

## Investigation on Present Situation/Countermeasures for Soil & Water Salinization, Oman

( Period of the study: 1.4 months from February, 2010 Our assignments: Biosaline Agriculture )

### Background of the Study

Salinity level of soil and groundwater is generally high in Oman due mainly to the arid characteristics of the climate with less than 100mm of annual rainfall. It is thus difficult to secure land and water resources suitable for agriculture. In these days, the salinity level of soil and groundwater is more and more increasing due to excessive pumping of groundwater corresponding to the rapid increase of domestic and industrial water demand caused by the recent modernization and population increase. The Government of Oman therefore established Biosaline Laboratory in order to promote the countermeasures against salinity hazard. Biosaline Laboratory aims at the improvement of agricultural production by developing salt tolerant crops through researches on saline water agriculture and formulation of guidelines on salt hazard countermeasures. Various salinity related researches on dates palm and fodder crops are being carried out by the local staff of the laboratory. But their technical levels of knowledge and skills are yet unsatisfactory and the technical transfer to those local staff in the field of research planning and up-to-date technology is strongly requested.

### Outline of the Study

Under the circumstances mentioned above, the objective of the current investigation is to analyze the present situation, problems and countermeasures taken for soil and water salinization and also to examine the future cooperation by JICA in this field.

### Our Assignments

- | Review on JICA's sector-wise guideline, country-wise assistance plan and country-wise implementation plan,
- | Confirmation on cooperation resources of the concerned field in Japan,
- | Investigation on technical level and organization of research center, biosaline laboratory and others,
- | Examination on type and contents of JICA's cooperation for biosaline laboratory,
- | Collection of information on support trend by the major donors,
- | Technical advice on assumed technical cooperation, and
- | Report of the investigation results to the Embassy of Japan.



Biosaline Laboratory



Screening of salt tolerant crops



Field Day on salt tolerant fodder crops



Field Day on protected horticulture