

CHAPTER 8

Use of land degradation / SLM assessment and monitoring for wise decision making

This chapter presents the very important aspects of how to ensure that the assessment results are presented to and considered by the various concerned decision makers. The findings may need to be targeted to different specific groups of decision makers, for example; local authorities and planners; national institutions (technical institutions and ministries); interested project partners and NGOs / CSOs; the private sector (agricultural suppliers, etc.).

8.1 Drawing conclusions from the assessment findings

Each transect studied was located and each detailed site was selected due to specific biophysical and human characteristics (terrain, soil, land use, management practices). However the aim is not only to gather precise data on all specific transects and sites, but to analyse the findings to enable the assessment team to:

- ⊗ draw conclusions on land degradation (type, extent, severity) under various land use systems and management practices;
- ⊗ assess the effectiveness of current land use / management practices that are being promoted (government, NGOs, projects) and / or used (small and large farmers, herders, foresters) and to identify a few main SLM best practices; and,
- ⊗ assess the impacts of LD and SLM practices on livelihoods and on ecosystem services.

As described in more details in Chapter 2, the analysis of the findings are done by the assessment team using the DPSIR framework. The first step is to describe the state of the land resources using the appropriate tools in each main land use system / type. This is followed by the explanation of the identified direct pressures and indirect drivers of land degradation or sustainable land management. Often the indirect drivers are the same for the range of LUS, however the pressures will vary (e.g. population pressure leading to overgrazing on pasture land and nutrient mining on crop land). The information on these direct and indirect causes will come mainly from the rural participatory tools (e.g. the focus group discussion, household interviews, and land user and key informant interviews – Tools 1.1, 7.1, 5.1 (FAO *et al.*, 2011b)). At this stage in the analysis, it is important to consider the historical context in which different land uses have evolved and how land users have been affected by these major historical changes. The third step is to look at the impacts of land uses and management practices on land resources status and trends (i.e. recent / current responses of the local land users and of policy / programme interventions) in terms of degradation, conservation, or restoration and their effects on ecosystem services and livelihoods using the ecosystem assessment and sustainable livelihoods approaches. It is important to highlight any synergies and trade-offs between the causes and the impacts, particularly in relation to their different temporal, spatial and human dimensions.

Once the draft findings have been analysed and summarised, (preferably in a clear PowerPoint presentation) a response analysis workshop should be organized with all stakeholders to discuss the most appropriate responses (i.e. potential responses to address the identified LD and promote the SLM best practices) within the local assessment area and the different land use systems assessed.

Where a national LD / SLM assessment is also taking place, the local assessment findings should be fed into the national process to provide more in depth understanding of the causes and impacts of land use practices and behaviour of various land user types. In turn, the national findings should be compared with the local findings to ensure that there are no major discrepancies and if there are to conduct further investigations to find out why.

8.2 Adaptive management and land use / territorial planning

Although this step has not yet been tested by the LADA countries, as it was beyond the scope of the LADA project, the LADA methodology and results can be integrated into an environmental monitoring and evaluation programme for a number of purposes:

- ⊗ to improve decision making on natural resources management and rural development;
- ⊗ to identify community and natural resources management needs in the development phase of a rural project or programme and as part of the development of a SLM plan for the community or local assessment area;
- ⊗ to provide an inventory of the baseline conditions (further allowing for an assessment of the performance and impacts of SLM measures and / or other changes brought about by the project, programme or SLM plan).

The results of the LD / SLM assessment would be the basis for the SLM Plan for a given community or a local assessment area. This would comprise improvement and retrofitting directed towards increasing the effectiveness of SLM measures in combating land degradation and in generating multiple benefits in terms of

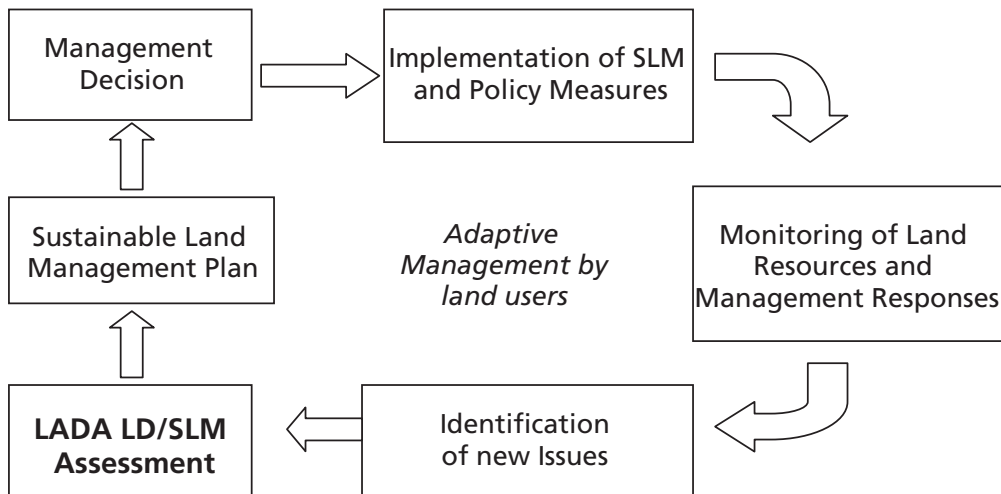


FIGURE 20 Adaptive management for territorial planning

productivity as well as ecological and socio-cultural benefits. In turn, this could be expected to increase the stability and resilience of the ecosystem and reduce vulnerability to shocks such as droughts, floods and increasing weather / climate variability.

The SLM Plan should prioritize the activities to be carried-out and should specify who is responsible for executing the plan, a timeframe for completion and estimated costs. The plan should also consider barriers in the overall environment hindering the implementation of the SLM Plan and should strive to implement measures to create an enabling environment for SLM. This could for example include policy changes, availability of resources and the initiation of an awareness and incentive program. This SLM Plan may require negotiation and conflict resolution to address the needs and expectations of different stakeholders and should be agreed upon with local policy makers and service providers (research, extension, NGOs etc) and as required with government

authorities at provincial or national levels for required financial and technical support.

There are four important steps involved in the development of an SLM Plan, namely:

- i. Establish the context and goals for the SLM Plan and any remediation strategies;
- ii. Identify, evaluate and select remediation strategies;
- iii. Apply and implement remediation strategies and monitoring progress;
- iv. Reflect on progress and the impacts of remediation strategies and adjust SLM Plan and strategies where and when necessary.

This process can also be described as an 'adaptive management' approach, which entails setting clear goals and targets when planning projects. It is then important to meticulously monitor and evaluate the project / interventions at every stage, to ensure goals and targets are reached. If not, changes and corrections should be made to the plan.

8.3 Informed decision making by stakeholders

As land degradation becomes of increasing concern, governments tend to increase their investment in programmes which aim to promote more sustainable land uses. Many of these programmes seek to change the management behaviour of land users. From both a policy-making and scientific perspective, it is important to understand how people perceive and respond to the need for sustainable land use. In order to stop and reverse the degradation of land, water and biological resources, an understanding is first needed of what motivates those whose everyday decisions and actions influence land management. A better understanding is also needed of the characteristics of sustainable management practices that most land users will be willing to adopt and the intricacies of the adoption process.

Through the DESIRE project (<http://www.desire-project.eu/index.php>) and based on WOCAT tools for best practices assessment, a participatory stakeholder process has been developed for appraising and selecting conservation measures to mitigate desertification and land degradation (Schwilch *et al.*, 2009).

This recognizes that decisions are taken at different levels and by different people. The land user needs to make everyday decisions about the utilization of natural resources; the practitioners (extension workers, soil conservation technicians etc.) need to advise land users on SLM practices and the implementation thereof; policy makers need to create an enabling environment for all these to happen; and researchers have to proactively undertake methodology development and troubleshooting.

An informed decision making process uses the assessment results of the LADA local assessment and other secondary information, as a basis to determine the vulnerability of different groups, of communities, and of their resources base and landscapes / territories. The assessment results then form the basis for the development, in close collaboration with stakeholders, of an SLM Plan to address land degradation in the area by proposing specific remediation strategies. This implies different decisions at land user, practitioner and policy making levels.

The TerrAfrica partnership programme (<http://www.terrafrica.org/>) has developed some tools to help countries scale up SLM notably:

- ⊗ Country support tool : How a country should engage more programmatically in SLM, how to identify, prioritize and formulate a SLM investment framework, and bring together other relevant products / tools (TerrAfrica, 2009a)
- ⊗ Policies for scaling up sustainable land management: resource guide for policy makers (TerrAfrica, 2009b)
- ⊗ Assessment of the barriers and bottlenecks for scaling up SLM investments throughout sub-Saharan Africa Strategic Investment Programme Activity 1.4 (TerrAfrica, 2007)

Please find below 5 Annexes that provide further information as cited in the document:

Annex 1: Fieldwork materials

Annex 2: Sustainable land management technologies

Annex 3: Case study of a SLM Technology assessment

Annex 4: Sustainable land management approaches

Annex 5: Case study of a SLM Approaches assessment