6 ÈME FORUM MONDIAL DE L'EAU

Session 1.1.5
Pratical approaches for sharing and monitoring information

Supporting and developing Environment Observatories in Africa

ème FORUM MONDIAL DE L'EAU
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LE TEMPS DES SOLUTIONS

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Support for an environmental observation system for the Volta River Basin

VBA OBSERVATORY = A PROCESS

Component 1 : Carry out Baseline situation analysis in the basin

- Characterisation of usages (Water supply, cultures irrigation, livestock, ...) and assessment of associated demand
- Characterisation of resources water availability (surface, groundwater)
- Summary of supply and demand
- Characterisation challenges (MDG, ...) and the problems, related to the management of water as it affects related ecosystems (Risk sanitary risk ...)

Component 2 : Establishment of the Observatory

- Progressive development of computerised tools for communication and decision support (definition of indicators for monitoring the challenges and problems, data collection, analysis of useful data and calculation of indicators)
- Develop a reference situation in 2 stages (initial and consolidated), with the view to having regular updates
- Capacity building (methodologies, network of data collectors, interoperability between data sources , format for data / information exchange)

Component 3 : Involvement of stakeholders in water management in environmental monitoring (cross-cutting component)

- Implication of all the actors at all the stages (consensus on the problems and the means to evaluate them; data collection and validation)
- Capacity building of the stakeholders

Facilitate decision making- management of water and the environment; governance)

Innovative Component

www.abv-volta.org

Support for an environmental observation system for the Volta River Basin

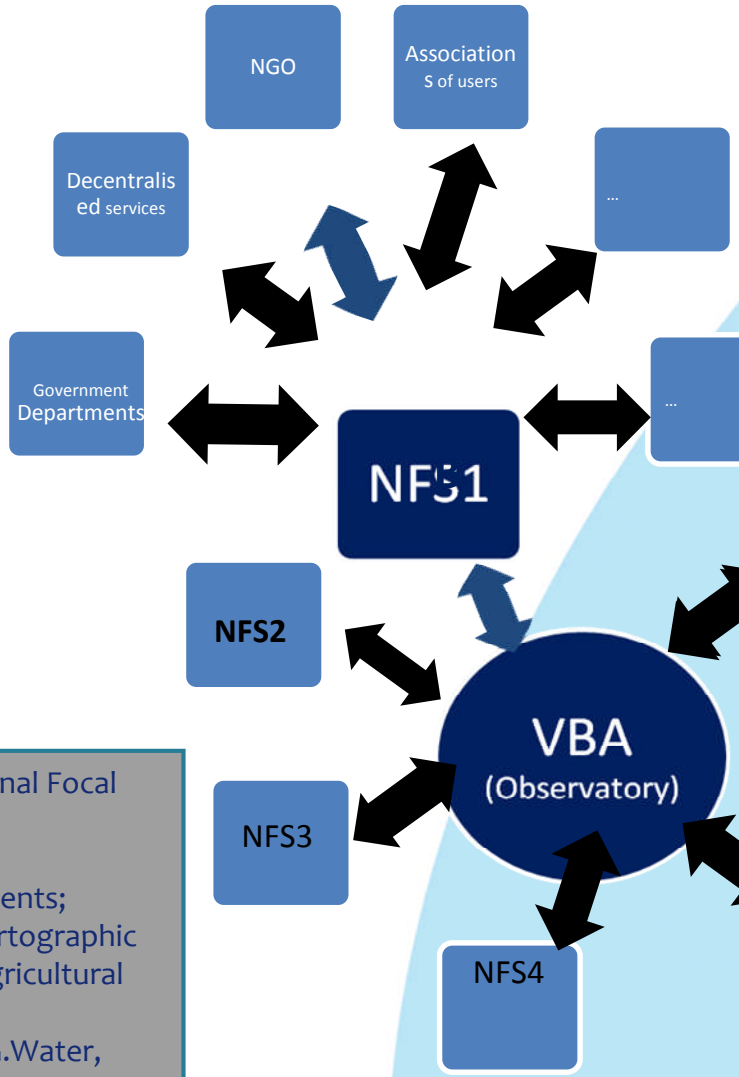
VBA OBSERVATORY = MEANS

Network of data collection and dissemination of information and useful data

MoUs for exchange of:

- Information
- Data
- Results

NFS = National Focal Structure: NHS, Web Correspondents; National Cartographic Services, Agricultural water managers,G.Water, Water Quality, Water-related Diseases, …



Agreed methods for data collection and validation

Standardised scientific and technical tools

Human Resources

Support for an environmental observation system for the Niger River basin

- **This project is intended to provide a set of decision support tools to the Niger Basin Authority (NBA) in order to improve the co-ordinated joint management of natural and environmental resources in the Niger basin.**

> *The basin of the Niger River—the third-largest in Africa—is shared by the nine States which created the Niger Basin Authority in 1980. Extensive infrastructure work is either underway or complete in various parts of the basin. This work has a major impact on the environment and the human population.*

- ***The Observation System created in 2004 by the NBA Member States in response to***
  - Deterioration of the environment due to the combined effects of climate change and pressure from an ever-growing population
  - Challenges for managing environmental data on the river basin (limited and scattered data, minimal leveraging, etc.)
  - The outlook for peaceful, sustainable development in the Niger Basin (Shared Vision)
- ***Mission:***

  Help reinforce the NBA's role as co-ordinator and improve the joint management of natural resources across the basin
  - The Niger Basin Observation System (NBO) became operational thanks to €1.2 million in financial support from FGEF/FDA, provided as a grant for the "Support for an Environmental Observation System for the Niger River Basin" project
  - The goal is to ultimately provide the NBA with a set of decision support tools designed to improve the co-ordinated joint management of natural resources as well as the social and economic activities in the Niger River basin

Project beneficiaries include the Niger Basin Authority (NBA) and its nine Member States: Benin, Burkina-Faso, Cameroon, Ivory Coast, Guinea, Mali, Niger, Nigeria, and Chad.

The Niger Basin Authority was created in 1980 in Faraway (Guinea) to replace the Niger River Commission, which was founded in 1964 in Niamey (Niger). From 2002 to 2008 the NBA implemented the Shared Vision process for sustainable development of the Niger basin.

KEY LESSONS FROM THE PROJECT AND OUTLOOK

- ***Smooth operation of the NBO and its activities are closely tied to the NBA's Key Natural Structures, and its role must be consolidated.***
- ***The major constraints and challenges concern:***
  - Data acquisition procedures
  - The lack of responsiveness from both the key structures and the national data providers
  - The lack of internal NBA financing for NBO activities over the long term

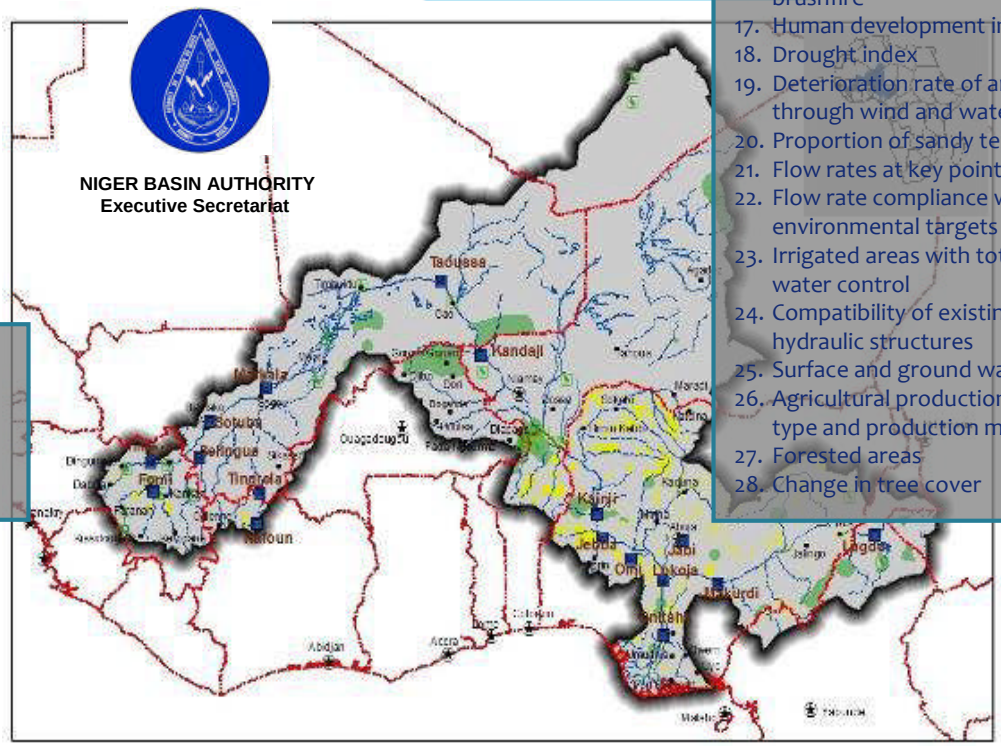
➢ Conclusion: Continued progress depends on effective financing for activities and the availability of the data required by the data analysis and distribution tools

The project addresses a key requirement, clearly favoured by all the stakeholders (Member States, technical and financial partners), for obtaining knowledge of the natural and human environment as well as decision support tools.

PROJECT ACHIEVEMENTS

- Countries were consulted extensively through several national and regional workshops
- **Basic analysis for making the NBO operational**
- Creation of a list of 28 key indicators and their specifications
- GIS platform and reference status of key indicators
- http://georepertoire.abn.ne/genetwork
- Development Plan for the Niger Basin Observation System ***Data acquisition procedures***

1. Agricultural and demographic density
2. Population density
3. Average annual demographic growth rate
4. Extent of flooded areas
5. Prevalence of water-born diseases
6. Gross schooling rate
7. Gross literacy rate
8. Production of hydroelectricity
9. Drinking water access rate
10. Percentage of the population with access to an improved purification system
11. Index of municipal waste released into fresh water (suspended solids, BOD)
12. Growth rate for fish production
13. Importance of livestock
14. Water erosion rate
15. Protected area management level
16. Annual surface area affected by brushfire
17. Human development index
18. Drought index
19. Deterioration rate of arable land through wind and water erosion
20. Proportion of sandy terrain
21. Flow rates at key points
22. Flow rate compliance with environmental targets
23. Irrigated areas with total or partial water control
24. Compatibility of existing and projected hydraulic structures
25. Surface and ground water abstraction
26. Agricultural production by speculation type and production method
27. Forested areas
28. Change in tree cover



Support for an environmental observation system for the Senegal River Basin

FFEM Fonds Français pour l'Environnement Mondial

OMVS Organisation pour la Mise en Valeur du fleuve Sénégal

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