### Result 3: Introduction of improved technologies below WUA level

## 3.1 Prepare guidelines /manuals for extension agents and trainers on principles of know-how for land and water productivity improvement and water demand calculation based on Phase II results

Guidelines on the principal directions of effective irrigation water use in farm production of cultivated crops (cotton, wheat) were prepared for trainers of extension services in Kyrgyzstan, Uzbekistan and Tajikistan.

Bases on soil-reclamation maps were prepared for Fergana and Andijan provinces in order to adjust hydromodule zoning of pilot canals' command irrigated areas of IWRM-Fergana Project.

Recommendations on irrigation schedule for different soil-reclamation conditions of Project irrigated lands will be given according to the results of calculations carried out by Project specialists and prepared maps. Such calculations and soil-reclamation maps are being prepared for Kyrgyz part of Project irrigated lands. In the absence of map material in Tajikistan the adjustment of hydromodule zoning in this Project part is still behindhand and not started.

# 3.2 Pilot test of proposed approaches for developing dissemination instruments on know-how about water and land productivity improvements, and guidelines and manuals in WUAs and Basin Organizations.

Demonstration sites have been created in every province on pilot WUAs territory based on pilot fields of Project Phase II for demonstration and dissemination of improved technologies for farmers:

- · In Sogd province farms Sayed and Khudgif with laser planning in WUA Zarafshan;
- · In Fergana province farm Turdiali in WUA Akbarabad;
- · In Andijan province farm Tolibjon
- · In Osh province farm Nursultan-Aly in WUA Zhapalak.

Irrigation and agrotechnical measures are being carried out in every demonstration site according to developed and tested methods of IWRM-Fergana Project.

Model plan of measures and forms allowing specialists to collect required information on farms were developed for accounting, evaluating and analyzing indices of irrigation water use disseminating Project experience among farms.

All activity stages have been included into this plan of measures:

- Farms' monitoring over irrigation water use, carrying out agrotechnical measures and problems in agriculture production of every farm;
- · Comparative evaluation of irrigation indices and agrotechnical measures with normative parameters;
- Developing recommendations for every farmer;
- · Consultations on effective irrigation and agrotechnical measures.

Differences of agriculture reforms carried out in countries, differences of structural formation of farms and their social-economic conditions were taken into account when developing model plan of measures on disseminating improved technologies.

### 3.3.1 Preparation of proposals on joint cooperation with RAS and FOMP and other relevant organizations

### Proposal on joint cooperation with RAS in the Republic of Kyrgyzstan

At the present time the agreement has been made between Osh Rural Extension Service (RES) and SIC ICWC on join cooperation directed at uniting efforts and joint actions on territory of Osh province Kyrgyz Republic in order to improve water and land productivity though raising farmers' knowledge in effective water use and in carrying out agrotechnical measures through trainings and consultations.

During 2005 talks were carried out on joint cooperation of "IWRM-Fergana" project and FOMP (Farmer Ownership Model) implemented under financial support of International Financial Corporation in Sogd province. The Agreement on Joint Cooperation has been prepared but at the present time it is not yet signed because of organizational reasons (changes in governance of FOM Project).

Today there are three types of organizations in Uzbekistan. It is possible that their activities could be included extension services and in cooperation with them the project could develop work on disseminating its experience:

- 1. Association of Individual farms and Dekhkan farms (AIFDF),
- 2. Non governmental organizations (Chance, Agrokhamkor, ESRBFA (Extension Service of Rural Business of Farms Association))
- 3. Water users association
- 4. Basin Irrigation Systems Administrations (BISA)

As a result of discussion and monitoring the project selected the following non governmental organizations «Chance» Center in Andijan province, Extension service of Rural Business of Individual Farms Association in the Republic of Uzbekistan, Training and Methodological Consulting Centre of «Agro-Khamkor» farmers in Fergana province for cooperation

Today the Agreements on joint cooperation were achieved with all organizations regarding improving farmers' knowledge in effective water use and in carrying out agrotechnical measures through trainings and consultations.

All these organizations will carry out extension activity for farmers through a network of field polygons in the whole province under support of provincial BISA. IWRM-Fergana project specialists train the last ones to monitor over all types of irrigation measures and irrigation water use effectiveness, agriculture works, prepare necessary forms and methodic recommendations for them, and organize demonstration measurements. In this context, branches of SIC ICWC Training centers have been organized in Naryn-Karadar'ya BISA (Andijan) and Syrdar'ya-Sokh BISA (Fergana) for holding training workshops and trainings for specialists of field polygons (trainers) in December.