Land degradation and desertification, aggravated by climate change, deforestation and urbanization, among others, have a huge impact in the agricultural sector and vice versa. It is estimated that about 52 percent of the land used for agriculture worldwide is already moderately or severely affected by land degradation, and nearly 2 billion ha of land are already seriously degraded, some irreversibly.

Land degradation reduces productivity and food security, disrupts vital ecosystem functions, affects biodiversity and water resources, and increases carbon emissions and vulnerability to climate change.

Sustainable Land Management (SLM) can play an important role in mitigating these issues, optimizing the use of natural capital and restoring productivity while at the same time improving the socio-economic impact.

Sustainable land management (SLM) can be scaled out through a well-structured mainstreaming strategy and decision support framework.

The DS-SLM Project

FAO works in collaboration with the World Overview of Conservation Approaches and Technologies (WOCAT) to address land degradation at global, regional and national scales, and different levels of decision-making. In this context, the GEF-funded FAO project on “Decision Support for Mainstreaming and Scaling up of Sustainable Land Management (DS-SLM)” is being implemented in 15 countries across the world and facilitates the mainstreaming and scaling out of SLM. A Decision Support Framework has been developed, which provides guidance to countries on scaling up SLM. It links Land Degradation and SLM assessment tools at different levels which are embedded into the development of a strategy and action plan for mainstreaming, scaling up and out of SLM.

In line with the GEF-5 Land Degradation Strategy, the goal of the project is to contribute to arresting and reversing current global trends in land degradation and supporting better decision-making processes at various scales.

Global environmental objective

To combat desertification land degradation and drought (DLDD) worldwide through mainstreaming and scaling out sustainable land management best practices based on evidence based and informed decision making.
The methodological framework developed by FAO and WOCAT defines the steps for the implementation of the DS-SLM project and is divided into 7 modules. Each country applies the framework according to the priority settings and available financial resources.

The DS-SLM methodological framework

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Development objective

To increase the provision of ecosystem goods and services and enhance food security in countries affected by DLDD through the promotion of SLM and integrated management and efficiency in the use of natural resources.

Module 1: Operational strategy for mainstreaming and scaling out SLM

An operational strategy and action plan to structure and monitor activities for integrating SLM into key national policy, planning and financial decisions and therewith promote the wide adoption of SLM practices. A tool was developed for the design of the DS-SLM mainstreaming strategy in support of the countries.

Decision Support Framework

for SLM mainstreaming and scaling out

Project components

The project objectives are delivered through three interlinked components:

(i) National and local decision-support on combating DLDD and promoting mainstreaming and upscaling of SLM best practices;
(ii) Global DLDD and SLM knowledge management and decision-support platform; and
(iii) Monitoring and evaluation and dissemination of project results.

Decision Support Framework

for SLM mainstreaming and scaling out

Module 2

National / Subnational Level Assessment

Assessment of LD & SLM Partnerships with policy institutions and financing mechanisms

Module 3

Selection of Priority Landscapes

Assessment of LD & SLM Livelihoods and natural resources assessment Selection of SLM Best Practices

Module 4

Landscape Level Assessment

Prioritization and action plan for implementation with stakeholders SLM support mechanisms, partnerships with decentralized policy institutions and financing mechanisms

Module 5

SLM Territorial Planning

Multi-sector and multi-stakeholder process and impact assessment

Module 6

SLM Implementation and scaling out

Module 7

Knowledge management platform for informed decision making

Phase A REVIEW AND INITIAL STRATEGY AND ACTION PLAN

Phase B PARTNERSHIPS AND CAPACITY DEVELOPMENT

Phase C SCALING OUT THROUGH POLICIES, TERRITORIAL STRATEGIES, INCENTIVES, FINANCING MECHANISMS
Module 2: National / Subnational Level Assessment
Assessment of land degradation (status, causes, trends, impacts) and SLM measures at (sub-) national level to identify ‘hot spots’ of LD and ‘green spots’ of SLM per Land Use/Land Management System (LUS/LMS) using the LADA-WOCAT Mapping Questionnaire (QM).

Module 3: Selection of Priority Landscapes
Identification of priority landscapes for intervention with key stakeholders based on the (sub-) national assessment results.

Module 4: Landscape Level Assessment
Identification of land use pressures, LD impacts and promising SLM solutions for relevant LUS/LMS at the local and landscape level, using LADA-WOCAT QM, LADA-local, WOCAT Questionnaire on SLM Technologies and Approaches (QT-QA). All the information extracted from the questionnaires is also available online in the Global SLM Database (https://qcat.wocat.net/en/wocat/)

Module 5: Territorial planning
Results from the landscape level assessment are reviewed with stakeholders to identify, negotiate and select territorial responses, considering existing plans and implementation mechanisms.

Module 6: SLM Implementation and Scaling Out
Selected SLM practices are implemented in identified sites and scaled out through awareness raising and capacity building using a broad range of communication tools and materials.

Module 7: Knowledge Management Platform
The knowledge management platform guarantees that information is made publicly available to all stakeholders beyond the project to ensure mutual learning and exchange and evidence-based decisions.

LADA Local
Provides a methodological approach and tool-kit for the assessment of land degradation processes, causes and impacts at local level using a participatory approach.

WOCAT questionnaires and database
The Questionnaires on SLM Technologies (QT) and SLM Approaches (QA) and the related database have been developed by WOCAT to document and assess successful SLM practices.

LADA-WOCAT QM questionnaire
Evaluates the type, extent, degree, rate and causes of land degradation but also gives the possibility to the user to list a number of technologies and their characteristics that can reverse land degradation.
Examples from DS-SLM countries

The countries committed to participate in the DS-SLM project, have set different priorities according to their emerging needs, and emphasis is given to different modules and activities. They undertake activities which give prominence to their strengths followed by a past experience in SLM but also aim at filling gaps by identifying opportunities in mainstreaming and scaling out SLM. Some examples from countries include:

- **Morocco** gives emphasis on territorial planning following a participatory process. A 'Development Pact' to be developed based on LADA Local/LUS assessment.
- **Bosnia and Herzegovina** is making progress on the mainstreaming strategy formulation linked to PLUD and the implementation of SLM best practices.
- **Panama** has focused on the implementation of the mainstreaming strategy and currently is working on the implementation of SLM best practices in two pilot sites.
- **Tunisia** has advanced on developing a mainstreaming strategy for scaling out agroforestry, conservation agriculture, sandy amendment and composting.

**DS-SLM National Project Partners and Lead Agencies**

- **Argentina** Subsecretaría de Política Ambiental de la Secretaría de Ambiente y Desarrollo Sustentable de la República Argentina
- **Bangladesh** Department of Environment, Ministry of Environment, Forest and Climate Change
- **Bosnia and Herzegovina** Federal Ministry of Agriculture, Water Management and Forestry (Federation of BiH); Ministry of Agriculture, Forestry And Water Management (Republika Srpska)
- **China** National Bureau to Combating Desertification, State Forestry Administration
- **Colombia** Unidad de Planificación Rural Agropecuaria, Ministerio de Agricultura
- **Ecuador** Ministerio del Ambiente
- **Lesotho** Ministry of Forestry and Land Reclamation
- **Morocco** Haut Commissariat aux Eaux et Forêts et à la Lutte Contre la Désertification
- **Nigeria** Federal Ministry of Environment
- **Panama** Ministerio del Ambiente
- **Philippines** Bureau of Soils and Water Management, Department of Agriculture
- **Thailand** Land Development Department, Ministry of Agriculture and Cooperatives
- **Tunisia** Direction Générale de l’Aménagement et de la Conservation des Terres Agricoles, Ministère de l’Agriculture
- **Turkey** General Directorate of Combating Desertification and Erosion (ÇEM), Ministry of Forestry and Water Affairs
- **Uzbekistan** UZGIP Institute (Uzgipromeliovodkhoz), Ministry of Agriculture and Water Resources

For more information about the DS-SLM Project
For enquiries contact DS-SLM-Secretariat@fao.org

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