## Past Technical Assistance for the Gulf States and Future Challenges (3)

## Part 3: JICA's technical assistance in the field of fish culture and desert greening

Since 1980, JICA has been carrying out technical assistance (TA) for UAE's Ministry of Agriculture and Fishries, in the field related to the development and expansion of fish culture techniques at the Marine Resources Research Center. Here the TA projects adopt the principle of local empowerment. In spite of the general labour market condition with its overwhelming proportion of foreign labourers (as is characteristic of the oil producing states in the Gulf region) most of the UAE counterpart workers of Japanese specialists are UAE nationals. Also, attempts have been made to develop techniques suitable for local conditions and needs, rather than just blindly introducing Japan's shrimp or fish farming techniques. Moreover, the aquarium attached to the center exhibits the marine life found around the country, contributing to the environmental education of children. There is also a project to distribute young tillapia to local farmers for the purpose of clearing up irrigation water tanks as well as for fish farming. The TA projects cover a wide range of activities, and recently another project has been started to combine aquaculture and mangrove plantation, with the aim of creating and nurturing marine ecosystems along the desert coastline. Some counterpart workers of the early period of the TA projects are now heading the center and the Fisheries Bureau of the Ministry of Agriculture, and have become strong back up for JICA's projects. Through marine farming, the projects have been greatly contributing to the development of the country's manpower and of its economy, and it can be said to be a very ideal form of TA in the Gulf region.

Since 1985 a research project on the greening of desert areas has been conducted in collaboration between the Faculty of Agriculture in Shizuoka University and the University of UAE. This project has carried out pilot studies and achieved a number of positive and promising results in the fields of (1) improving crop productivity using techniques such as desert dune fixation, the application of water-saving and saline water irrigation systems and (2) studies into the tolerance of plants against salinity and drought. The University of UAE is the only university in the country, and a great contribution can be expected from this TA in terms of empowerment and education of local manpower. This is what JICA is aiming for. However, in this case the aforementioned employment characteristic of the oil producing countries (i.e. that many of the counterpart staff are foreign workers who return to their respective home countries once their contracts come to an end) seems to pose some difficulties for effective practice and sustainable/continuous progress in the collaboration between the two institutions.

In 1992, Oman which is one of UAE's neighbouring states, introduced the so-called 'Omanisation' which aims at increasing the employment of Omani nationals (rather than foreign workers) at practical and managerial levels. In all of the oil producing countries this kind of employment scheme will be necessary sooner or later. From now on TA projects in support of such a trend will be more desirable for the countries in the Gulf region.

