SHARED WATER MANAGEMENT TO ENSURE COMMUNITY SUSTAINABLE DEVELOPMENT

Water is the basis of every form of life on earth. It also plays a very important role in the equilibrium and survival of ecosystems and soil quality. Its quality and availability are factors of development. But today, our global water resources are directly threatened by climate change, population pressure and industrialization. According to Bergkamp, Director of the World Water Council, "Water is a key factor to development and the first medium through which climate change will be felt". Yet only 5% of development aid are intended to issues of access to water while 1/7 of the world population has no access to safe drinking water and 1/3 is not connected to sewerage systems. According to the FAO, by 2025, 1.8 billion people will live in countries or regions experiencing dangerous water stress.

The growing water stress will also affect directly agriculture and food security: rain-fed agriculture which today represents 96% of cultivated land in sub-Saharan Africa will see their yields decrease sharply. This could mean that 75% of the African population, by 2080, will face hunger while demand for irrigation will increase significantly. In fact, in sub-Saharan Africa, agriculture represents already 87% of the use of water (an average between 70 and 80% in other regions of the world).

Moreover, the quality of available water resources is deteriorating. The expansion of urban areas is already increasing pressure on local water resources and their quality. Modes of industrial production, increased use of chemical inputs and the lack of wastewater treatment infrastructures tend to degrade the water quality. In developing countries, 70% of wastewater is discharged untreated into the rivers. Ecosystems, which are producer and regenerating areas of this resource are threatened, polluted and destroyed by intensive farming systems.

Access to water for all and for a long time

Yet there is enough water for everyone. From the above, the problem we are facing today is mainly a problem of governance and management. But that must be reconciled with access to water for all, a right becoming more and more basic in terms of climate change and its impacts on water resources. The issue is therefore to share and manage water resources fairly, efficiently and resiliently to climate change, while ensuring the sustainability of natural ecosystems. In short, Rio +20 process should create a real economy of water which goes from a short-term logical reaction to an adaptive and preventive risk management over a long term at the social, economic and environmental level.

There are solutions and good practices at the community level. These should inspire international policies. Including:

Integrated Water Resources Management (IWRM1), a local and replicable solution.

In front of relatively recent impacts of climate change, communities tended to apply to these creeping and recurring phenomena such as desertification of the principles of limited crisis management. It is time to implement

adaptive management in a longer term. In this perspective, water should not be managed as a substance but as an ecosystem. In this respect, the Integrated Water Resources Management (IWRM) can help control and overcome water shortage. Ideally, IWRM should recognize the importance of protecting water resources and try to reconcile with the interest to exploit the resource. **IWRM** build communities and consultation



meetings, awareness and accountability to find practical solutions to reconcile the use of water with its protection. It seeks to analyze and mainstream the traditions, cultural factors that may affect / improve water management. IWRM is certainly demanding, but offers a flexible and progressive framework towards sustainable integrated management.

¹ IWRM is a process that encourages the promotion and the coordinated management of water resources, land and associated resources in order to maximize economic and social welfare that results from this, in a equitable way, without compromising the sustainability of vital ecosystems (Global Water Partnership, 2000).

Box: IWRM Project in the lower valley of Tarka, Niger (IWRM) - NGOs

Since 1999, Niger has opted for a strategic choice of IWRM as a tool for managing the national water potential. In this perspective, IWRM started in 2009 for a period of nine years. It intervenes in an area of market gardening crops with high a production of onion, and where the water table is shallow and the use of chemicals in rain-fed farms is intense. The project aims to strengthen coping strategies and build capacity of community to manage water and cope with climatic and environmental risks, and the strong involvement of women in water management.

In three years, the project has helped to collect and analyze data on the consumption of water. It continues to analyze climate change impacts and how to reduce environmental risks. It also helped to empower and mobilize 400 communities in the valley on the remediation and restoration of the environment during meetings to discuss the management of water in the field of agriculture, water basin, livestock breeding, grazing areas, wet areas and ponds The project has allowed training local authorities and inter-communality on IWRM. Finally, the project gave a support to female farmers for the development of ecological agriculture. Given the importance of good water management in the context of agricultural production, the project will focus on water for agriculture and will become" WAI "Water for Agriculture Initiative from 2013.