Country: UZBEKISTAN
Presentation made by: Umid Abdullaev, NPC

FAO/GEF/WOCAT Project “Decision Support for Mainstreaming and Scaling up of Sustainable Land Management”

2 December, 2018 Bonn, Germany
Decision Support Framework for SLM mainstreaming and scaling out

About 48% of integrated lands is affected to secondary salinization, more than 17.4% of which are classified as moderately or highly saline;

More than 56% of land area is affected by wind erosion;

Practically all the country's ecosystems have undergone significant changes, etc.
Selection of priority landscapes

**Site 1. Irrigated salt-affected landscapes**
Agro-climatic province: *Central semi-desert*

The irrigated croplands in Djizak region

**Technology 1.** Crops diversification with introduction of legumes and green manures on salt-affected soils

**Technology 2.** Introduction of new drought and salt tolerant «Gulistan» cotton variety

Demonstrated SLM technologies
Selection of priority landscapes

Site 2. Rainfed drought-prone landscapes
Agro-climatic province: Southern semi-desert

Rainfed landscapes in Kashkadarya region

Demonstrated SLM technologies

**Technology 1.** Planting of almonds on small terraces to increase productivity of eroded soils in rainfed landscapes.

**Technology 2.** Cultivation of desert drought-resistant crops on rainfed lands for reduces of soil erosion and provision of fodder production growth.
Soil Organic Carbon Map of Uzbekistan

Landscape assessments
Assessment of Land Degradation for UNCCD PRAIS reporting

Land Degradation in according to National Data

<table>
<thead>
<tr>
<th>Category</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry lands (pasture degradation, deforestation)</td>
<td>106 477</td>
</tr>
<tr>
<td>Irrigated land (salinization, erosion)</td>
<td>20 640</td>
</tr>
<tr>
<td>Total land degradation:</td>
<td>127 117</td>
</tr>
<tr>
<td>in total area, or 28.6% of the total area of the country.</td>
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In addition, the degradation of the dried bed of the Aral Sea is 17 630 km² or 4% of the total area of the country.
SLM Options Mapping for restoration of salt-affected landscapes for planning and decision making

<table>
<thead>
<tr>
<th>SLM options</th>
<th>SLM sub-options</th>
<th>Finance needs/costs</th>
<th>Cost Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-2</td>
<td>&lt;300</td>
<td>Low-cost</td>
</tr>
<tr>
<td>2</td>
<td>3-9</td>
<td>400-470</td>
<td>Mean cost</td>
</tr>
<tr>
<td>3</td>
<td>10-13</td>
<td>750-800</td>
<td>High-cost</td>
</tr>
<tr>
<td>4</td>
<td>14-22</td>
<td>1100-1540</td>
<td>Very high-cost</td>
</tr>
<tr>
<td>5</td>
<td>21-26</td>
<td>2150-3990</td>
<td>Extremely high-cost</td>
</tr>
</tbody>
</table>

Djizak project area
SLM Options Structure for planning and decision making

National / sub-national and local database
- DLDD and SLM assessment outputs and maps
- LUS map
  - Biophysical
  - Land use - farming system:
  - Social economic

FAO LADA-WOCAT and other global tools
- Identification and collection of available SLM practices
- Assessment and selection of suitable T&A with involving SLM stakeholders

WOCAT Knowledge Management
- Documentation of SLM, QT and QA
- Entering of QT & QA into global database

Ecologic-economic zoning of territory in relation to SLM technologies needs and activities
- Cost-benefit and environmental analysis
- Validation and evaluation of SLM options
- Mapping of SLM options and activities
- Formulation of SLM options
- Choosing of suitable technologies and activities for each soil unit/soil polygon

Planning and decision making for actions
SLM mainstreaning and scaling out

Building Capacity and Collaborative Partnerships for SLM Scaling out

**Local Level:**
FFS for SLM technology scaling out PLUD

**Sub-national:**
Stakeholder workshops, expert meetings in support of SLM scaling out

**National level:**
Seminars, expert meetings, round tables

**Regional level:**
WOCAT–FAO Training, Workshop

SLM best practices implemented
Outputs of SLM mainstreaming and scaling out

Formulating of the Mainstreaming Strategy

- Established coordination mechanisms and formulated a draft Strategy
- Policy instruments and partnerships are enabled to scale out and mainstream SLM

Regional:
Documentation of selected SLM A&T and their integration into WOCAT SLM Database (2016-2018).

National:

Subnational:
Stakeholder workshops, expert meetings with target groups and decision makers, review and cost-benefit analysis of SLM practices, DLDD assessment, based on FAO LADA, DESIRE, LUS, and SLM, development SLM options for scaling out at wider landscapes (2017-2018);

Local:
Participatory Land Use Development (PLUD) training in the 4 local communities, Farmer strategies to overcome the obstacles at local levels. FFS training and consultations with local communities, decision makers. Stimulation of local householders for upscaling agroforestry (almonds, fruits), etc. (2016-2018)
What did we achieve in DS-SLM project

- SLM technologies demonstrated at the project sites lead to adoption and outscaling of at least 4-6 cost effective and innovative SLM technologies in salt affected and drought-prone landscapes;

- Farmer benefits are: (i) increasing cotton yield of «Gulistan» variety from 1.8 t/ha to is 3.2 t/ha at average; (ii) water saving during vegetation season is about 1600-2000 m3/ha that equal 2 irrigation events; (iii) farmer income increased up to 4.8 times, etc.;

- The area under SLM during 2 crop seasons are increased from 2347 ha (2017) to 4723 ha (2018). In future, expected area under SLM will be increased up to 10000 ha (2025).

- 2 project proposals for resource mobilization to enhance SLM scaling out at the wider scale of salt affected landscapes were developed for further actions.
Thank you!