

## Feasibility Study on Chashma Right Bank 1st Irrigation Project, Pakistan

(Period of study: 12 months from August, 1993    Our assignments: Soil and Land Use)

### Background of the Study

Since only 40% of farmland in Northwest frontier states of Pakistan is under irrigation and the state is located in semi-arid area, the promotion of irrigation has high priority for the improvement and the stabilization of agricultural production. In 1973, the state has already built up project plan for irrigation of Chashma right bank, 550 thousands ha in total with both gravitational and pumping irrigation. As for the gravitational irrigation, the construction work has already started by using the fund of Asian Development Bank. In spite of strong request from the state for the pumping irrigation, the loan was not obtained and the project has been postponed. In 1991, irrigation department of the state requested Japanese government the technical cooperation for the feasibility study of pumping irrigation project targeting 110 thousands ha in D.I.Khan prefecture in the state, owing to the solution of the consultation about water rights of Indus river and the project is ready to be commenced.

### Outline of the Study

The study was carried out by 13 experts, specialized in irrigation/drainage, hydrology/meteorology, geology, farming system/soil, land use, facility planning, designing/estimation, agricultural economy, marketing, organization, environment, etc. In addition to the survey and analysis on each expert's field, the detailed survey and analysis were carried out on geology, soil, water quality and rural society. During the first phase of the study, the development master plan has been formulated according to the result of analysis of data, collected information and field survey. During the second phase, on the other hand, the implementation plan consists of agricultural development plan and pumping irrigation plan was formulated by assigning new experts of organization and system according to the request of Pakistan.

### Our Assignments

- Collection and analysis of data about soil and present land use of target area,
- Investigation on both development hindrance factor and feasibility of land resource, and
- Formulation of development master plan about land use.

