Updates on UTF/SAU/017: Support to the Fish Farming Center in Jeddah,Kingdom of Saudi Arabia

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The main thrust of the present unilateral trust fund (UTF) project in the Fish Farming Center (FFC) (or Center) in the Kingdom of Saudi Arabia (KSA) is technical capacity building for the national staff to carry out applied scientific research in the field of aquaculture and particularly in support of mariculture development. To accomplish this objective, the researchers of the Center are taught how to plan and conduct scientific research. New research proposals were written and the researchers were guided in the actual conduct of experiments. In addition, selected staff were sent for targeted technical training courses outside the country especially in areas where the Center needs advancement. Technical training courses attended by some of the staff include marine fish hatchery operations and management, fish health management, and culture of natural food organisms. For other activities, consultants were brought to the Center to train the staff and improve the Center's capabilities. In the latter scheme, a consultant on fish disease visited the Center for 3 weeks in January 2009 to train the staff of the Fish Health Laboratory on disease diagnosis and prevention. The consultant also evaluated the Center's readiness and capability to apply molecular-based tools, e.g. polymerase chain reaction (or PCR) for disease diagnosis. Furthermore, an English Language Course for research staff is a continuing activity considering that the majority of scientific literatures are largely in English.

The present UTF project in the FFC is entering into the third year of its five-year of implementation. To assess the progress and the achievements made by the project, a Joint Program Committee Meeting (JPCM) between FAO and the Ministry of Agriculture (MOA) of KSA was held in late March 2009. Aside from presenting the progress of the FFC and other projects under the same UTF, the meeting also highlighted the various difficulties so far experienced. Present during the JPCM were the technical officers of the various projects from FAO headquarters and regional offices and the senior officers of the MOA of KSA. The chief technical advisers or national project directors of each project presented the achievements and problems for each project. The overall assessment indicated that the cooperation between FAO and MOA is progressing well, and that the achievements and delivery status of the various projects were satisfactory. Among the problems pointed out, the one that most applies to the project in the FFC is the limited number of national technical staff that can be trained. This is most relevant to the FFC since capacity building of the national staff is a major objective of the project.

The FFC was established as a research center to support the development of aquaculture. However, although the FFC has significantly contributed to the growth of the aquaculture industry in the country (particularly with regards to shrimp and tilapia aquaculture), the current shortage of technical manpower has severely lowered its support to the sector. To strengthen the role of the FFC, two senior officers of MOA in-charge of guiding the future course of the facility, namely, Dr Anwar Essa Al-Sunaiher (Director, Department of Aquaculture) and Mr Baheej Mohammad Rasem (Director, FFC), recently visited the Southeast Asian Fisheries Development Center - Aquaculture Department (SEAFDEC-AQD), a renowned aquaculture research center based in the Philippines. The main objectives of this study tour were to enable the MOA senior officers to visit the research facilities of SEAFDEC-AQD, observe its operations and appreciate the processes leading to the various research and training programmes. Furthermore, this visit was taken as an opportunity to discuss on future collaboration between the two institutions. SEAFDEC-AQD top management officials expressed willingness to extend technical assistance to FFC in specific areas identified by FFC.

In the coming year, several important staff capacity building activities will be undertaken by the project. During the first six months of 2010, two international experts on marine cage culture and environmental monitoring of aquaculture operations will visit the Center for capacity building on marine cage culture technology and environmental monitoring. These activities are important especially now that there are plans by the private sector to initiate marine cage culture in the Red Sea (at present only one marine farm is operating). As tourism is an important and growing sector in the region, it is essential that future commercial marine farming is carried out responsibly and in a sustainable manner in order to minimize impacts to the surrounding environment. The FFC will therefore need to acquire the necessary technical expertise to better advice the authorities, guide the farmers and future entrepreneurs. To ensure that these project activities will be successfully implemented, preparations are currently underway which include the acquisition of hydrographic survey equipment and a research/work vessel. In addition, four technicians will undergo SCUBA training to assist in field activities and eventually to follow-up on the work initiated by the consultants.

Some facts about the Fish Farming Center

I. Staff Profile

A. Technical staff (all Saudi Nationals)

MS (Marine Science)	1
BS (Marine Science)	10

B. Support staff

Saudi Nationals	10
Non-Saudi nationals	12

C. Visiting staff (all non-Saudi Nationals) 3

II. Facilities

- A.Fish broodstock tanks system
- B.Fish hatchery
- C.Shrimp hatchery
- D.Tilapia culture (Biobab) system
- E.Pond culture system (lined-ponds)

III. Laboratories

- A. Fish health lab
- B. Water analysis lab
- C. General fish biology lab
- D. Microalgae lab

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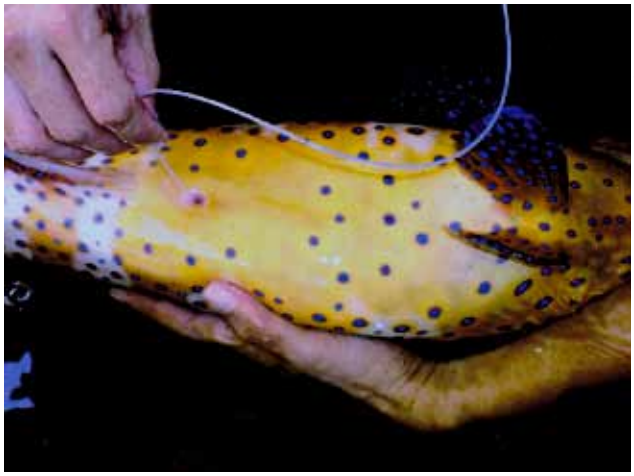
Grouper (Plectropomus areolatus) *fry produced in FFC Fish Hatchery*



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Sexing grouper (Plectropomus areolatus) *breeder for induced spawning*

F. Ayson, Jeddah

Senior officers of the Department of Aquaculture, Ministry of Agriculture of KSA (right) in discussion with the top officers of SEAFDEC-AQD during a recent study tour