



ECONOMICS OF LAND DEGRADATION Supporting Evidence-Based Decision Making

Towards a comprehensive methodological approach for assessing the costs of land degradation and the value of sustainable land management at national and global level

Background

Vulnerability to desertification/land degradation and frequent drought is worsening the food security situation and escalating poverty, particularly in Sub-Saharan Africa. This is a problem that may thwart national efforts towards attainment of several of the Millennium Development Goals (MDGs), especially those relating to the eradication of extreme poverty and hunger (MDG 1) and environmental sustainability (MDG 7). In this context, the United Nations Convention to Combat Desertification (UNCCD) aims to raise awareness of the problem of desertification/land degradation and to advocate concerted effort by the international community to take action to reverse it and to prevent further degradation of soil and other natural resources.

The Global Mechanism (GM) was established under Article 21 of the UNCCD by the first Conference of the Parties (COP) held in Rome in September 1997. The GM is a subsidiary body of the UNCCD mandated "*to increase the effectiveness and efficiency of existing financial mechanisms [and] to promote actions leading to the mobilization and channelling of substantial financial resources, including for the transfer of technology, [...] to affected developing country Parties*" for combating desertification.

Hosted by the International Fund for Agricultural Development (IFAD) in Rome, Italy, the GM functions under the authority and guidance of the COP, which mandated the GM to:

- collect and disseminate information on financial resources and needs;
- analyze and provide advice on sources and channels of financial assistance;
- promote coordination and facilitate co-operation for the mobilization of resources;
- mobilize and channel financial resources in partnership with relevant institutions.

In response to the needs and priorities of affected developing countries, the GM developed a pragmatic approach to the mobilization of financial, institutional, technical and knowledge resources. The strategy inter-alia calls for the development of strategic partnerships with organizations having specific capacity, expertise and comparative advantage in the relevant fields.

An increasing number of countries affected by desertification and land degradation have recently requested the support of the GM in analysing the costs of land degradation, desertification and drought, to support decision making and the mainstreaming of SLM within relevant national and international policy-making processes. In particular, there is a demand for a comprehensive methodological approach for assessing the costs of land degradation and the value of Sustainable Land Management (SLM) at national and global level.

In this connection, a programme for the analysis of the economics of land degradation in support of evidence-based decision making is being established as a partnership initiative between the GM and relevant organizations, research institutions and universities.



Objectives

The expected outcome of the programme is to increase public and private investments in SLM through the generation of scientifically rigorous arguments to demonstrate the economic benefits of SLM as opposed to the costs of unsustainable business-as-usual practices.

The programme is intended to contribute to a culture of evidence-based policy-making and implementation, which in turn can lead to a better use of limited resources and generate long-term sustainable impacts.

The specific objectives of the programme are as follows:

- identify and promote a comprehensive model for the integrated economic assessment of costs and benefits of combating desertification;
- generate a better understanding of barriers to and drivers for SLM through a methodology to evaluate risks and potential returns on investment;
- facilitate the mainstreaming of SLM into national and international development frameworks by providing instruments to quantify land use trade-offs and portray alternative scenarios;
- assist governments in the identification and implementation of integrated financing strategies to advance the SLM agenda.

Activities

The programme will develop an articulated work programme for the integrated economic assessment of costs and benefits of combating desertification and land degradation. This would indicatively include the following activities:

1. Stocktaking analysis of existing valuation techniques and methods of relevance to the programme;
2. Identification and packaging of a comprehensive integrated economic assessment methodology for SLM (see Annex 1 as an example);
3. Validation of the methodology and valuation models through country-level pilot assessments and case studies;
4. Collaboration in the process of mainstreaming SLM at national and international level on the basis of integrated economic assessments.



Annex 1

6-STEP ASSESSMENT APPROACH Overview

STEPS	DESCRIPTION	METHODS (examples)
Step 1	Assessment of the value of land and natural resources, including global ecosystem functions and services → per country, sub-national region and/or unit of planning	<ul style="list-style-type: none"> - Sustaining Natural Capital (WBI) - Resource Inventory Mapping - Natural Assets Valuation - Total Economic Value - Net Present Value
Step 2	Identification of land degradation issues, driving forces and patterns → per agro-climatic zone, country, sub-national region and/or unit of planning	<ul style="list-style-type: none"> - Environmental Baseline Assessment - Remote Sensing/GIS - Field-level Verification - Biophysical Symptom Analysis - On-site / Off-site Impact Analysis
Step 3	Inventory of Sustainable Land Management (SLM) techniques and practices → per sector, project area, or geographical unit	<ul style="list-style-type: none"> - (Un)Sustainable Practices Review - Stakeholder Analysis - Sectoral Analysis - Technical Analysis (project-level)
Step 4	Evaluation of the socio-economic and ecological footprint of land use systems → per country, sub-national ecosystem, sector, project area, or geographical unit	<ul style="list-style-type: none"> - Land Use Analysis - Ecological Footprint (EF) - Environmental Impact Assessment - Socio-Economic Impact Assessment - Health Impact Assessment - Social Impact Assessment - Life Cycle Analysis
Step 5	Assessment of costs and benefits of land use change → per country, sub-national ecosystem, sector, project area, or geographical unit	<ul style="list-style-type: none"> - Cost Benefit Analysis (CBA) - Cost Effectiveness Analysis - Prevention/Mitigation Approaches - Scenario-based Projections - Simulation Techniques - Risk Assessment - Country Case Studies or Models
Step 6	Recommendations for decision making and policy reform → sub-national, national and international level	<ul style="list-style-type: none"> - Multi Criteria Analysis (MCA) - Strategic Environmental Assessment - Sectoral / Thematic / Technological - Strategic / Planning Issues - Willingness To Pay / Accept - Compensation / Benefits Transfer - Financing Strategies