TCP/MAU/3103 (D)
Formulation of a strategic and legal framework, and a development plan for sustainable inland fisheries and aquaculture*

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Background

The Islamic Republic of Mauritania (surface area 1 030 400 km2) can be divided into three distinct zones: (a) a narrow southern belt along the Senegal River Valley which is relatively well vegetated; (b) an intermediate central belt of broad sandy plains and dunes fixed with scrub grasses; and (c) and a northern desertic belt of rocky plateaus and sand seas. The climate is extremely hot and dry with very little rainfall, confined to the south between July and August. The only permanent river in the country is the Senegal River, which forms the border with the Republic of Senegal for over 600 km. There are several lakes associated with the Senegal floodplain system. Environmental issues, which include overgrazing, deforestation, and soil erosion aggravated by drought are contributing to desertification. There are also limited natural freshwater resources away from the Senegal River, and locust infestation. Most of the population concentrated in the cities of Nouakchott and Nouadhibou and along the Senegal River in the southern part of the country. Half the population still depends on agriculture and livestock for livelihood. Mauritania's coastal waters are among the richest fishing areas in the world; however, overexploitation threatens this key source of revenue.

The fisheries sector has been primarily based on marine fisheries, therefore inland fisheries have been constantly overlooked despite its importance to food security and poverty alleviation to riverine fishing communities. Several other factors such as droughts, impacts of dams, displace-ment of rural communities to urban centres, consumer preference for marine fish, and the move of inland fisherfolk to agriculture have exacerbated the underdevelopment of this sector. Aquaculture continues to be almost non-existent in Mauritania. There was a inland fish farming project initiative by UNICEF in the late 1990's. However, as in other African counties where subsistence farming was promoted, these efforts were unsustainable.

Objectives

The Ministry of Fisheries and Maritime Economy (MPEM) wishes to re-launch efforts to improve and promote inland fisheries and aquaculture development. To this end, the government of Mauritania requested the assistance of FAO to support them in their efforts. TCP/MAU/3103 (D): "Formulation d'un cadre stratégique et réglementaire et d'un plan de développement durable de la pêche et de l'aquaculture continentals"(Formulation of a strategic and legal framework, and a development plan for sustainable inland fisheries and aquaculture) was proposed to resolve many of the issues listed above. It has been specifically formulated to promote the sustainable development of inland fisheries and aquaculture in Mauritania to increase food security and reduce poverty. The main objectives of this project are to support MPEM in the formulation of a legal framework for inland fisheries and aquaculture, a strategic framework for aquaculture development and a development plan for inland fisheries.

Expected outcomes

Based on the above, the following main results were expected from this TCP:

- a legal framework for inland fisheries and aquaculture;
- a strategic framework for aquaculture development validated through a national workshop;
- a development plan for inland fisheries (including a digital map for inland waters illustrating fish landing sites) validated through a national workshop;

* Original title of the project: Formulation d'un cadre stratégique et réglementaire et d'un plan de développement durable de la pêche et l'aquaculture continentales

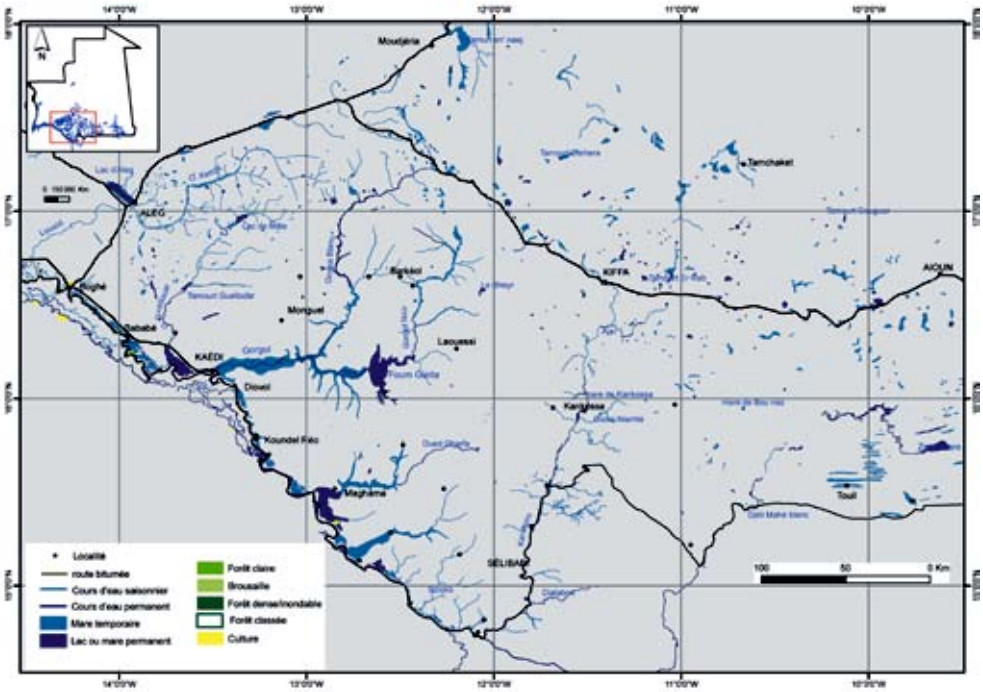

Figure 1. Surface waterbodies in the high valley (Senegal River) and the Tagant province, Mauritania

- capacity building on aquaculture production for 110 fish farmers and technicians; and
- at least two pilot sites to demonstrate profitable and durable culture technologies and practices for fish farmers.

The two last outputs were later removed from the list because of unsuitability of identified sites. The development of the two pilot sites was conditional to being already functional and having physical characteristics which are conducive to an economically and environmentally sustainable aquaculture. An expert's investigation of the sites revealed that neither of the two sites suggested met this condition. In fact, one of them was completely abandoned. Thus, without adequate sites, the capacity building of the 110 farmers (cooperative owners) and technicians was no longer possible because it was to consist in on-farm training on these sites.

Assistance/Results

Very little information for managing inland fisheries or aquaculture in Mauritania exists; therefore, one of the main outputs of this TCP is an inventory of inland waters (Figure 1).

Of relevance to inland fisheries, is that the inventory of inland waters can be used as a base to predict potential fish yield and conduct hydrological reporting. From an aquaculture viewpoint, inland waters represent the areas where aquaculture already is developed, or in which aquaculture has varying potential for development. Thus, the inventory provides a spatial framework for inland fisheries and aquaculture which could provide the basis for assessing their potential for development at national scale. Further explorations and application of this inventory could deepen the understanding of inland aquatic resource management and be of immediate value in addressing a wide variety of issues such as improving status and trends reporting in inland fisheries and aquaculture, co-management of shared inland fisheries resources, transboundary movements of aquatic species, and increased participation of stakeholders.

Conclusions

This project, which has resulted in a legal framework for aquaculture and inland fisheries, an operational strategic framework for sustainable aquaculture development, a plan for sustainable inland fisheries along with a digital map for inland waters, has been heralded as laying a solid foundation for aquaculture and inland fisheries development. The national workshop which validated these results especially acclaimed the digital mapping as a unique experience from which much could be learnt.

Follow-up activities

What remains to be done is to take all necessary efforts to ensure the durability of these results, and in particular, to assist the government in taking full appropriation of them. The database for the digital map has been installed in the Ministry and 5 staff were trained on its maintenance and periodic update, but, a higher-level training is still needed. There is also a need for a development project to demonstrate the feasibility of the programmes defined in the plan and operational strategic framework.