

## Joint Study Project on Improvement of Arid Land Agriculture, UAE

(Period of the study: 10 years from September, 1985    Our assignments: Arid Land Agriculture)

### Background of the Study

Desertification is regarded as serious environmental as well as food problem at the global level. Although desert greening and food security are the important issues in the developing countries of arid land, harsh climate conditions (hot and dry weather) and peculiar conditions in arid land (shifting sand and salt accumulation) are disturbing the development of the area. The faculty of agriculture, Shizuoka University was intending to proceed with the research activities in the arid land of the Middle East and came into contact with UAE University for the joint research under JICA's technical cooperation scheme. In practice, the research team consists of the members from both universities carried out various research activities at the experimental station of UAE University for about 10 years. This project has been expected not only to contribute to the development of agricultural technology in UAE but also to improve the research capability in the field of dry land agriculture.

### Outline of the Study

In the initial 5 years, basic researches including sand dune fixation, water saving and crop production under saline condition were carried out. Specifically, three themes on "Sand dune fixation and suitable tree species", "Irrigation, soil water retention and crop production" and "Selection of salt tolerant crops" were set up. Various activities including research planning, experimental designing, executing field experiment, data collection/processing and reporting were jointly implemented. A part of the results were contributed to the scientific journals. Although there was an interruption due to the Gulf War, further research activities were continued under the themes of sand dune fixation and protected horticulture.

### Our Assignments

- Research on sand dune fixation and suitable tree species,
- Research on irrigation, soil water retention and crop production,
- Research on selection of salt tolerant crops and tree species,
- Research on modern technology in protected horticulture, and
- Research planning, experimental designing, executing field experiment, data collection/processing and reporting for the above mentioned researches.

