# Annex 5. Report on PLUD Field Training in Zarbdar project area

# **Background**

PLUD field training on land use planning was conducted in Andijan Village Cities Assembly (VCA) / Keriz WUA on August 23-27, 2017 in Zarbdar project area. PLUD field training was organized by DS-SLM team under collaboration and support of local authorities and partners.

#### Objectives and tasks

<u>The main objective</u>: assessment of physical, social and economic factors in such a way as to encourage and assist land users in selecting options that increase their productivity, are sustainable, and meet the needs of society

<u>The main tasks</u>: to reveal and coordinate the best practices and technologies; (ii) to formulate and estimate possible options for improvement of land use, (iii) to introduce local knowledge in process of land use planning and to formulate practical recommendations to provide introduction among farmers and the private sector of rural communities

# **Program**

Plan of activities to organize and implement the PLUD field training for members of Andijan Village Cities Assembly (VCA) / Keriz WUA, and other local stakeholders is provided below (Tables 5.1-5.3).

**Table 5.1.** Plan of PLUD consultation and field training activities

Date	Activity	
August 23, 2017	Preparatory activities to holding a workshop on scaling up of SLM technologies	
August 24, 2017	Consultation meetings with representatives of local authorities and the regional organizations (Khokimiyat, WUA, the Jizzakh OGME, the Regional scientific agricultural center)	
August 25, 2017	Training of target groups and dialogue with participants on application, to the needs for support for distribution of SLM technologies on a large scale	
August 26, 2017	Field training in the "Merishkor Azim" project farm. Studying of experience of introductio of SLM technologies in the project farm (the farmer is A. Umirov).	
August 27, 2017	Local meetings with "Keriz" WUA/Andijan VCA rural community	

**Table 5.2.** Consultation Log and Meetings with local authority and stakeholders for organize and implement of PLUD training

N	Name	Position	Subject			
Zar	Zarbdar District, 24.08.2017					
1	I.A.Bobodjonov	Khokim of the district				
2	A. Anarkulov	Khokim's Assistant	Arrangement of education program with local authority and stakeholders (program,			
4	A. Ilashev	Director of Jizzakh Scientific Center				
5	U. Mamatov	Chief of Melioration department of OGME target groups, ver				
6	A. Umirov	Farmer of «MirishkorAzim» farm				

**Table 5.3.** Agenda of the PLUD Field Training Workshop

Time	Subject	Responsible officer
8.30-9.00	Registration of participants	
9.00-9.10	Opening speech	Representative of Zarbdor Khokimiyat district
9.10-9.25	Workshop opening. GEF/FAO/WOCAT Project. General information on the project. Targets, tasks, the expected benefits and beneficiaries of the project	DS-SLM counterpart I. Saidov.
9.25-10.00	Technologies on soils preservation, improvement of soils and to water saving. Assessment of the current practice of farmers	DS-SLM Consultant T. Khamzina
10.00-10.45	Agro technology of cotton cultivation. "Gulistan": it is new drought- and salt-resistant variety of cotton. Biological opportunities of the variety.	DS-SLM counterpart S. Alikhodjaeva
10.45-11.00	Break	
11.00-11.30	Problems of soil fertility in Zarbdar district. Actions for prevention of degradation and restoration of soils	DS-SLM counterpart I.Saidov.
11.30-12.30	Ways and actions for improvement of meliorative condition of the irrigated lands. Drainage role	DS-SLM Consultant A.Chernyakov
12.30-13.30	Dialogue with farmers and other groups of local community concerning scaling up of SLM technologies in the project area	DS-SLM Consultant Z. Sidik-Khodjaev
13.30-14.30	Lunch	
14.30-16.30	Field training: Discussion and share experience on introduction of "Diversification of crops on the Salinized Irrigated Lands" technology and cultivation of new drought- and salt-resistant variety of cotton – "Gulistan" at "Merishkor Azim" farm.	Farmer Azim Umirov, «Merishkor Azim» farm

# **Participants**

65 representatives from 5 target groups were involved in the consultation process and took part in the PLUD workshop: (i) local authorities (3 persons), (ii) farmers (29 persons), (iii) specialists of agriculture and water economy (14 persons), (iv) women (13persons), (v) aksakals (6 persons).

### Workshop outputs

- 1) The women participating in this training increased the potential for efficient use of water and land on household sites. In particular, a group of housewives is trained in 4 methods of soil moisture conservation, diversification of crops on the household sites and selection of the best crop-precursors for vegetable crops, the use of simplified drip irrigation (from plastic bottles) for young fruit trees, etc.
- 2) As a result of dialogue with farmers and other groups of local community the main problems and possibilities of local stakeholders are revealed for implementation and scaling out of SLM technologies.

<u>The short characteristic of land use in Andijan WCA</u>. The irrigated arable lands of 1727 hectares are in long-term rent at 29 farmers. The household areas make 118 ha. Farms are united in Keriz Water users association (WUA) which carries out delivery and distribution of irrigating water. Farmers specialize in cultivation of crops. The main of them – the cotton and a winter wheat occupy 844 hectares and 685 hectares (88,9%) accordingly, the remaining area (11,1%) is under other crops (vegetable, cucurbits, potatoes).

Soils are characterized by the lowered fertility (average bonitet of 47 points), mainly because of salinization of soils. Cotton productivity in 2016 was 20 c/hectare, winter wheat – 45 c/hectare.

During interviews and discussions the local target groups emphasized the need to introduce the water saving and soil conservation and erosion-preventive practices (drip irrigation. land leveling, sowing of cotton under the film, green manure/soil mulching), however, the most of these methods - high cost. They also indicate the importance of traditional low-cost methods (rainwater harvesting, forest belts, halophytes and other salt-tolerant crops, etc.

Participants of PLUD training indicated the major problems in land use: (i) inadequate working of drainage, (ii) wear of intrafarm irrigating network (destruction of canalettes) and (iii) soil salinization, (iv) lack of knowledge and experience, (v) financial issues and lack of advanced equipment, deficiency of fertilizers, qualitative seeds etc.;

Inhabitants of Keriz WUA/Andijan VCA consider that main problems of soil salinization are: inadequate work of drainage and deterioration of on-farm irrigating network (destruction of canalettes), lack of irrigating water. Serious obstacles on the way of introduction of SLM are: lack of knowledge and experience - so consider 50% of participants of the meeting; 20% of participants call wear on-farm infrastructure, 15% - financial difficulties and 15% - lack of stimulation of SLM. The participants of the training offered 4 options for overcoming obstacles to improve scaling out of SLM practices in Zarbdar district:

Limiting factors	%	Ways to overcome/Coping strategy
1.Lack of knowledge, experience and information	50	Organization and implementation on a permanent basis of consultation office (under WUA or other); Raising awareness and knowledge of rural /village inhabitants through FFS training program, share experience, mass media, etc.
2. Lack of stimulation of SLM	15	Development of local plan for actions and micro-credits for farmers, dekhkans and other land users to apply and scaling out of best SLM practices
3. Deterioration of on-farm infrastructure (canalettes, drainage)	20	Establish of informal cooperation and community work days for improvement/repairing of on-farm network, roads, organizing discussions/meetings with local administration and decision makers.
4. Financial obstacles (costly a new machinery, techniques, plant protection issues, lack of organic fertilizers, qualitative seeds	15	Improving of the technical services of agricultural machinery and equipment units and schedule of using required techniques between farmers, WUAs and agro firms; training of O&M system staff.

Participants of PLUD Workshop proposed strategy and ways for overcoming barrier of SLM scaling up by efforts of rural communities and farmer associations (Table 5.4).

**Table 5.4**. Strategy and Ways of Overcoming Barrier of SLM Scaling up by Efforts of Rural Communities and Farmer Associations

Limiting factors	Proposed solutions of the communities and farmers	Suggested action for SLM scaling up strategies
Lack of knowledge, experience and information	1. Training of all segments of the population, including students of colleges, pupils.	1. Training of all segments of the population, including students of colleges, pupils.
	2. Equip WCA /WUA room with the materials (news-sheets, brochures, posters).	2. Development of consultation and extension service unit in the each VCA / WUA
Payroll embarrassment	1.Appeal to the authorities behind support	1.Providing micro crediting for farmer and land users in accordance with the Government Degree
Shortage of the equipment, organic fertilizers, qualitative seeds	<ol> <li>Cooperation of farmers for sharing of the equipment.</li> <li>Use of service support of agricultural firms (signing of the</li> </ol>	Strengthen partnerships and agro technical services for farmers and agricultural enterprises.  Testing of soils, recommendations on norms

Limiting factors	Proposed solutions of the communities and farmers	Suggested action for SLM scaling up strategies
	contracts) 3. Addressing with the requirement to local authorities and the organizations responsible for seeds.	of fertilizers application for each culture and feedback with stakeholders.  Settlement of seeds supply through the commercial or state organizations.
Wear of on-farm infrastructure (canalettes, drainage)	Carrying out of traditional actions like hashar, etc. on drainage cleaning 2. Regulation of schedule of rehabilitation works	Improvement of drainage through better service and increasing capacity of responsible organizations  Monitoring ad assessment of soil salinity, water logging, water use efficiency  Introduction of mobile and other tools and Early warning system to climate variability and drought mitigation.
The difficulties caused by lack of water and unsettled water distribution	Joint participation in water allocation between water users and schedule of irrigation and leaching of saline soils.	Perfection of WUA work for improvement of service for all water users Control of observance of water use and schedule od irrigation events and leaching.