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"Solidarity in a competing world — fair use of resources"

## Sustainable Fisheries Management in Burkina Faso, West Africa

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## Abstract

A number of challenges, including climate change and population growth, threaten the fair and sustainable availability of water and fisheries. In response to threats of chronic water scarcity and episodes of severe drought, since 1950 hundreds of reservoirs were created to provide a dispersed network of water storage facilities throughout Burkina Faso. As fisheries, these reservoirs also became important new sources of food. However, pressures of overfishing, intensive agriculture and sedimentation threaten the services (fish, water quality) these reservoirs provide. To establish sustainable management of natural and manmade aquatic systems, Burkina Faso requires methods and tools for the standardised assessment of water and river health as well as the environmental impacts on riverside society. However, inland fisheries production has plateaued at the same time that quality (size) of fish has dramatically declined, thereby limiting the fecundity and productive potential of the fishery.

Improving fishery management policies and practices will require substantial increases in what is reliably known about ecosystem services, biophysical and socio-cultural factors that influence these trends on fish and benthic invertebrate diversity. To establish sustainable management of aquatic systems, Burkina Faso is building capacity for adapted and standardised assessment methods improving water quality and ecological status of rivers and reservoirs.

These ideas and tools on a modern and ecological water management are promoted towards social development and poverty reduction in academia, government and among local practitioners. There remains a clear need to continue, strengthen and improve the promising initial results, such as the bio-monitoring of waters and of the impacts aquatic ecosystems under pressure on society. Experience made in the project SUSFISH will help to implement activities that are socially, politically and scientifically relevant, such as the contribution to higher education, assessment and improvement of simple techniques in aquaculture already undertaken by the national institution responsible for fish resources.

**Keywords:** Biodiversity, Fish, freshwater, Human Impacts