Strategic Action Programme(SAP) , the IWRM and the Vision 2025 of the Lake Chad Basin.**

**The Creation and Extension of Water Charter of the Lake Chad Basin was a Grant Agreement between the African Water Facility and Lake Chad Basin Commission signed at N'Djamena July 6, 2007 with specified completion period of Forty Five (45) Months.**

**The cost of the Project was € 1.0 Million Euros which out of 89% & 11% was financed by African Water Facility & Lake Chad Basin Commission respectively.**



## PROJECT OBJECTIVES

- ✓ **The Quantitative Management of Surface & Ground Water Resources**
- ✓ **The Qualitative Wetland Management**
- ✓ **Biodiversity & Ecosystem Conservation**
- ✓ **Navigation Management**
- ✓ **Preventing Conflicts over usage of Shared Water Resources & Environment**
- ✓ **Improving the Socio Economic Condition.**



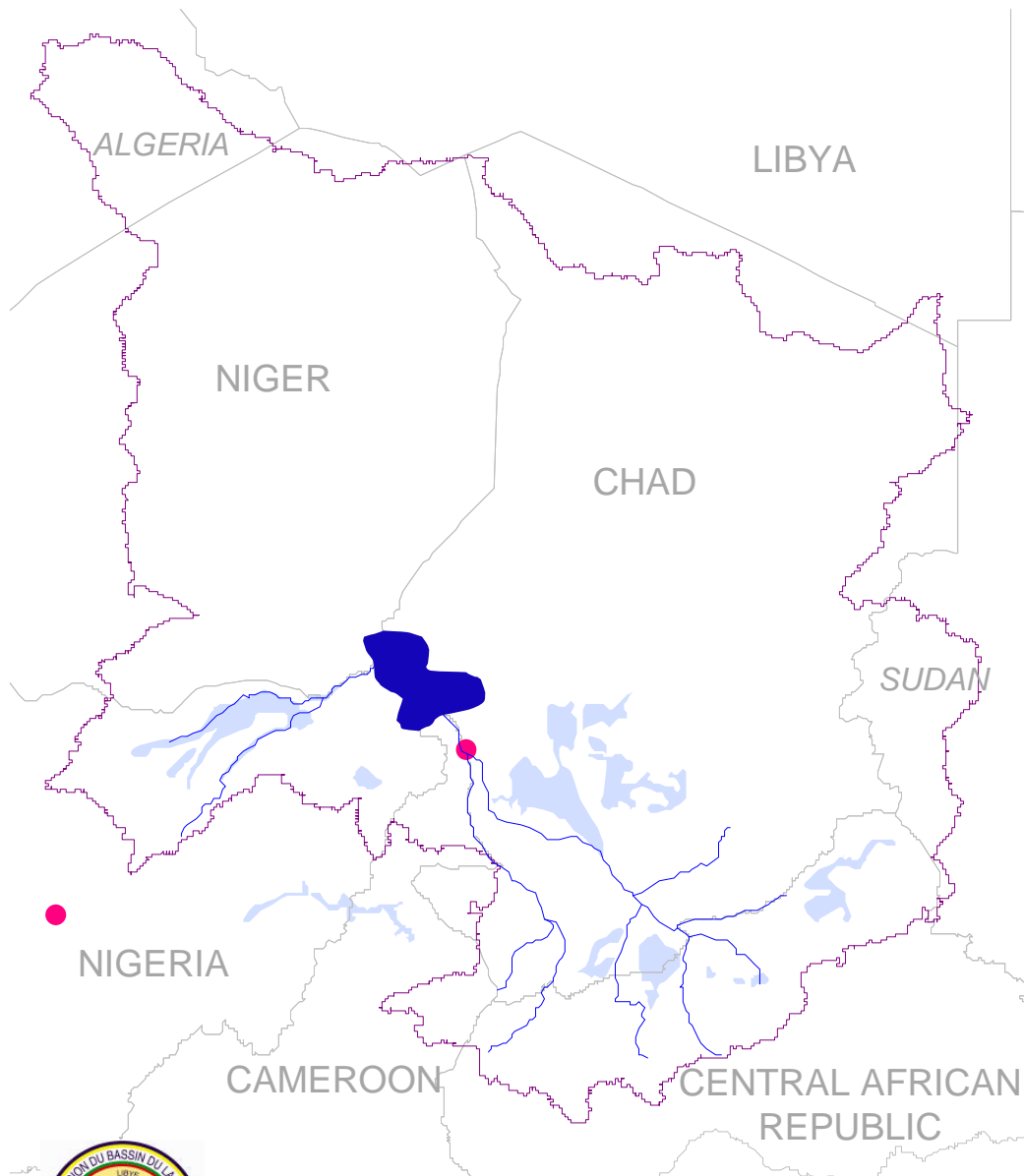
# One of the largest African basins



2 500 000 km<sup>2</sup>



## A shared inland lake





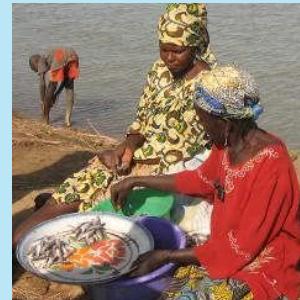
## 30 million peoples within the basin

### Consumptive uses:

- Irrigation: 150 000 ha - 1,8 km<sup>3</sup>
- Recession irrigation
- Domestic consumption: 0,5 km<sup>3</sup>
- Cattle: 0,2 km<sup>3</sup>

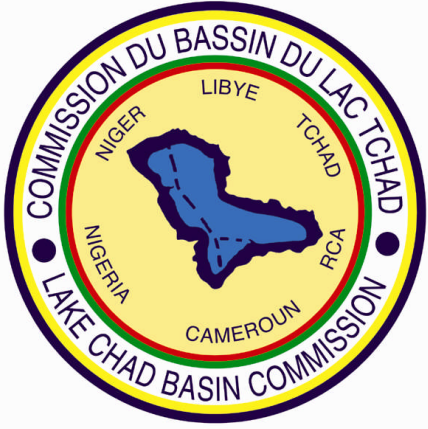
### Non consumptive uses

- Transportation
- Fisheries – Environment (wetlands) ->Minimum flows (floods, low waters)



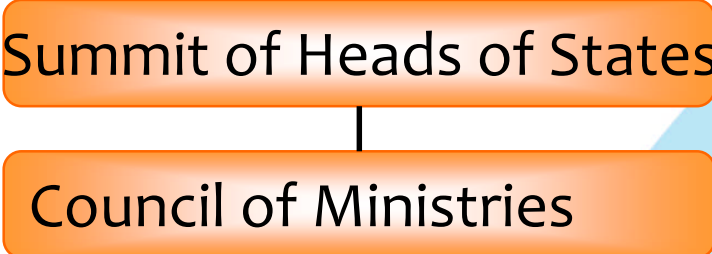
# Construction of water cooperation: the LCBC

Statues and treaty, 1964  
 Institutionnel reform, 2010  
**Water Charter, 2011**



POLITICAL

Strategic Action Plan  
 Vision 2025



TECHNICAL

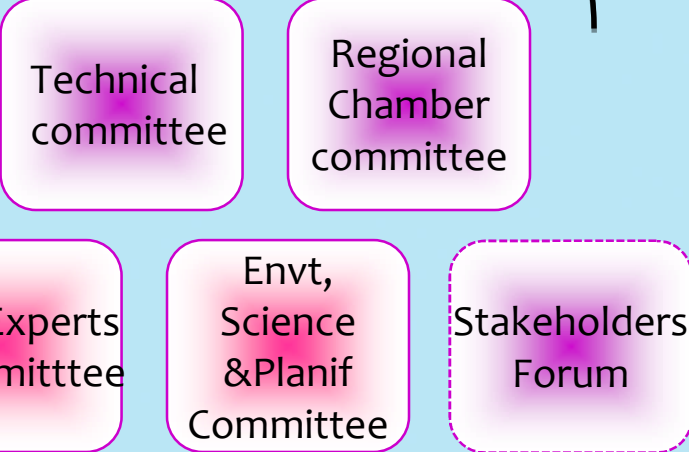
Projects



ADVISORY

NATIONAL

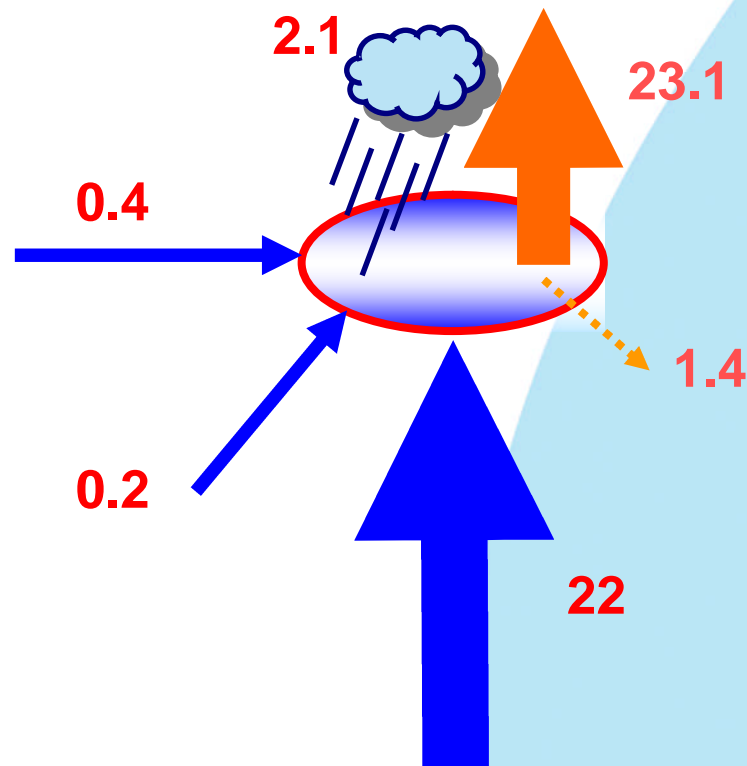
National agencies



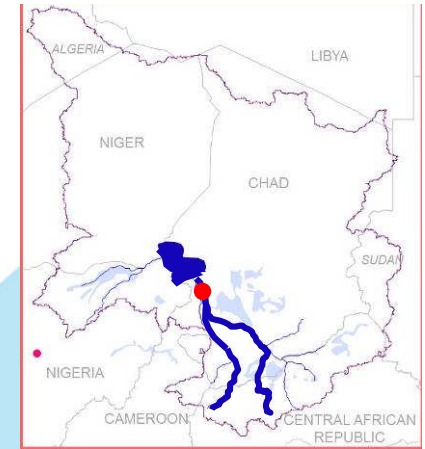
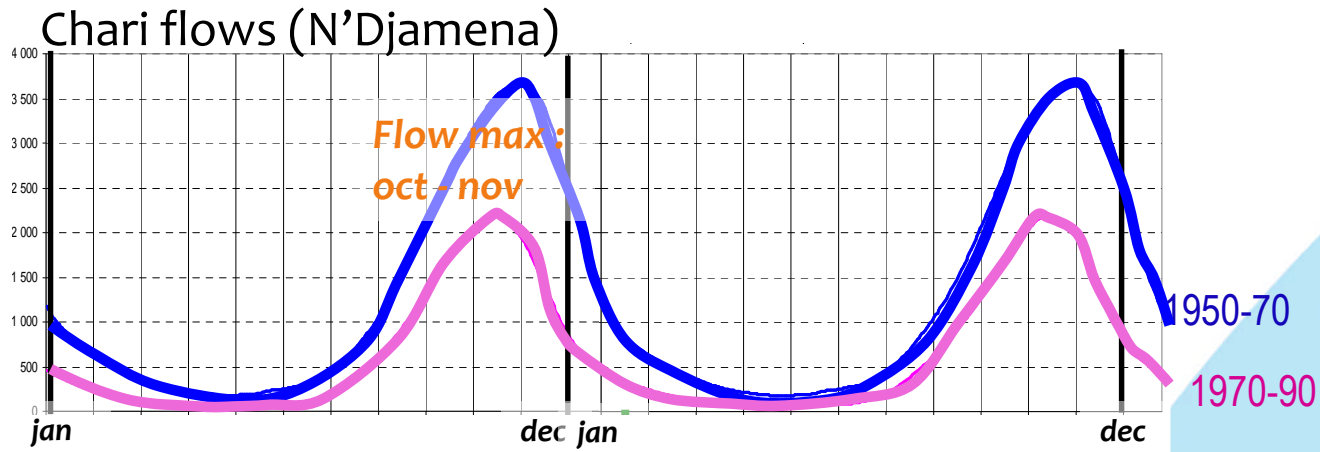


## Yearly variations of lake levels

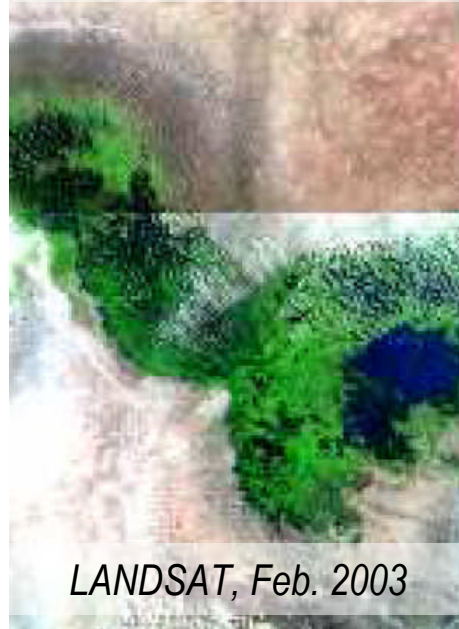
	In (km <sup>3</sup> /yrs)				Out (km <sup>3</sup> /yrs)			Average area of the Lake and the associated wetlands (km <sup>2</sup> )	
	Chari-Logone	Komadoug-Yobe	El Beid tributary	Direct rainfall on the lake	Total	ETP	Infiltration		Total
<b>1900-1970</b>	37.8	1.0	1.2	6.0	<b>46.0</b>	43.0	3.0	<b>46.0</b>	18 000
<b>1971-1990</b>	21.8	0.4	0.2	2.1	<b>24.5</b>	23.1	1.4	<b>24.5</b>	9 400



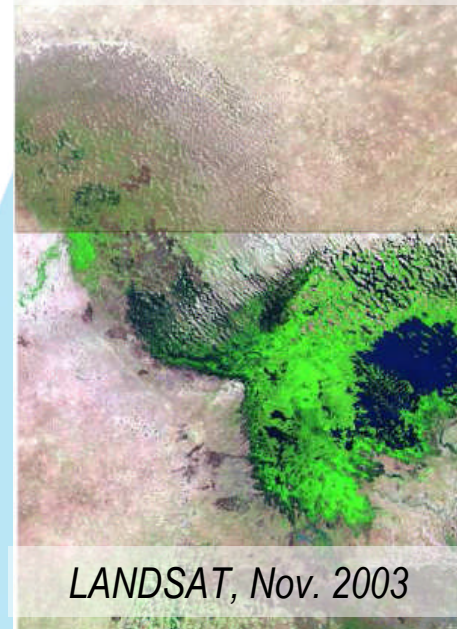
# Yearly variations of lake levels



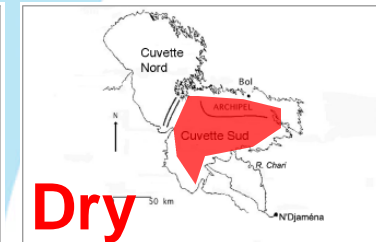
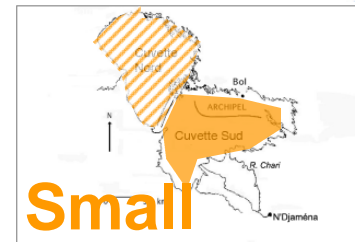
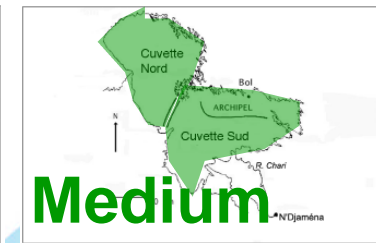
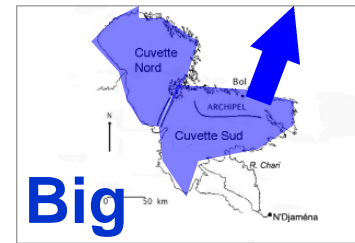
Lake level max: january



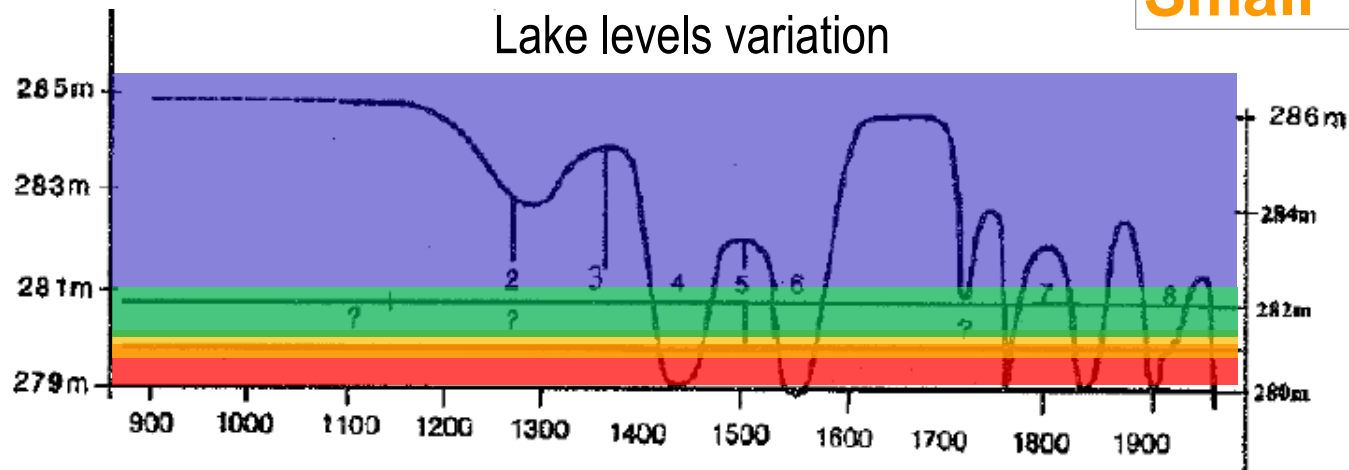
Lake level min: sept-oct

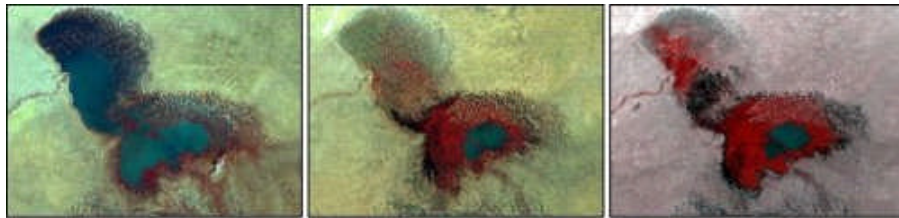


The variations of lake levels depends on the variations of the climate



Lake levels variation





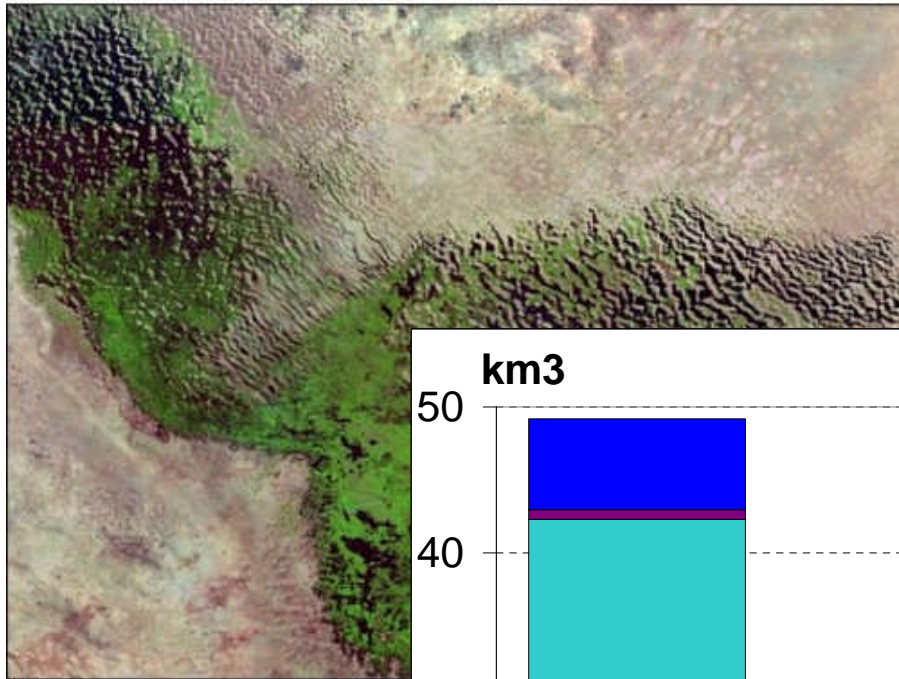
1973

1987

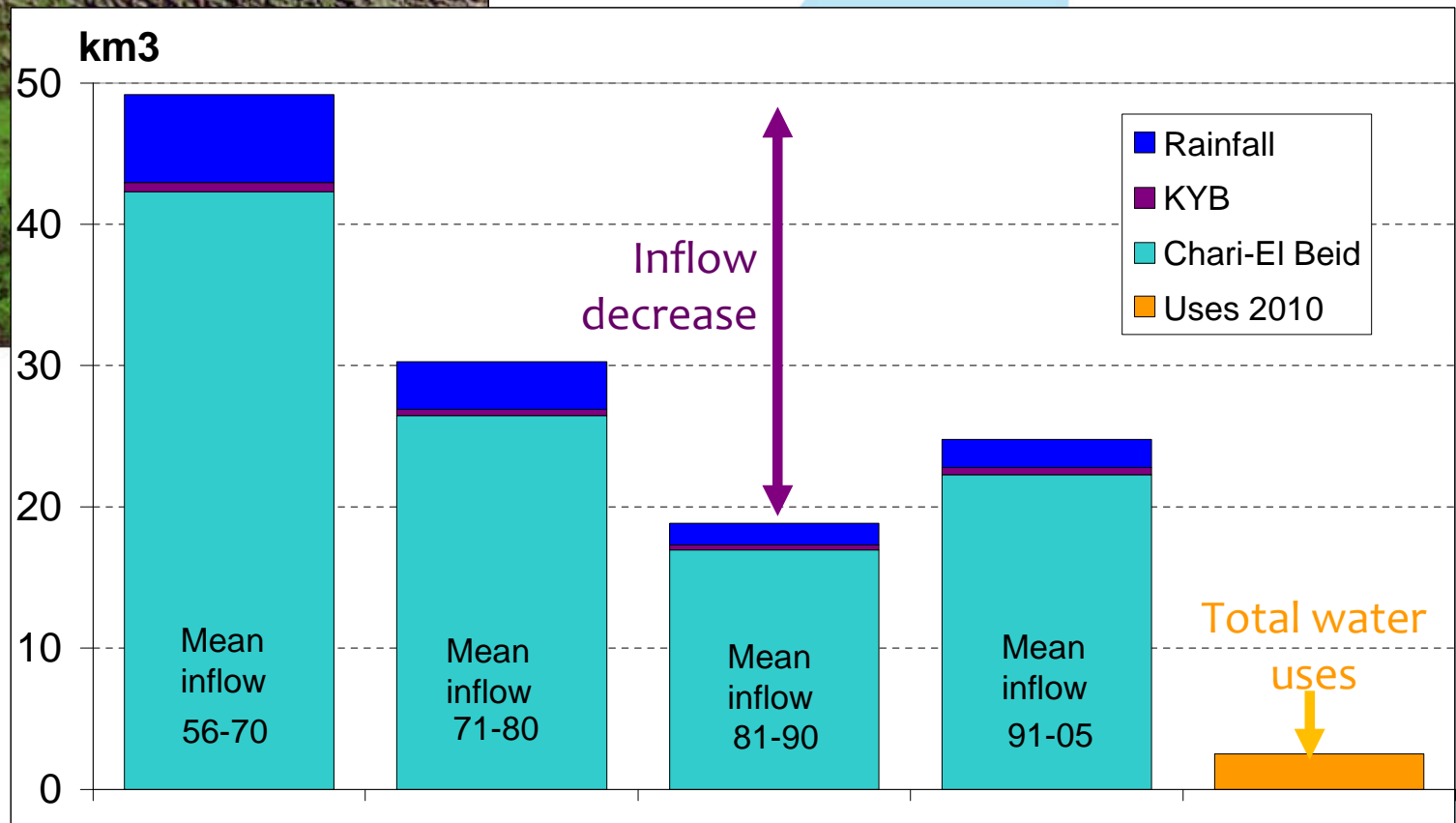
1997

## The lake Chad is not the Aral sea !

*What are the max water abstractions for a limited impact on lake levels?*



2001



# A Water Charter for the Lake Chad: why?

## ☛ Handle major IWRM challenges on the basin

- ☛ Ecosystems, and in particular Wetlands,
- ☛ Resources dependent on water (fish, pasture)
- ☛ Water sharing during low waters, environmental flows
- ☛ Lake filling : Maximum volumes to be abstracted
- ☛ Data sharing

→ **A document adapted to the specificities of the basin**

## ☛ Anticipate

- ☛ Possible harms for future generations,
- ☛ Crisis situations,
- ☛ Possible conflicts.

→ **Both technical and legal process**

☛ **Define limits and practical commitments**

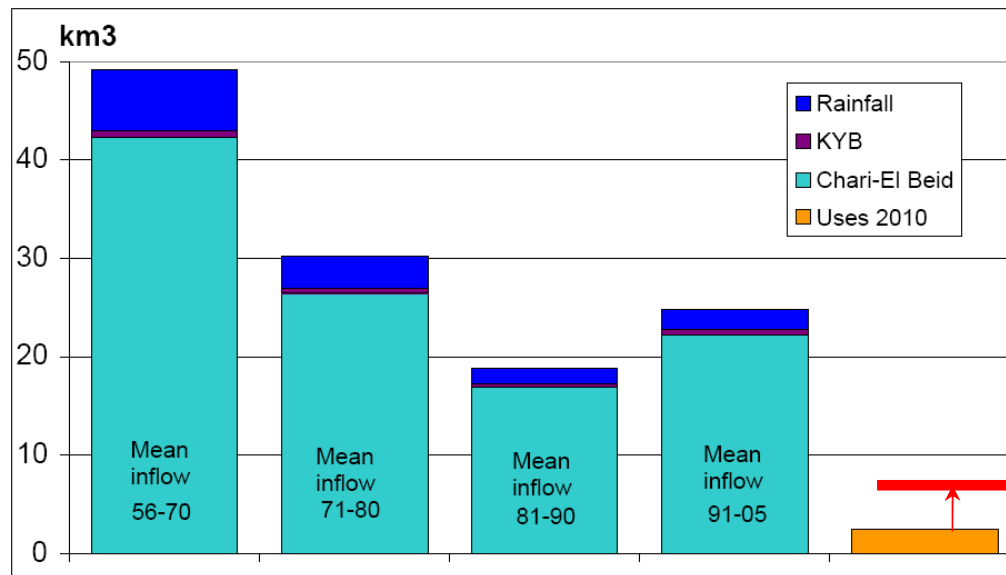
☛ **Design a cooperation framework to implement them**



## 8 technical commitments

### Water sharing:

1. Control the **proportion of water abstractions from inflows** to the Lake
2. Reserve **minimum flows during dry season** for the tributaries flowing into Lake Chad



## 8 technical commitments

### 6 *Ecosystems and Environmental Services*

3. Reserve a **minimum amount of flood waters** to ensure that the basin's wetland areas are inundated
4. **Preserve ecosystems**
5. Create **fishing reserves** in part of Lake Chad and/or its tributaries.



## 8 technical commitments

### 6 Groundwaters

6. Adapt groundwater abstraction to aquifer capacity.

### 6 Pollutions

7. Monitor and control pollutions

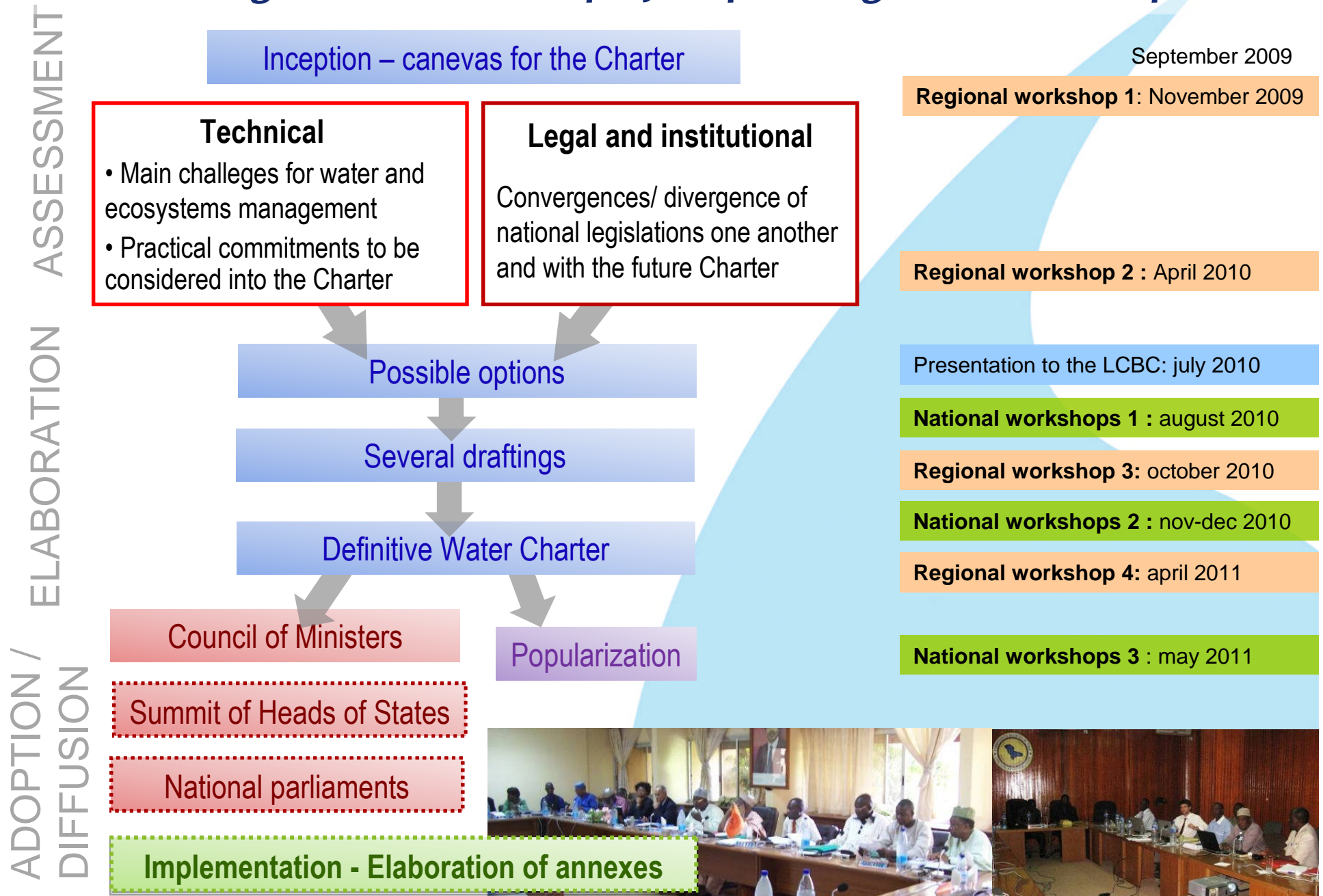
### 6 Data management

8. Share data and ensure smoothly-run exchanges of information





# A shared agreement built step by step through consultative process



# Highlights of major progress

The Charter is the written translation of a commitment process driven step by step.

## Statutes

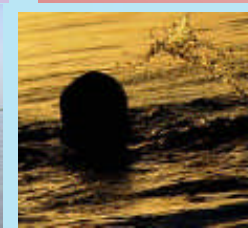
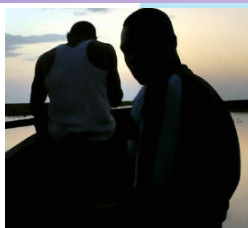
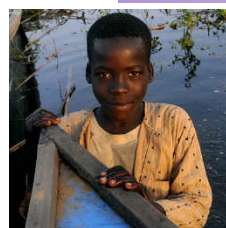
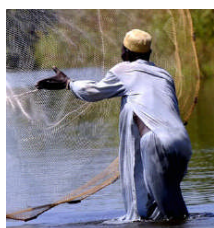
- ✓ **Recognition of fundamental rights**
  - Right to water and sanitation,
  - International waters,
  - Rights of local populations (genetic heritage, protection of traditional know-how, legal proceedings, gender issues).
- ✓ **Water sharing**
  - No priority among uses. In case of conflict: drinking water
  - No possibility to reserve future rights to utilise water to the detriment of the existing equitable and reasonable use

## Technical issues

- ✓ **Quantitative water management**
  - limitation of the water abstractions
  - Environmental flows
- ✓ **Pollution prevention at the source**
- ✓ **Collection and exchange of data and information**
  - Obligation of collection
  - Harmonisation of the methods
  - Regional database

## Cooperation framework

- ✓ **Interdiction to cause significant harm**
- ✓ **Settlement of disputes procedures**
- ✓ **Prior notification for any new Project**
- ✓ **Notice of emergency,**
  - to LCBC & Member States,
  - Emergency plans (floods, droughts)
- ✓ **Promotion of common facilities**
- ✓ **Clear responsibility in basin management.**



# Implementation of the Charter

## National level

- Obligation to prevent infringements - control,
- National reports of implementation
- National basin agency

## International level

- Harmonisation of legal frameworks
- Implementation reports
- Possibility of inspection
- LCBC entitled with more assignments
- Stakeholders forum

## Partnership

- participation of non-member states and international organisations





**THANK YOU FOR LISTENING !**

