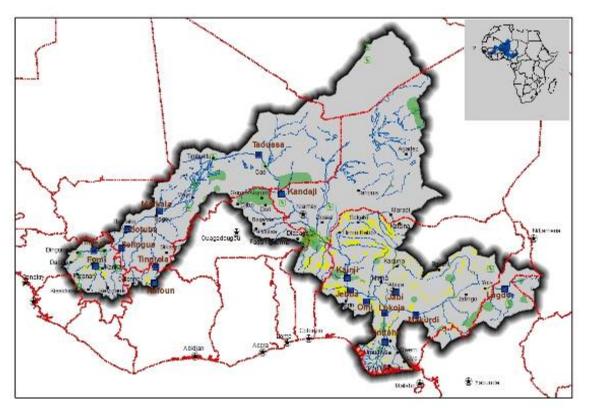




Institutional, Technical and Legal instruments of management of resources in the Niger Basin

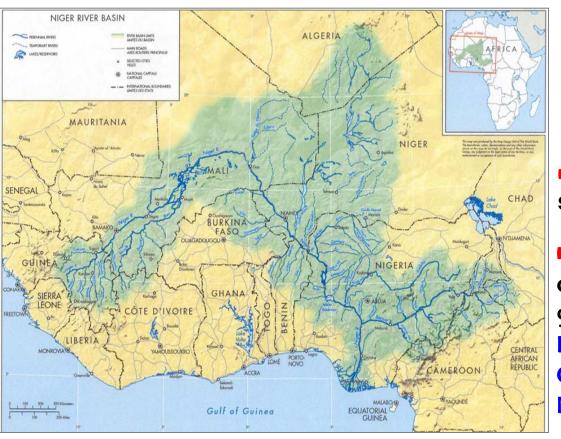




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1 - GEOGRAPHIC AND INSTITUTIONAL CONTEXT OF THE NIGER BASSIN



- river of Africa and 9th in the world, with a length of 4200 kms and its tributaries including Benue (1200 kms).
- Hydrological <u>area</u>= 1,500,000 sq Km
- The Niger Basin Authority was created on 26th November 1964 by 9 countries who sheare the basin: Benin, Burkina Faso, Cote d'Ivoire, Cameroun, Guinea, Mali, Niger, Nigeria and Chad.
- **▶ Population:** + 110 millions
- **NBA Mission**: To promote cooperation among the member countries and ensure the integrated development of the basin by enhancing its resources, especially in the areas of: Hydraulics, energy, agriculture, animal rearing, fishing, forestry, industry, mines, transportations and communications.

2- Legal and institutional Instruments: Water Charter

- The Water Charter of the Niger Basin is the main legal instrument for implementing the principles of solidarity for a sustainable and equitable use of the waters of the Niger Basin, came into force on July 19th, 2010, to regulate the following:
- The fair and reasonable distribution of water resources between member countries on the one hand and the various users on the other;
- The consultation between member countries in the planning of projects likely to have significant negative transboundary impacts on water resources;
- The protection and preservation of water resources;
- The prevention and resolution of conflicts related to the use of the water resources: this rule requires members countries to favor conciliation and mediation as means of settlement of disputes which might arise between countries over the use of water resources of the water Niger Basin.

- To achieve these objectives, NBA set up water management institutions. These are:
- The Permanent Technical Committee. This is an advisory body to the Executive Secretariat and responsible for monitoring the rational and equitable use of the water in the basin.
- The Regional Advisory Group: responsible to establish consensus in the planning and construction of structural works.
- The Panel of Experts: responsible for giving technical advice on specific issues relating to development of works in the basin, especially on large dams.
- **Sub-basin commissions:** responsible for proposing the terms of use of water resources in each sub-watershed and to help resolve issues related to the use of water.

The protection of the environment in the Niger basin: adopted by the 30th Ordinary Session of the Council of Ministers held on 30 September and 1st October 2011 in N'Djamena, Chad;
 The coordinated management of large hydraulic structural works (existing or planned) in the basin;

The Water Charter is accompanied by a series of apendicies

regulation of:

works;
The general status and legal regime of works of trans-boundary interest.

The sharing of costs and benefits associated with hydraulic structural

Ultimate beneficiaries of the Water Charter are the populations of the basin whose rights have been recognized both for access to water and sanitation and for the exercise of their economic activities. The environment and planned or existing structural works are also main beneficiaries.

3- Technical instruments of rational management of water resources in the Niger Basin

- 1)- Allocation and forecasting models of water resources. This allows, among other things the: 1) optimization of the management of resource, 2)- analysis of hydraulic impacts of the planned measures, 3)- coordination the management of dams, 4)- alerting water actors in case of emergencies and to manage the input and output reservoirs of dams.
- 2)- Hydro Economic module: This involves coupling of the IWRM model with an economic module, which assists to analyze the scenarios of the basin development in economic terms, calculate production (agriculture, hydropower, fisheries) and calculate the number of navigable days.

3)- Management Module of dam reservoir is used by dams specialists to optimize management of reservoirs to meet the relevant sectoral needs based on specific hydrologic conditions.

4- Lessons Learned

- The results of global climate models are inaccurate and contradictory in the region (Sahel). It is therefore necessary to adapt to specific regional climate to be relevant in the management of specific river basins;
- The hydrological forecasting models are necessary for better management of extreme hydrological events and security of riparian communities;
- The dialogue between scientists, managers of trans-boundary water resources and users of water resources is absolutely necessary to define climate change adaptation actions.



