Protection of ecosystems in the two UN Water Conventions and example of the Lake Chad Basin

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### Ecosystem preservation and protection

The obligation to protect ecosystems

- shield ecosystems from a significant threat or harm
- the need to adopt a precautionary and prevention approaches, as well as apply the polluter pays principle

#### Measures to ensure:

Water quality

- Protection of land-based ecosystems (such as forests, wetlands, soil, etc.)
- Prevention of erosion and saline intrusion
- Prevention of pollution (chemicals temperature)

Water quantity

Environmental flow

New York Convention 1997	Helsinki Convention 1992
Protection and preservation of ecosystems	Conservation and restoration of ecosystems
Art. 20: Protection and preservation of	Art. 2 General provisions:
ecosystems of international watercourses	(d) To ensure conservation and, where
Art. 22: Introduction of alien or new species	necessary, restoration of ecosystems.
Preserve: maintaining freshwater ecosystems in a "pristine or unspoiled condition"	Conservation: Protection and preservation
Ecosystem of the international watercourses	Ecosystem = land and water ecosystems
Art. 21 Prevention, reduction and control of pollution: prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse.  Article 27: Prevention and mitigation of harmful conditions to prevent or mitigate conditions related to an international watercourse that may be harmful to	Art. 1 Definitions: "Transboundary impact" means any significant adverse effect on the environment include flora, fauna, soil, air, water  Art. 3 Prevention, control and reduction (d) Stricter requirements, even leading to prohibition in individual cases, are imposed when the quality of the receiving water or the ecosystem so requires; (i) Sustainable water-resources management, including the application of the ecosystems approach, is promoted;
other watercourse States, whether resulting from	
natural causes or human conduct, such as flood	
or ice conditions, water-borne diseases,	
siltation, erosion, salt-water intrusion,	
drought or desertification.  Marine ecosystems	Marine ecosystems
Art. 23: Protection and preservation of the marine environment	Art 1: "wherever transboundary waters flow directly into the sea"

### **KEY POINTS**

- 1. States are obliged to protect, preserve and restore the ecosystem of international watercourses as an extension of the general principle of equitable and reasonable utilisation and participation.
- 2. States are under a due diligence obligation to prevent new sources of pollution, and reduce and control existing sources.
- 3. States must take all necessary measures to prevent the introduction of species, alien or new, that may have detrimental effects on an ecosystem.

Lake Chad Basin

- International drainage basin,
- Located in parts of Central & West African States,
- Transboundary Lake and Rivers,
- Lead to LCBC,



## Management Instrument

### The lake Chad common vision 2025;

- Lake Chad Common heritage and other wetlands are maintained at sustainable levels,
- Ensure the economic security of the fresh water ecosystem resources, sustained biodiversity and aquatic resources of the basin,
- The use of which should be equitable to serve the needs of the population of the basin thereby reducing poverty level.

## Strategic Action Programme

- SAP, Adopted in 2008 for the Reversal of Land and Water Degradation Trends in the Lake Chad Basin Ecosystem,
- o primarily addresses the seven priority regional environmental concerns namely the variability of the hydrological regime and fresh water availability, water pollution, decreased viability of biological resources, the loss of biodiversity, the loss and modification of ecosystems, sedimentation in rivers and water bodies, and invasive species,

- Ecosystem Quality and Water Resource
   Objectives (EQWROs),
- o Improved quantity and quality of water,
- Restoration, conservation and sustainable use of bioresources,
- Conservation of biodiversity,
- Restoration and preservation of ecosystems,
- Strengthened participation and capacity of stakeholders, and institutional and legal frameworks for environmental stewardship for the Lake Chad Basin

- oThe SAP sets the agenda for enhanced regional environmental cooperation among the Member States,
- To improve environmental stewardship and protect the ecosystems of the Lake Chad Basin,
- Outlines five regional EQWROs to be achieved,
- o Identifies environmental interventions to be taken in order to meet those EQWROs at the national and regional level,

## Water Charter

- Constitutes a binding framework purpose of which is the sustainable development of the shared water resources and environment,
- Advocates good governance, sub regional cooperation and solidarity,
- Refines and supplements the convention creating the lake Chad Basin as international drainage basin,
- It aims to fulfill specific goals among which quantitative management of surface and groundwater resources; qualitative management of wetlands; ecosystem and biodiversity conservation; abstraction and discharge authorization etc.

### Annex No. 6 Environmental Protection

- aims to secure an appropriate and overall protection of the environment based on sustainable, concerted and participatory management in compliance with MDGs,
- apply to all sectors of the environment (all natural resources and environmental issues) in the basin,
- In conformity with fundamental principles of environmental protection such as;
  - Non-risk transfer principle,
  - precautionary principle,
  - Preventive principle,
  - User-payer principle,
  - Polluter payer principle,
  - Principle of compensation of environmental damages, etc.

## Implementation & Reporting

- National Reports on the State of the Environment;
  - Produce with support all stakeholders every two years,
  - Shall highlight the status, measure taken to combat degradation and recommendations for protection,
  - Shall be widely circulated and be subjected to public debates,

#### Regional Report on the State of the Environment;

- In cooperation with the states parties, commission shall publish a periodic regional report,
- Shall be based on national reports,
- Shall contains statistical data and measures proposed by the states to improve the state of the environment,

- Art. 8 General obligation to cooperate: states shall cooperate on the basis of reciprocal benefits and faith to achieve optimal utilization and adequate protection of water resources and the environment,
- Art. 10: Obligation to utilize water in an equitable and reasonable manner in their respective national jurisdictions to obtain optimal and sustainable benefits that are compatible with legitimate interest of all and protection of the lake Chad and watercourses, aquifer and aquatic ecosystem,
- Art. 12 Minimum Flow: States undertake to maintain environmental flows at key stations to protect and preserve the aquatic ecosystem,
- Art. 21 General obligation to prevent pollution: shall closely cooperate with each other and with the commission to prevent, control and mitigate pollution,
- Art. 29 Obligation to prevent environmental harm: States and the commission are oblige to take all necessary measures to prevent damage causing situation affecting the ecosystem such as siltation, erosion, bank degradation, flooding, drought, desertification and deforestation,

## Special provisions

- Special provisions for Fisheries;
  - Art. 33. Fisheries resources conservation measures....., the commission shall establish fisheries conservation areas (fishing reserves) in order to allow for fish stock reproduction,
  - Art. 34. Harmonized legislation and institutions concerning fishing....,
- Special provisions for Herding;
  - Art. 35. Recognition of herding right;
  - Art. 36. Sustainable herding..., States shall undertake measures to ensure that herding activities are not detrimental to environmental preservation....

# Thanks for your attention!