

Food and Agriculture Organization of the United Nations

BUILDING FORWARD BETTER

THEMATIC AREA LAND RESOURCES PLANNING



1. Description of the module

1. Land resource planning for sustainable land management

Land resource planning is an approach for achieving sustainable and efficient resource use, taking into account biophysical and socio-economic dimensions. It allows a systematic assessment of land potential and land-use alternatives for achieving optimal land uses and improved socio-economic conditions through a participatory multisectoral, multi-stakeholder and scale-dependent process. The purpose of land resource planning is to support decision-makers and land users in selecting and putting into practice land uses that best meet the needs of people while safeguarding natural resources and ecosystem services for current and future generations.

2. Sustainable Land Management (SLM)

Sustainable Land Management (SLM) comprises measures and practices adapted to biophysical and socio-economic conditions aimed at the protection, conservation and sustainable use of resources (soil, water and biodiversity) and the restoration of degraded natural resources and their ecosystem functions. The selection of appropriate SLM practices and approaches is an important step in ensuring the effectiveness of land management and restoration.

3. Land Degradation Neutrality (LDN) -Restoring degraded lands

Identifying the impacts of land degradation on provisioning ecosystem services (i.e. productive, regulating/supporting and socio-cultural services) is a crucial aspect of a strategic approach to food security. FAO's contribution to land degradation neutrality (LDN) is based on its expertise in policy development on SLM and addressing land degradation, including governance and land rights, and on its role as the foremost global custodian of agricultural information for the Organization's country members.

BUILDING FORWARD BETTER



LAND RESOURCES PLANNING

4. Land assessment and impacts

FAO assists member countries in assessing the physical, socio-economic, institutional and legal potential and constraints on land use, with the aim of achieving the optimal and sustainable use of land resources and empowering people to make informed decisions on the allocation of those resources.

5. FAO Digital soil mapping (DSM)

DSM refers to techniques of soil mapping mostly through digital techniques, incorporating field and traditional legacy soil information. DSM makes use of pedometrics, which refers to the application of numerical techniques to describe and map soils. The scope is to make soil survey, classification, and land evaluation as objective as possible.

6. Remote sensing for land use planning

Remote sensing covers all techniques related to the analysis and use of data from environmental and earth resources satellites and from aerial photographs. Land cover maps constitute necessary tools for the planning and management of the territory and satellite remote sensing provides a cost-effective and accurate tool for their updating.

2. Module structure

- 1. Land resource planning for sustainable land management: current and emerging needs
- 2. Sustainable Land Management (SLM): practices and tools
- 3. Land Degradation Neutrality (LDN) Restoring degraded lands
- 4. Land assessment and impacts
- 5. Digital soil mapping: tools and real cases applications
- 6. Remote sensing for land use planning: production of land maps and presentation of case studies

3. Learning objectives

Trainees acquire knowledge and skills in developing and updating land use policies and strategies in their respective countries. They also learn on different tools available and how to make use of soil data to produce soil digital maps.

SUPPORTED BY:







© FAO, 2020 CA9463EN/1/06.2