

Past Technical Assistance for the Gulf States and Future Challenges (4)

Part 4: Technical assistance by the private sector

Kashima Oil Co. provided technical assistance for the UAE, Abu Dhabi Agricultural Bureau in the field of intensive horticulture, with funding from JICA. In 1981 they introduced the sandponix system developed by Sumitomo Electric Industry Co. in a greenhouse equipped with a simple cooling system, and started experiments into vegetable cultivation using dune sand. Artificially creating a mild environment for the purpose of intensive farming is one of the future options for agricultural development in desert countries with harsh climates. In this technically assisted experiment it proved possible to grow vegetables throughout the year in the greenhouse. This system saves water by using water-saving cultivation beds each of which is 7 cm thick and raised above the ground. Cucumbers and tomatoes could be harvested in almost double the average yield. If other soft techniques can also be transferred successfully, such as thorough training for site workers to maintain and manage the facilities, this cultivation system can be expected to become wide-spread.

In another example of technical assistance by the private sector, Taiki Co. undertook part of the afforestation project promoted under the Abu Dhabi Emirate's desert greening policy, and carried out large-scale (hundreds of hectares per unit) plantations in several places. This kind of contract work includes all aspects of plantation projects, starting from the establishment of campsites in plantation areas allotted by the Forest Department, the construction of fences and irrigation systems, tree planting, and the protection of the planted trees. Instructions as to the species to be planted, the density of the plantations and the outlines of irrigation and fertilization schemes are given by the Forest Department. But it is up to the contracted company's capability and technology to devise methods to raise healthy saplings and increase their growth rate, as well as to improve irrigation facilities such as filters, liquid fertilizer mixers and drip irrigation systems. The main objectives of these afforestation projects is the greening of the environment, but planted trees also play other important roles such as protecting roads and residential areas from shifting sand dunes. Therefore, it is thought that such plantation schemes will become more and more important in the future.

One of the major goals of Official Development Assistance is to develop local manpower, but it takes a long time and often it is difficult to see or evaluate its effects in the short term. On the other hand, technical assistance by the private sector aims at gaining immediate profits by transferring appropriate hard techniques and methods. If the effect can be shown in visible figures, it will be easily accepted by the beneficiaries. In reality this seems to be a short cut to technology transfer which leads to steady, widespread acceptance in the recipient country. In assisting the oil producing countries to proceed independently in their efforts for economic development, it is an effective way to invest a large sum of capital in order to provide them with new technologies, necessary facilities and equipment to start off with. From now on, as countries in the Gulf region are growing out of the stage where they need to receive Japan's ODA for their development, facilitating more of such private sector-based technical assistance may be a more appropriate way of supporting them.



Cultivating melons in Kashima Oil CO. experimental farm



One of the afforestation project sites contracted to a private plantation company