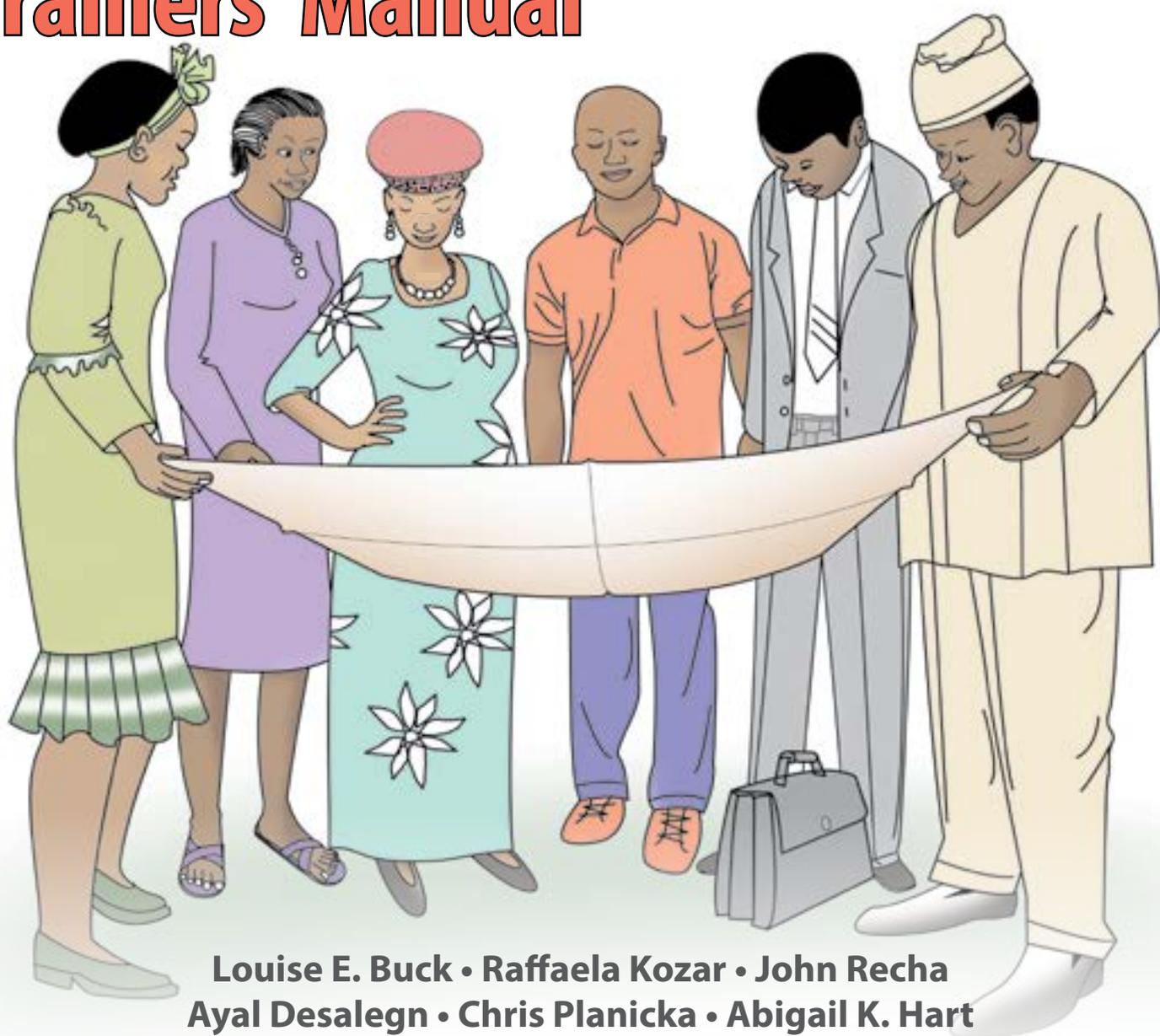
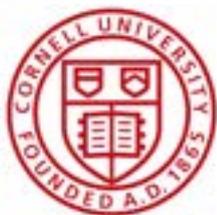


# A Landscape Perspective on Monitoring & Evaluation for Sustainable Land Management

## Trainers' Manual



Louise E. Buck • Raffaella Kozar • John Recha  
Ayal Desalegn • Chris Planicka • Abigail K. Hart



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# **A Landscape Perspective on Monitoring & Evaluation for Sustainable Land Management Trainers' Manual**

**Louise E. Buck, Raffaella Kozar, John Recha,  
Ayal Desalegn, Chris Planicka, Abigail K. Hart**



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# Introduction



This manual will aid trainers of sustainable land management (SLM) professionals to organize and conduct effective courses on monitoring and evaluation (M&E) from an integrated landscape management perspective. The manual provides a curriculum for building the capacities of SLM project and program managers, as well as M&E specialists, to practice M&E in ways that support a landscape approach to SLM. It presents a sequence of learning activities that enable trainers to introduce concepts and practices that build leadership for monitoring and evaluating SLM initiatives which stand to impact agricultural productivity, ecological conservation and livelihood security as well as institutional strengthening outcomes. Through training courses built around the curriculum, SLM leaders will gain insight into designing and implementing M&E systems that help to bring about multiple desired impacts from SLM initiatives. Professionals who are entrusted to help build leadership for M&E in the context of SLM initiatives in Africa are expected to be primary users of the manual. Among these are participants in TerrAfrica, a partnership led by the New Partnership for Africa's Development (NEPAD) that is present in 24 countries to support innovative solutions to sustain landscapes, address land and water degradation and adapt to a changing climate. The curriculum will be valuable also in a wide variety of programs with similar aims that may not be affiliated directly with the TerrAfrica platform.

Much of the material presented in the manual was pilot tested in a course conducted in the city of Mekelle in Tigray, Ethiopia in April, 2014. The *TerrAfrica Regional Leadership Course on M&E for SLM*, sponsored by TerrAfrica, was planned and facilitated by EcoAgriculture Partners, Cornell University, and Environmental Resources Management Center for Sustainable Development in collaboration with the Ministry of Agriculture's Sustainable Land Management program in Tigray. The "examples" presented in the manual are drawn substantially from the experience of the pilot course. Like the pilot course, the training curriculum is rooted in the landscape measures approach that is elaborated in the Landscape Measures Resource Center (LMRC) at <http://landscapemeasures.info>. The LMRC provides a glossary of terms related to landscape M&E that users of the manual may find useful.

The manual is designed to assist in the mentoring of adult learners. Through practice in using the manual, professionals who are active in capacity building for SLM and related initiatives will develop the competencies needed to train project and program leaders, including M&E specialists, in groups. The manual emphasizes team building to develop effective leadership for SLM and similarly, a team approach to training. Training teams who use the manual to design and facilitate capacity development courses that bring a landscape perspective to SLM M&E should view themselves as facilitators of learning whose primary role is to assist trainees to think deeply and creatively about SLM and ways that monitoring and evaluation can be practiced to improve SLM initiatives and outcomes. The manual is designed therefore, to help training teams establish a climate conducive to learning, encourage learners to draw from their wealth of knowledge and experience to enrich the learning environment, help them identify and utilize a variety of resources to accomplish their learning objectives, and give them a strong role in delivering learning material. Features of the manual to help users develop competency in facilitating the learning of leadership teams about SLM M&E from a landscape perspective are highlighted below.

## *Modular approach to content delivery*

The manual is organized in units and modules that enable the training team to select content they consider most relevant to the programs, training needs and learning objectives they seek to address in conducting a course on monitoring and evaluation in SLM. While the modules and lessons contained in each may be delivered sequentially and comprehensively when adequate time and resources are available, their organization around key themes and specific learning objectives enables training teams to custom-design courses. Training teams can use the overview section of each module to quickly gain insight into what each module offers. They can then build the most relevant course for their needs, or sequence courses around clusters of modules that are conducted over an extended time period. Estimates of the time required to conduct the lessons in each module are further aids in designing a successful course.

## *Preparation guidelines*

The learning objective for each lesson is followed by guidelines on how to prepare in advance for each lesson. Preparation often involves engaging learners to draw on their knowledge and resources to contribute to a course activity, sometimes well before the course begins. It also may involve assigning background readings before a lesson is conducted. Following the preparation guidelines helps the team ensure a climate conducive to learning by organizing and preparing in advance thereby avoiding un-prepared learners or apparent disorganization in the classroom.

## *Trainers' notes*

Trainers' notes linked to each lesson provide helpful hints about ways to engage learners in the various activities within a lesson, to encourage group interaction, to get across certain points, to keep time, or to use the training team's judgment about ways of generating the best learning from a lesson. The notes will help training teams use and modify the course material to best effect in their respective settings.

## *Summary of main learning points*

A summary of main learning points for each lesson ensures that training teams are able to help learners focus on key take-home messages following a lesson that may have generated diverse input and ideas through conversation. The summaries relate to the respective learning objectives and will aid the training team in keeping the course on track while also promoting creativity and ingenuity in learners.

## *Exercises*

The exercises describe tasks that pairs or groups of trainees can undertake to explore in more depth particular topics introduced in a lesson. The exercises contextualize the learning activity in the working environments of course participants, and generate insightful content for the lesson.

## *Examples*

Examples are provided of presentations by course participants and of outputs from some of the group exercises that were conducted during the pilot course. The examples illustrate the types of information and insight that might be generated by these important inputs to the course by the trainees.

## *Handouts*

Handouts provide learners with summaries of key material from the lesson to take home from a course for their reference. Training teams can distribute the handouts at the conclusion of the lesson to reinforce the material covered and provide participants with a written reference of key concepts, diagrams, and terms introduced in the curriculum. By the end of the course participants will have the core of a curriculum to take home with them, to reference later and potentially to use in building a follow-up course.

## *To use the manual most effectively*

**Review content and organization.** The manual's Table of Contents reveals the topics around which the training curriculum is organized into units, modules and lessons. Each lesson is comprised of a sequence of activities. Become familiar with the content of the curriculum, and the estimated time required for respective modules and activities. Use this information to design a course that suits your program's capacity development needs.

**Prepare in advance.** Study the selected course material to learn the main points well enough to deliver key concepts in the team's own words. Plan to incorporate the experience of team members into the lessons, as well as the experience of participants. Give assignments to participants in advance of the course so they come well prepared to contribute from their experience with M&E. When possible, prepare to model or demonstrate key concepts.

**Demonstrate confidence.** Build credibility by being honest with participants about what your team does and does not know. Reference authorities and sources that are relevant to participants. Take time to get to know the participants and the location where the course, and a possible field trip, are being conducted.

**Set a positive tone.** Greet participants as they arrive. Incorporate ice breakers, short activities to energize participants and develop a sense of comfort, into the opening of the course and delivery of lessons. Establish course management rules that are sourced from participants and agreed upon by all. Exemplify good listening, reflecting on participants' contributions and asking questions to further open conversation to the group.

**Facilitate rather than direct.** Encourage participants to share ideas and experiences. Listen actively and ask questions to encourage discussion. Rephrase questions that are unclear or do not solicit many responses. Encourage participants who have been quiet to speak. Use open-ended questions as well as questions which remind participants of earlier lessons. Be mindful of participants who may dominate discussion and steer conversation to others.

**Evaluate.** Review key ideas at the end of each lesson, engaging participants in this exchange. Encourage participants to share feedback.

**Reflect.** Engage participants in active reflection on the results of a training course, reviewing course evaluations and other feedback. Discuss with participants individually or in groups how the course could be improved.

For further information, read the Report on TerrAfrica Regional Leadership Course on Monitoring and Evaluation for SLM at [http://ecoagriculture.org/publication\\_details.php?publicationID=658](http://ecoagriculture.org/publication_details.php?publicationID=658), or Train-the-Trainer Manual: Mentoring Adult Learners at <http://www.csu.edu/TLMP/documents/TLMPTraining-the-TrainerManual2.pdf>.



# Unit 1

## **Landscape Measures for Sustainable Land Management Monitoring & Evaluation**.....

# Module 1

## Monitoring & Evaluation for Sustainable Land Management: The Landscape Measures Approach

### Overview

*This module orients trainees to the TerrAfrica approach to monitoring & evaluation (M&E) and highlights participants' experiences with M&E in their projects. It introduces the role of M&E in improving sustainable land management (SLM) outcomes and aims to broaden participants' perspectives on M&E, first, by establishing linkages between SLM and landscape approaches and, second, by introducing the Landscape Measures Approach to M&E. The module also introduces key concepts in M&E and engages participants in choosing types of indicators that are best suited for M&E for SLM. Finally, it guides participants through the process of identifying cost-effective indicators for M&E.*

### Time

1 hour 30 minutes

### Lessons

**Lesson 1: What is M&E for SLM? The TerrAfrica Approach (40 minutes)**

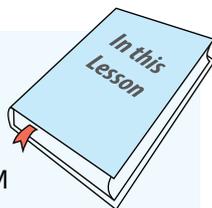
**Lesson 2: The Landscape Measures Approach (25 minutes)**

**Lesson 3: Choosing Integrative and Leverage Indicators (25 minutes)**

# Lesson 1 • What Is M&E for SLM? The TerrAfrica Approach

## Learning Objectives

Extend participants' perspectives on the ways that M&E can strengthen SLM programs.



## Preparation

- ✓ Several weeks before the workshop, consider which member of the facilitation team is most familiar with TerrAfrica's SLM program and how M&E is used to support it. Ask him or her to prepare a brief (10 minute) presentation on the purpose and key concepts of M&E for SLM. Consider three country representatives who might have interesting and distinct perspectives on M&E and who would be willing to share briefly on their country program's experience with M&E. Ask them to prepare a 4-5 minute presentation each on their experience. If the training course is being conducted in a single country, differentiate the exercises by project to highlight diverse experience with M&E for SLM.
- ✓ One week prior to the workshop, gather slide presentations from participant presenters for Activities 1 and 2.
- ✓ The day of the lesson, set up projector and screen for a plenary style presentation. Write out key M&E concepts and definitions (see handout) to be reviewed in Activity 3 on a flipchart: aggregation, harmonization, indicator, baseline and target.

## Procedure

- **Activity 1:** Present perspectives on the purpose of M&E for SLM (10 minutes)
- **Activity 2:** Facilitate speed presentations (five minutes or less) by three country representatives or participants (20 minutes)
- **Activity 3:** Review key M&E concepts used by TerrAfrica country programs (10 minutes)

## Total Time

40 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** The TerrAfrica Approach to M&E for SLM

## Readings

Bwalya, M., Steve Danyo, and Mohamed Sessay. 2008. TerrAfrica Results Monitoring Matrix: Version 1.0. TerrAfrica. <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/TerrAfrica-Results-Monitoring-Matrix-Version-1.0-TerrAfrica.pdf>



## Activity 1

The identified facilitation team member presents on the purpose of M&E for SLM within the TerrAfrica framework. Afterward, distribute the handout on The TerrAfrica Approach to M&E for SLM to participants. Encourage participants to hold their questions until Activity 3 when the key concepts introduced in Activity 1 are reviewed.

## Activity 2

Introduce the country (or project) representatives who will be presenting. Remind each presenter that they have 4-5 minutes to present their slides and 3 minutes to answer questions from participants. Additional questions about the purpose of M&E or particular experiences, indicators or means of measure can be written on a flipchart to address in later sessions.

## Activity 3

Direct participants to look at the terms on their handouts, which are also on the flipchart prepared before the lesson. Ask participants to identify ways that the experiences presented in the speed presentations demonstrate the potential for aggregation and harmonization. Also ask them to identify any examples of indicators, baselines or targets that they heard about in the presentations. Finally, ask participants if they have any questions. If the questions are targeted at the presenters, allow the presenters to answer. Address as many questions as possible in the remaining time.

### Summary of Main Learning Points

1. The TerrAfrica approach to M&E is designed to address key challenges related to the practice and promotion of SLM.
2. Each country and project has a unique perspective on M&E and experience implementing an M&E framework.
3. An effective M&E system for TerrAfrica will foster aggregation and harmonization of M&E data and is structured around indicators, baselines and targets.

### Trainer's Notes

The most important factor in making this lesson a success is the participants selected to give the presentation. Invite presenters who can demonstrate a breadth of experience related to M&E, and who are familiar with the TerrAfrica approach to M&E.

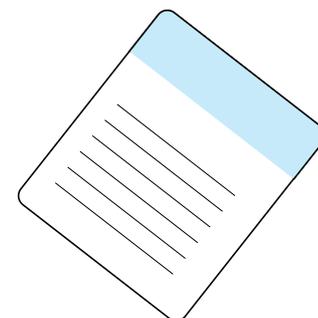
Monitor the presenters' time closely to ensure that there is time to review the key concepts and answer any questions. Consider establishing a system for warning presenters when they have only one minute of presentation time remaining.

Transitioning between presentations may be easier if the speed presentations are combined into a single presentation file. While graphics and slide presentations can make the presentations more engaging, Activity 2 can be conducted without presentations, particularly if presenters have little time to prepare or have limited access to computers.



## Handout 1

# The TerrAfrica Approach to M&E for SLM



<i>The Problem: Fragmentation</i>	<i>The TerrAfrica Approach: Integration</i>
Programs are overlapping and scattered, and missions have conflicting objectives.	Better alignment and harmonization among stakeholders can reduce the drain on country resources.
Land degradation is too large a problem for a single institution to address alone.	Pooled resources and information can reduce transaction costs and achieve economies of scale.
Narrow, single sector approaches have a limited impact.	A comprehensive approach to SLM can reduce the barriers between sectors that hinder scaling up.
Poor knowledge management constrains the scaling-up of SLM.	Better tools can facilitate the assessment of economic and social benefits of SLM, sharing of success stories, replication, benchmarking and providing the right knowledge to the decision makers and land users.

## Key Terms for Thinking and Communicating about the TerrAfrica Approach to M&E for SLM

**Aggregation** – Vertical alignment of M&E data that allows for a cumulative picture from the lowest to the highest levels of the TerrAfrica system.

**Harmonization** – Horizontal alignment of M&E systems across key partners within TerrAfrica’s network that allows comparable data to be collected, analyzed and reported within a common M&E framework.

**Indicator** – A quantitative metric that provides information for monitoring performance.

**Baseline** – An initial set of measurements for each of the indicators in the M&E framework that provides a starting point for future comparison.

**Target** – A desired measure for each indicator in the M&E framework.

## Lesson 2 • The Landscape Measures Approach

### Learning Objectives

Discover ways that a Landscapes Measures Approach complements and enhances TerrAfrica's SLM M&E.



### Preparation

- ✓ Review the Unit 1.1 on the Landscape Measures Resource Center and the reading for this lesson.
- ✓ Set up projector and screen for a plenary presentation for Activity 1.
- ✓ Write out the four components of the Landscape Measures Approach on flipchart paper for Activity 2: Goals, Criteria, Indicators and Means of Measure.
- ✓ Prepare a second flipchart off to the side of the room with the words "Parking Lot" written at the top. In Activity 3 and throughout the rest of the workshop participants will be encouraged to "park" questions that may be answered later in the workshop.

### Procedure

- **Activity 1:** Discuss perspectives on M&E and moving from SLM to landscapes. (10 minutes)
- **Activity 2:** Introduce the four components of the Landscape Measures Approach. (10 minutes)
- **Activity 3:** Set up the parking lot for questions to address later. (5 minutes)

### Total Time

25 minutes

### Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

### Handouts & Exercises

- **Handout 1:** Components of the Landscape Measures Approach to Monitoring and Evaluation (adapted from Buck et al. 2006)

### Readings

Buck, Louise E., Jeffrey C. Milder, Thomas A. Gavin, and Ishani Mukherjee. 2006. Understanding Ecoagriculture: A Framework for Measuring Landscape Performance. Ecoagriculture Discussion Paper No. 2. Washington, DC: EcoAgriculture Partners. <http://ecoagriculture.org/publication/understanding-ecoagriculture-a-framework-for-measuring-landscape-performance/>



Milder, Jeffrey C., Louise E. Buck, Fabrice A. J. DeClerck, and Sara J. Scherr. 2012. "Landscape Approaches to Achieving Food Production, Natural Resource Conservation, and the Millennium Development Goals." In *Integrating Ecology and Poverty Reduction: Ecological Dimensions*, edited by Jane C. Ingram, Fabrice A. J. DeClerck, and Cristina Rumbaitis del Rio, 77–108. New York: Springer.

## Activity 1

Begin the session by reminding participants that the goal of the TerrAfrica partnership is to scale up SLM practices to improve: 1) land productivity, 2) climate resilience, 3) economic growth, 4) natural resource-based livelihoods and 5) ecosystem functions.

Explain that in order for SLM leaders to successfully address land degradation, they must also consider issues of livelihoods, ecosystem functions and sustainable production. They also need to engage partners and stakeholders at a broader scale. This approach is called collaborative landscape management. In general, collaborative landscape management requires a move from focusing on a single issue and action, to a collaborative, integrated approach that addresses multiple issues and coordinated sets of actions.

Briefly explain the reasons for working at a landscape scale (e.g. biophysical realities and the nature of resource-dependent systems) and the specific motivations for bringing a landscape perspective to SLM (e.g. the scale of ecological processes, scale of institutional frameworks, the changing face of rural agricultural economies and new market opportunities).

An example presentation on the collaborative landscape management approach is available at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/PPT-on-the-landscape-management-approach-16April2014-lb-akh.pdf>

Wrap up your presentation by asking participants to consider multi-scale connections within their own M&E systems, and how such connections have influenced their approaches to M&E.

## Activity 2

Begin by explaining that the Landscape Measures Approach is a framework for making and assessing progress toward landscape objectives. It guarantees that all major elements of the landscape are considered and allows for landscape specific measurement and interpretation.

Next, introduce the four components of the Landscape Measures Approach: goals, criteria, indicators and means of measure. Direct participants to the handout, which describes each of the components in detail.

Explain that **goals** are necessary for defining desired outcomes and deciding on appropriate indicators. Introduce the four main goals of the Landscape Measures Approach:

1. Conserve, maintain and restore wild biodiversity and ecosystem services.
2. Provide for sustainable, productive and ecologically compatible agricultural production systems.
3. Sustain or enhance the livelihoods and well-being of all social groups in the landscape.
4. Establish and maintain institutions for integrated, ongoing planning, negotiation, implementation, resource mobilization and capacity building in support of the goals of ecoagriculture.

The goals of the Landscape Measures Approach are considered universal and help ensure that the specific criteria and indicators cover all important dimensions of landscape performance. Next, present **criteria** as the descriptors or characteristics of successfully functioning integrated landscapes. Then, explain **indicators**, a term also discussed in [Lesson 1](#). Emphasize that indicators are

usually place and scale specific and should be appropriate and cost-effective for stakeholders to implement. Finally, introduce **means of measure**, which are the specific metrics used to evaluate the indicators. Encourage participants to consult their handouts for more information on the four components.

## Activity 3

Open the floor for questions about the presentations in Activities 1 and 2. For questions that may be answered in later sessions, direct participants to the flipchart set up as the "Parking Lot" prior to the lesson. Explain to participants that some of their questions will be parked on the flipchart until later in the workshop. Add as many questions to the Parking Lot as necessary until the time for the question and answer activity is over.

### Trainer's Notes

This lesson is based on plenary presentations with minimal interaction between participants. Encouraging participants to interact with the handouts and ask questions will help to keep them engaged throughout the lesson.

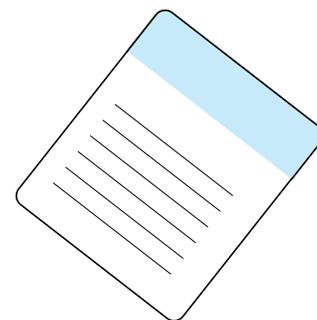
It may be helpful to allow participants to ask questions throughout the presentations and introduce the Parking Lot earlier on in the lesson, but keep track of the time so that there are a few minutes for questions at the end of the lesson.



### Summary of Main Learning Points

1. The Landscape Measures Approach is a method used to track landscape performance and promote integrated landscape management.
2. The four components of the Landscape Measures Approach are goals, criteria, indicators and means of measure.

# Handout 1



## Components of the Landscape Measures Approach to M&E

---

In designing monitoring and evaluation systems, people often begin the process by defining indicators, without taking the time to understand what is important to measure are. In the end, we can have a long list of possible indicators, without a clear rationale for collecting and analyzing the data, which can be time-consuming and expensive. Because of this, many M&E plans languish and prove not to be useful.

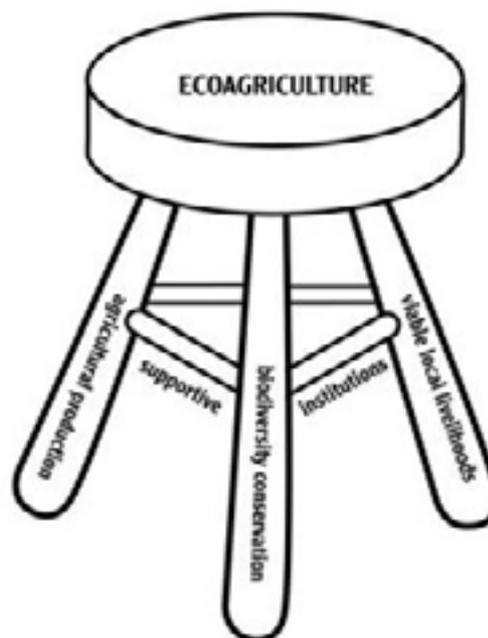
When designing a viable monitoring and evaluation system, it is beneficial to develop a measurement framework that begins with the defined the goals, or desired outcomes, against which to measure a system, program or project. In the context of integrated systems, such as complex landscapes, some of these goals are dictated by the very definition of a landscape approach, whereas others must be place-specific. That is, some integrated management goals are so universally applicable that they should be embedded in the framework itself, whereas others must be formulated according to the particular needs and context of each landscape. Once the goals and criteria (sub-goals) have been agreed upon, context-appropriate indicators can be identified to measure progress toward these goals.

These considerations point to the benefit of a hierarchical framework—an approach used in many viable measurement frameworks. The Landscape Measures Framework is organized into a hierarchy with four levels.

### Level 1: Broadest-level goals of integrated landscape management – universal

Four goals define the integrated landscape concept and are therefore the foundation of the measurement framework.

1. Conserve, maintain and restore wild biodiversity and ecosystem services.
2. Provide for sustainable, productive and ecologically compatible agricultural production systems.
3. Sustain or enhance the livelihoods and well-being of all social groups in the landscape.
4. Establish and maintain institutions for integrated, ongoing planning, negotiation, implementation, resource mobilization and capacity building in support of the goals of ecoagriculture.



*The four goals of integrated landscape management, envisioned as a stool.*

# Components of the Landscape Measures Approach to M&E



## Level 2: Sub-goals or criteria – often universal

In addition to the four universal goals, criteria (or sub-goals) are presumed to be desirable in any landscape. Criteria provide stakeholders with a more targeted set of sub-goals to consider when planning, implementing and measuring activities. Criteria are stated as descriptors or characteristics of a highly successful integrated landscape. As such, they are desirable endpoints that can help guide a project or intervention, even though these endpoints may be unattainable in any given landscape.

## Level 3: Indicators of each criterion – usually place-specific

Indicators are the actual factors that are measured to reveal how well each criterion is being fulfilled. Some indicators—especially “integrative” indicators that provide information about all four goals—may be so important or useful as to be universally applicable. However, most indicators will be place-specific as well as scale-specific.

For example, appropriate indicators of human health in the United States might include rates of obesity and diabetes, whereas appropriate indicators in the Amazon Basin might include incidence of malaria. Each of these indicators only makes sense in a specific context where it is measuring a health issue of local concern. In many cases, indicators can or should be developed collaboratively with local stakeholders. This is particularly true for livelihood indicators, when the goal is the wellbeing of these very stakeholders.

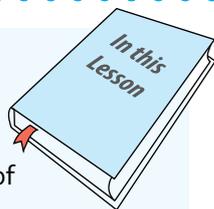
## Level 4: Means of measuring the selected indicators – usually place-specific

Methods used to measure the chosen indicators depend on the level of rigor and precision required in the data, as well as the competencies of those who will be responsible for measurement. Measurement choices depend on the extent to which local knowledge is important in the landscape M&E system, some methods are better than others for capturing it reliably. Choosing appropriate means of measure must account for knowledge from various sectors and perspectives, the cost and level of effort required to generate reliable data and make sense for evaluating change.

# Lesson 3 • Choosing Integrative and Leverage Indicators

## Learning Objectives

Understand what a cost-effective indicator is and identify different types of cost-effective indicators.



## Preparation

- ✓ Review Unit 4.1 in the Landscape Measures Resource Center at <http://landscapemeasures.info/?p=60> and relevant documents on the indicators used by the participants in the current M&E systems.
- ✓ Set up the projector and screen for a plenary style presentation for Activity 1.
- ✓ Set up flipchart in the front of the room for compiling feedback from the buzz groups in Activity 2.

## Procedure

- **Activity 1:** Give presentation on integrative and leverage indicators. (10 minutes)
- **Activity 2:** Form buzz groups to generate ideas on examples of integrative and leverage indicators. (15 minutes)

## Total Time

25 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Integrative and Leverage Indicators

## Readings

Buck, Louise E., Jeffrey C. Milder, Thomas A. Gavin, and Ishani Mukherjee. 2006. "A Brief Guide to Selecting Landscape Performance Indicators." In Understanding Ecoagriculture: A Framework for Measuring Landscape Performance, Ecoagriculture Discussion Paper No. 2. Washington, DC: EcoAgriculture Partners.

<http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Brief-Guide-to-Selecting-Indicators-from-the-LMRC.pdf>



## Activity 1

Introduce the terms integrative and leverage indicators as two types of cost-effective indicators. Explain that these types of indicators tend to:

1. Make use of existing data and resources,
2. Use existing local capacity to measure, and
3. Be relevant, sensitive to change, easy to understand and measurable.

Next, explain how integrative indicators inform multiple functions or goals of landscape performance. Give an example of an integrative indicator, such as the example of land use/land cover found in the handout. Explain, for instance, how land use/land cover can inform our understanding of production, conservation, local livelihoods and institutions.

Next, explain how leverage indicators provide information on an element of the landscape that affects many other elements. Give an example of a leverage indicator, such as the example of soil organic matter found in the handout. In the case of soil organic matter, describe how it can affect land use, market values, income and investments.

An example presentation on the integrative and leverage indicators is available at: <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/PPT-integrative-and-leverage-indicators-16April2014.pdf>

## Activity 2

Instruct participants to get into buzz groups of two or three people. Ask each group to discuss other examples of integrative and leverage indicators and take notes on the ideas they generate. Allow discussion for 8-9 minutes.

Direct participants to the flipchart at the front of the room, allowing 1-2 minutes for transition. In the last 5 minutes, quickly compile the ideas from the groups into one list.

### Trainer's Notes

The buzz groups in Activity 2 are the first group activity of the module. Since participants may not be very comfortable with each other at this stage, consider assigning participants to buzz groups or having them number off, to speed along the transition from the plenary session into the buzz groups.

Remember to copy the list of indicators compiled in Activity 2 or take a photo of the flipchart. This list may be valuable in later modules where participants consider how they can improve their M&E systems.

To help stimulate ideas and discussion about viable integrative and leverage indicators it may be useful to refer to the following list brainstormed by participants in the Africa-wide M&E for SLM course.

- Area under soil management
- Presence and location of dikes
- Rate of carbon capture
- Revenue / income generation
- Food security
- Land preparation / clearing methods
- Area under minimal tillage
- Amount of subsidies for agroecological practices
- Total land under SLM practices
- Soil carbon
- Water quality
- Fisheries quality
- Siltation
- Land certification
- Area of land restored for livestock, agriculture and firewood

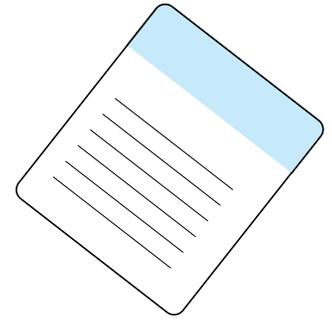
### Summary of Main Learning Points

1. Integrative and leverage indicators are two types of cost-effective indicators for measuring landscape performance.
2. Integrative indicators provide information on multiple dimensions of landscape performance.
3. Leverage indicators provide information on an element of the landscape that influences other elements in the landscape.



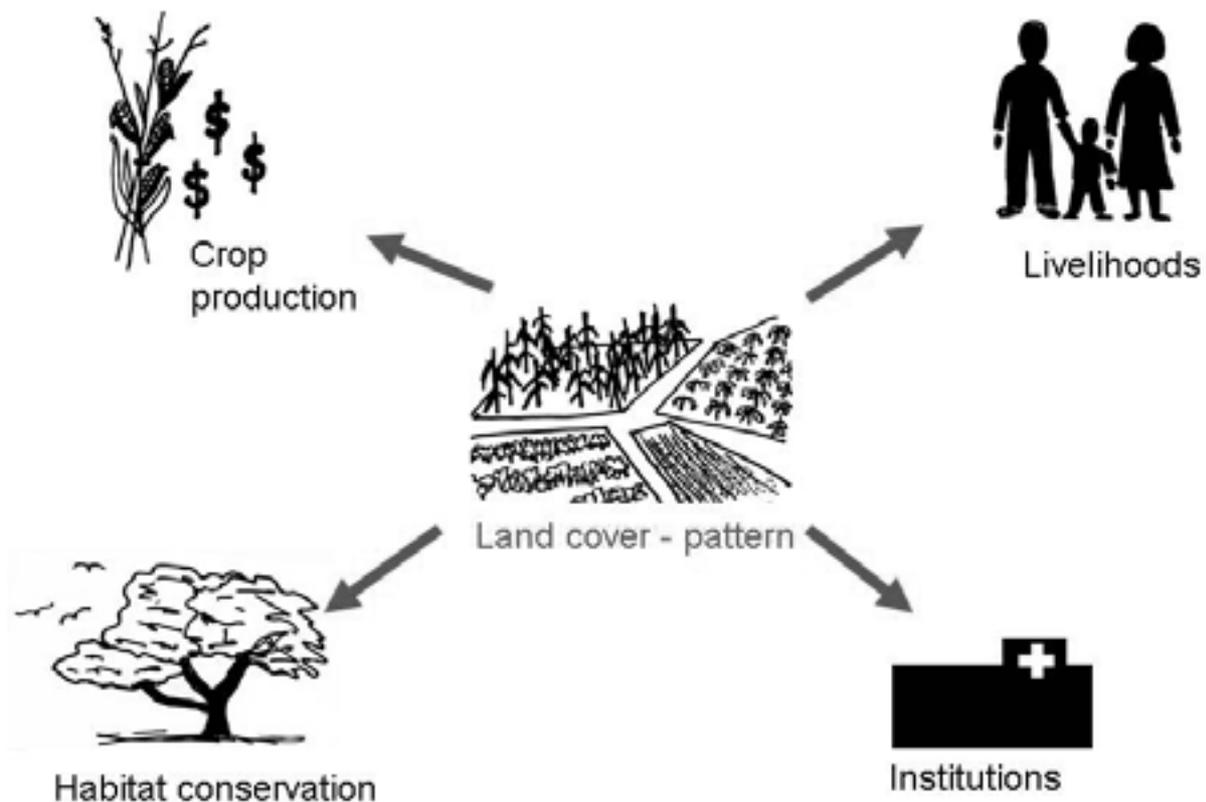
# Handout 1

## Integrative and Leverage Indicators

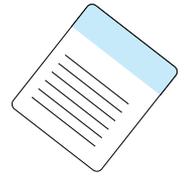


An **integrative indicator** reveals information about multiple landscape functions and goals for landscape performance. Land cover is an integrative indicator. Analyzing patterns of land cover change over time can generate insight into conservation, production, livelihoods, institutional performance and relationships among specific attributes within each category.

### Land cover pattern as an integrative indicator

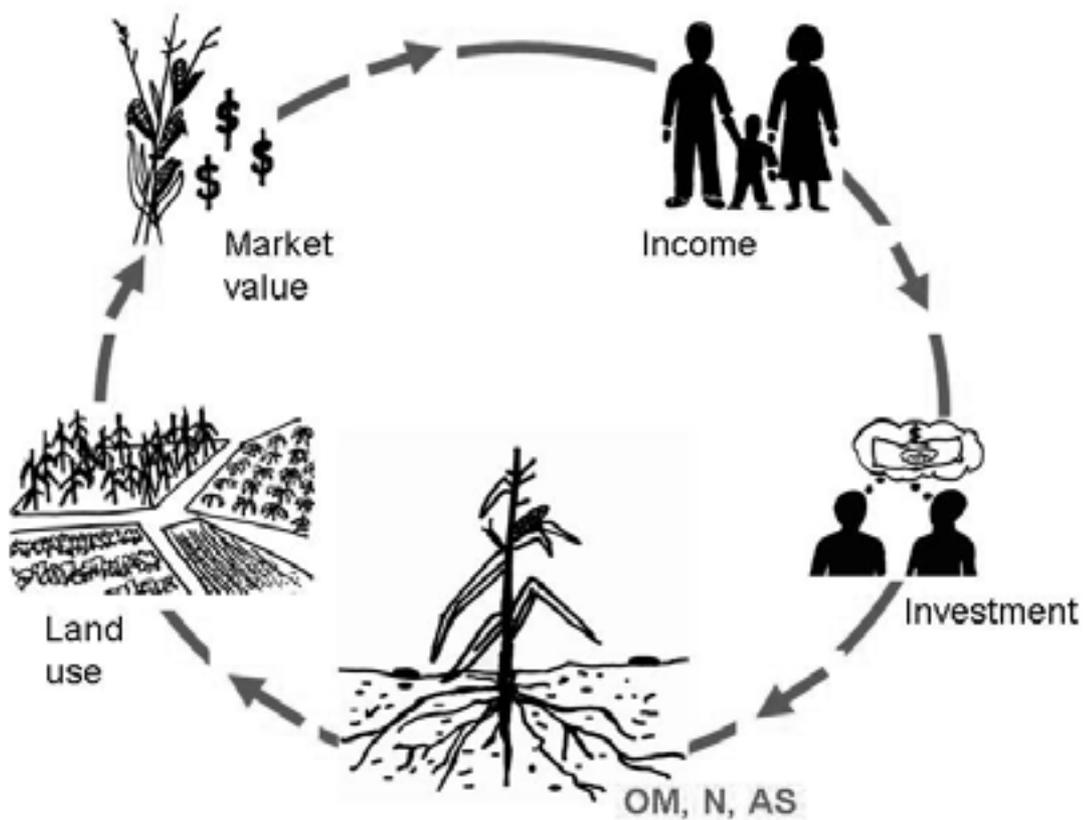


# Integrative and Leverage Indicators



A **leverage indicator** provides information about an element of a landscape system that is anticipated to affect many other elements of the system. A change in a leverage indicator signals the likelihood of change in other significant attributes of the landscape. Soil fertility (soil nutrition) is likely to be a leverage indicator in most integrated (conservation and production) landscapes, as illustrated below.

## Soil conservation as a leverage indicator



# Module 2

## Harmonizing Monitoring & Evaluation Systems for Sustainable Land Management: Strategies and Challenges

### Overview

*This module presents strategies for harmonizing monitoring & evaluation (M&E) systems for sustainable land management (SLM), including a discussion of current challenges in harmonization and strategies to address those challenges. It also explores ways that M&E systems can help to develop robust partnerships for SLM that engage public, private and civil society actors.*

### Time

1 hour 45 minutes

### Lessons

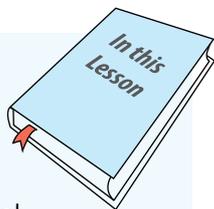
**Lesson 1: Perspectives on Harmonization Toward Sharing of SLM Information (1 hour 15 minutes)**

**Lesson 2: Engaging Multiple Partners (30 minutes)**

# Lesson 1 • Perspectives on Harmonization Toward Sharing SLM Information

## Learning Objectives

Enable participants to distinguish different strategies for harmonizing SLM M&E with national and international conventions and goals.



## Preparation

- ✓ Review TerrAfrica's M&E harmonization plan: Comprehensive Monitoring and Evaluation System Document: TerrAfrica Programme.
- ✓ Select two participants with strong experiences in harmonizing M&E systems appropriate for their local contexts with national or international conventions. Prepare these participants to each give 10 minute presentations on their experiences. These presentations should address the following questions:
  1. How have you interpreted the challenge to harmonize your M&E system with other M&E frameworks?
  2. What progress have you made so far?
  3. What are the challenges?
  4. What are the benefits of harmonization?

## Procedure

- **Activity 1:** Review TerrAfrica platform-wide harmonization. (15 minutes)
- **Activity 2:** Selected participants present on harmonization. (30 minutes)
- **Activity 3:** Facilitate plenary discussion. (30 minutes)

## Total Time

1 hour 15 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Readings

UNCCD. 2012. Template and Reporting Guidelines for Affected Country Parties (English): Version 3 - UNCCD Reporting and Review Process 2012–2013. UNCCD.

[http://www.unccd.int/en/programmes/Reporting-review-and-assessment/Documents/ACP%20template\\_Final\\_ENGLISH\\_.pdf](http://www.unccd.int/en/programmes/Reporting-review-and-assessment/Documents/ACP%20template_Final_ENGLISH_.pdf)

UNCCD. 2013. Decision 22/COP.11 Advice on How Best to Measure Progress on Strategic Objectives 1, 2 and 3 of The Strategy.

<http://www.unccd.int/en/programmes/Science/Monitoring-Assessment/Documents/Decision22-COP11.pdf>

TerrAfrica. 2014. Comprehensive Monitoring and Evaluation System Document: TerrAfrica Programme. TerrAfrica.

<http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Comprehensive-Monitoring-and-Evaluation-System-Documents/Document-TerrAfrica-Programme.pdf>



## Activity 1

Introduce the concept of M&E system harmonization. Describe why it is important to harmonize M&E systems with national or international conventions, such as the Millennium Development Goals (MDGs), the United Nations Convention to Combat Desertification (UNCCD), TerrAfrica, Regional Economic Communities (RECs), etc. Reasons to harmonize include:

- Sharing information and results more easily across platforms,
- Choosing a few cost-effective indicators that have been created and tested at the national or international level, and
- Incorporating national or international goals into SLM projects.

Introduce some factors to consider in creating a harmonized system, possibly including:

- Stakeholders' roles and responsibilities,
- Committees supporting the program,
- Institutional frameworks and SLM service networks,
- Delivery mechanisms for SLM activities,
- M&E tools, and
- SLM indicators.

Introduce key elements of the M&E harmonization process of the TerrAfrica platform. Describe the intent of the Comprehensive M&E System, which is to:

- Address the need for a programmatic and comprehensive SLM M&E approach at the continental level that builds on existing approaches at regional, country and project levels,
- Align impact assessment, in addition to capturing and sharing key lessons in the delivery of practical, locally feasible and viable SLM practices,
- Enable partners to identify and correct weaknesses, learn what works and what does not work, demonstrate achievements and document lessons learned, and
- Contribute to the development of a culture of excellence that enables TerrAfrica to strengthen its visibility both continentally and on the global stage.

Describe the structure of the TerrAfrica harmonized M&E system, which is built on four cornerstones.

1. Indicators at impact, outcome and output level
2. Data sources at impact, outcome and output level

3. Information products, or standardized reports, on a periodic basis within prescribed time frames
4. Dissemination of reports to stakeholders using prearranged dissemination channels in a manner that is synchronized with annual planning processes

*An example presentation on TerrAfrica's harmonization process is available at [http://ecoagriculture.org/publication\\_details.php?publicationID=646](http://ecoagriculture.org/publication_details.php?publicationID=646).*

## Activity 2

Invite two selected participants to give presentations on their experiences with M&E harmonization. Introduce the presenters one at a time, indicating that each presenter will have 10 minutes to describe his or her experiences in designing an M&E system to harmonize with national and international conventions (e.g. RECs, MDGs, UNCCD, etc.), while also remaining context- and country-specific.

*Two example presentations on harmonization experiences are available at [http://ecoagriculture.org/publication\\_details.php?publicationID=647](http://ecoagriculture.org/publication_details.php?publicationID=647) (French language) and [http://ecoagriculture.org/publication\\_details.php?publicationID=648](http://ecoagriculture.org/publication_details.php?publicationID=648).*

## Activity 3

Based on the information provided in the presentations, facilitate a plenary discussion on strategies for harmonization and possible methods for accomplishing it. Ask participants the following discussion questions:

- Why should projects harmonize their M&E systems with national and international conventions?
- How can local context be maintained in a harmonized system?
- What are the challenges?
- What makes harmonization difficult?
- How are projects responding to the challenge of harmonization?
- Do these strategies require major shifts in the way projects currently do M&E?

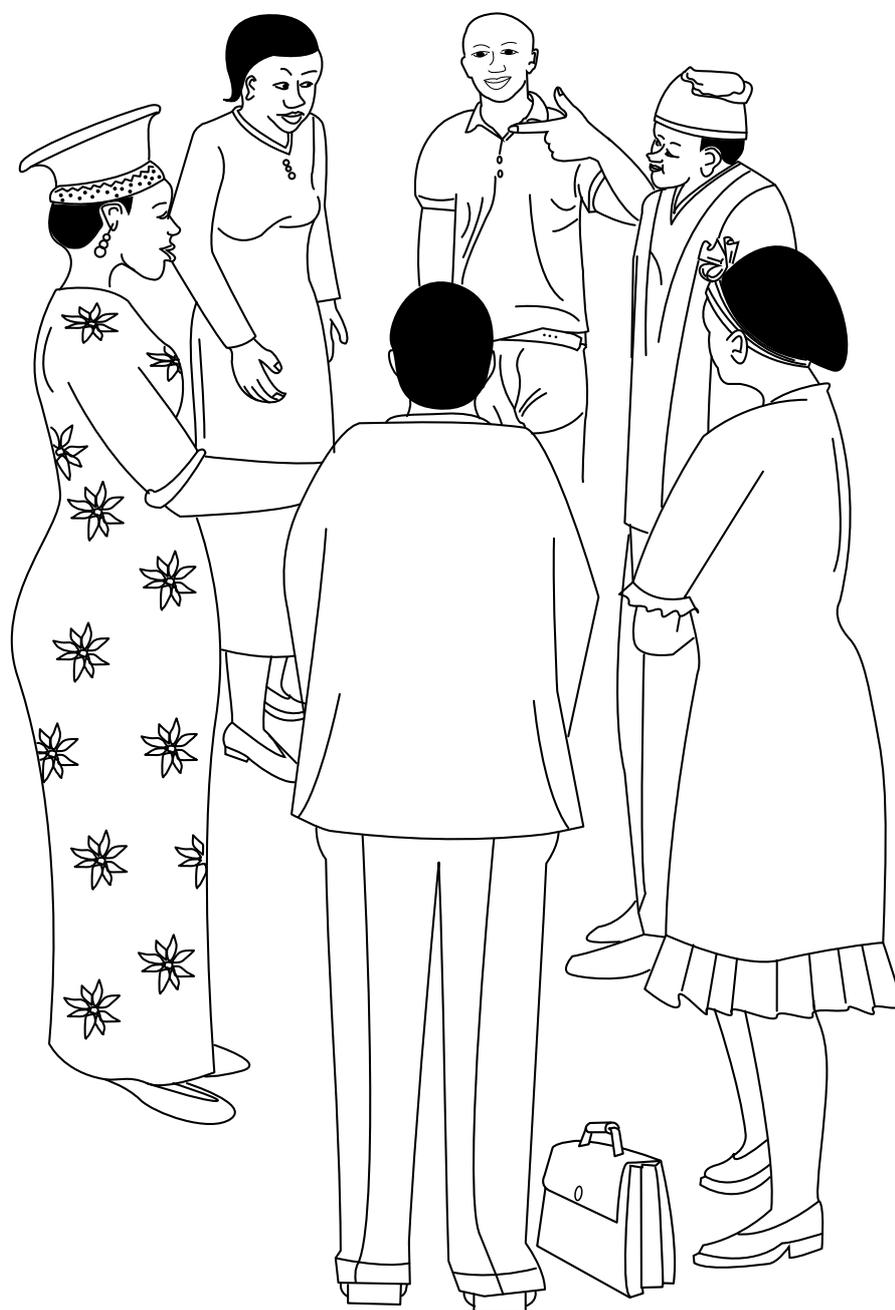
### Trainer's Notes

This lesson is based on the participants' experiences in M&E harmonization. Encourage participants to provide their own examples of harmonization challenges and successes, especially in the third activity. You may want to consider allowing brief questions at the end of each presentation, or you could hold all questions until the discussion. Finally, spend extra time reviewing the TerrAfrica harmonization experiences in order to feel comfortable with this lesson.



### Summary of Main Learning Points

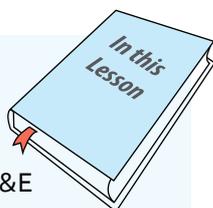
1. The goals of the TerrAfrica harmonization process are to share information more easily across platforms, choose cost-effective indicators that have been tested at the national and international level, and incorporate national and international goals into SLM projects.
2. Sharing M&E data is necessary for assessing impact at a large scale and capturing lessons learned, but it can be challenging to design systems that are relevant to diverse contexts.



## Lesson 2 • Engaging Multiple Partners

### Learning Objectives

Discover the benefits of engaging diverse stakeholders in a harmonized M&E system.



### Preparation

- ✓ Adapt benefits of engaging diverse stakeholders in a harmonized M&E system to local contexts and experiences.
- ✓ Brainstorm concrete examples to help participants understand the benefits.

### Procedure

- **Activity 1:** Present benefits of engaging diverse stakeholders. (10 minutes)
- **Activity 2:** Facilitate buzz group discussion. (10 minutes)
- **Activity 3:** Encourage participants to summarize and discuss the partner conversations. (10 minutes)

### Total Time

30 minutes

### Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

### Readings

Buck, Louise E, and Sara J Scherr. 2007. "Building Innovation Systems for Managing Complex Landscapes." In *The Sciences and Art of Adaptive Management: Innovating for Sustainable Agriculture and Natural Resources Management*, edited by K.M. Moore, 164–86. Ankeny, IA: Soil and Water Conservation Society.

<http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Building-Innovation-Systems-for-Managing-Complex-Landscapes.pdf>



## Activity 1

Describe the benefits of engaging diverse stakeholders in a harmonized M&E system.

- It allows each stakeholder to bring unique knowledge of the landscape.
- It lends legitimacy and credibility to the process.
- It generates innovation (new ideas and methods from collective problem solving).
- It promotes a balance of emphasis and data on production, conservation, livelihoods and institutional impacts of SLM interventions.
- It creates metrics for a unifying language in the landscape to help foster joint learning and concerted action.
- It helps build learning networks that improve the quality of information.
- It enhances transparency and objectivity in SLM decision-making platforms and improves negotiation around resource use and management.
- It provides a framework through which complementary goals can be achieved.

Describe the roles of M&E facilitators.

- Implementation of M&E for SLM usually requires facilitation by individual(s) or organization(s)

who work on a systematic and sustained basis to convene stakeholders, guide negotiation, manage information and promote collective action.

- One key role of the facilitator is to integrate stakeholders' disparate knowledge systems, data needs and ways of communicating and using information.

*An example presentation on the benefits of engaging diverse stakeholders in a harmonized M&E system is available at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Benefits-of-engaging-multiple-partners-april-21.pdf>.*

## Activity 2

Ask participants to turn to one person they are sitting next to and share their experiences in engaging diverse stakeholders in M&E systems. Provide the following discussion prompt:

Share a recent experience where you have successfully brought multiple stakeholders into an M&E system. What were the challenges in this engagement process? How did you overcome these challenges? What were the results?

## Activity 3

Facilitate a discussion to identify what participants learned from the conversations with their partners. Ask participants: now that you have reflected on successful experiences in engaging multiple partners, what strategies would you adopt to engage multiple partners in a harmonized system?

*An example output from a sharing of experiences in engaging diverse stakeholders in M&E systems is available at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Benefits-of-engaging-multiple-partners-might-be-the-output-pppg-20-t.pdf>.*

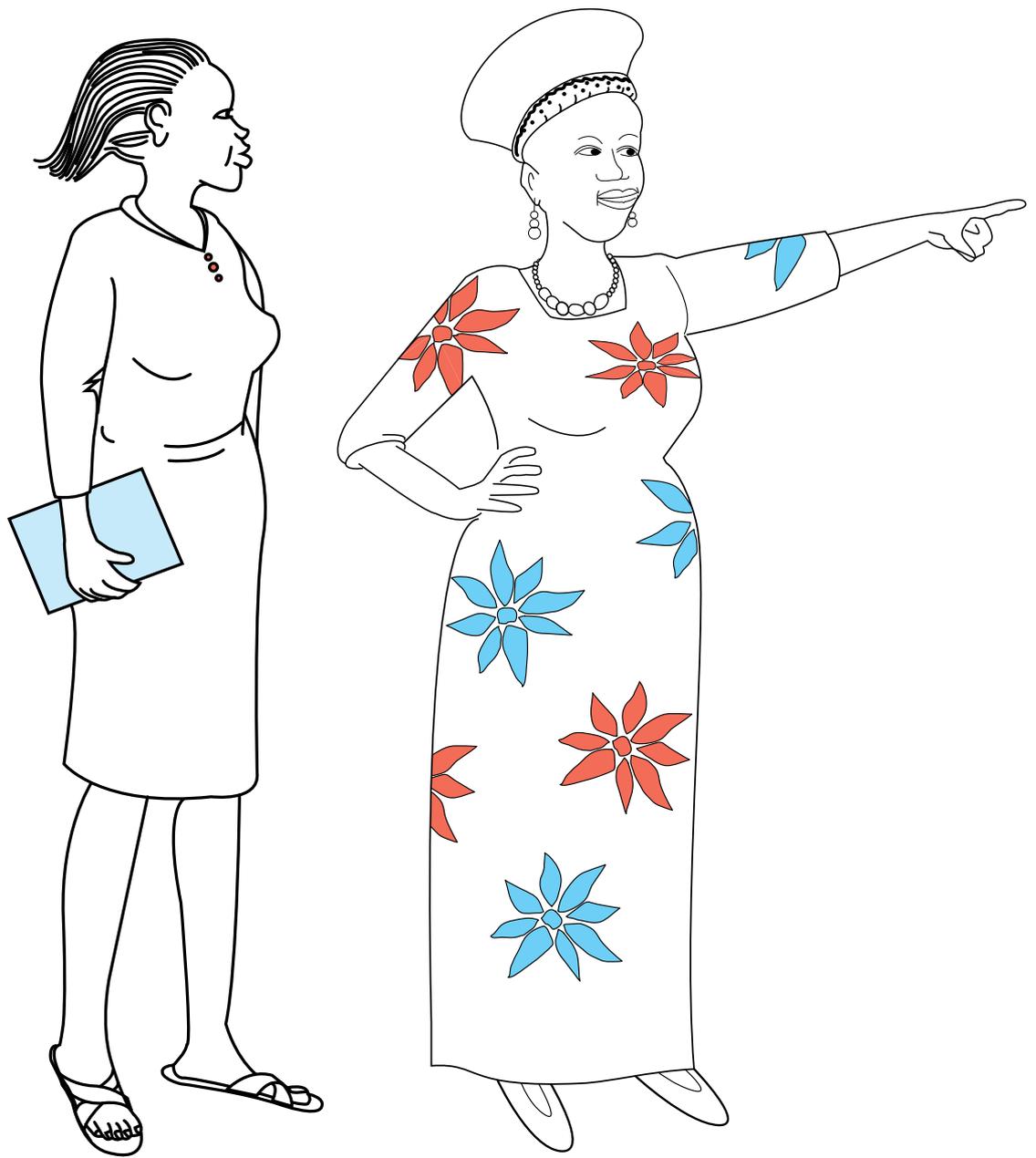
### Trainer's Notes

Each of the activities in this lesson is designed to be short, yet engaging. For this purpose, be prepared to adapt the sessions based on participants' level of knowledge and experience with the topic. This lesson can also incorporate learning points from previous lessons—add these topics in where possible to enhance the participants' feeling of ownership over the course material.



### Summary of Main Learning Points

1. Combining M&E data from multiple stakeholders builds legitimacy, generate innovative solutions, enhance transparency and promote the achievement of complementary goals. Recognize the benefits of combining data from multiple stakeholders in M&E.
2. Facilitating an M&E system requires skills for guiding negotiation, managing the flow of information and promoting collective action
3. A key role of an M&E facilitator is to integrate disparate knowledge systems, data needs and ways of communicating.



## Unit 2

# Landscape Planning & Monitoring for Sustainable Land Management

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# Module 1

## Sustainable Land Management Practices: What Practices Are We Monitoring?

### Overview

*This module reviews participants' experiences with SLM practices and connects these experiences to landscape-scale benefits. In this way, the module helps participants understand the landscape approach and how their existing work fits into it. The module is designed to demonstrate that the sustainable land management (SLM) work they are doing is in fact leading to landscape-scale benefits already.*

### Time

4 hours 30 minutes

### Lessons

**Lesson 1: Effective SLM Practices from Community Experiences (1 hour 30 minutes)**

**Lesson 2: SLM Practices for Landscape Outcomes (1 hour 30 minutes)**

**Lesson 3: Verifying Good Common Landscape-Scale Practices Across Communities (1 hour 30 minutes)**

# Lesson 1 • Effective SLM Practices from Community Experience

## Learning Objectives

Illustrate and compile good practices from landscape and local community experiences to be able to discuss their monitoring.



## Preparation

- ✓ In advance of the course, ask 3-4 participants who work in different types of agroecological settings and directly with local communities to make a very brief presentation (3-4 slides each) that illustrates SLM “best practices” in communities they work with. Ensure that the selected participants’ presentations identify the locations of the communities, watersheds or landscapes where the SLM practices occur, on a map or with descriptive names.

## Procedure

- **Activity 1:** Present examples of effective SLM practices in local communities that participants work with. (30 minutes)
- **Activity 2:** Break into small group discussions about SLM practices by representatives of different countries and/or SLM projects, watersheds or landscapes. (30 minutes)
- **Activity 3:** Report on small group discussions. (30 minutes)

## Total Time

1 hour 30 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Readings

Liniger, Hanspeter, Rima Mekdaschi Studer, Christine Hauert, and Mats Gurtner. 2011. Sustainable Land Management in Practice – Guidelines and Best Practices for Sub-Saharan Africa. TerrAfrica, World Overview of Conservation Approaches and Technologies (WOCAT) and Food and Agriculture Organization of the United Nations (FAO).

[https://www.wocat.net/fileadmin/user\\_upload/documents/Books/SLM\\_in\\_Practice\\_E\\_Final\\_low.pdf](https://www.wocat.net/fileadmin/user_upload/documents/Books/SLM_in_Practice_E_Final_low.pdf)



## Activity 1

Begin the training session by noting the wide variety of SLM experiences represented in the room. Tell participants, “Everyone here has had successes and challenges in implementing SLM. In order to improve our own SLM practices, it is useful to compare our experiences and share best practices from different landscapes and local communities.”

Describe that this training is relevant at the country and regional level for promoting a basket of SLM practices in different agroecological settings and communities, to enable farmers and other local land users to choose what is more relevant for their landscapes.

Ask for 3-4 participants to present a few best practices. These presenters will briefly illustrate their own best practice experiences with a few slides and brief descriptions.

*Two French-language example presentations on SLM best practices are provided at [http://ecoagriculture.org/publication\\_details.php?publicationID=651](http://ecoagriculture.org/publication_details.php?publicationID=651) and [http://ecoagriculture.org/publication\\_details.php?publicationID=652](http://ecoagriculture.org/publication_details.php?publicationID=652).*

## Activity 2

Divide participants into small groups of approximately five people and ask participants to discuss SLM best practices, focusing on the following guiding questions.

- What similarities and differences are apparent among the SLM practices, the approaches to monitoring and the challenges in monitoring?
- Is everyone in the group doing and experiencing the same thing?
- What differences are notable?
- Does the analysis reveal any common challenges?

Refer to the group exercise for more information on this activity.

## Activity 3

Ask one representative from each small group, the group's recorder, to report on the three questions. Use these responses to guide a large group discussion on SLM best practices.

### Trainer's Notes

Some SLM practices may be more common in one specific region, and you may wish to focus more on improving these practices and providing alternatives. Then emphasize the component of monitoring these practices.

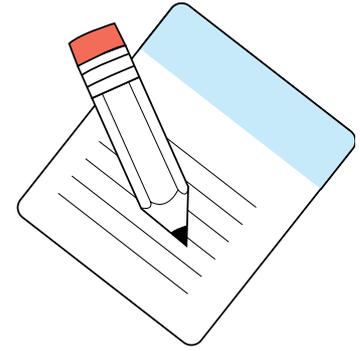


### Summary of Main Learning Points

1. There is a great range of SLM experiences and practices, which explains the variation in monitoring practices among countries and projects. Each practice and related monitoring practice is selected to fit its specific context.
2. Many SLM practices are difficult to monitor and understanding the reasons for these challenges helps develop improved monitoring systems. Involving communities and other stakeholders is one way to address these challenges.

## Exercise 1

# Group Work on Effective SLM Practices from Community Experience



In small groups of 5-6 people, discuss SLM best practices. Choose a facilitator and a recorder for your group. Their roles are described as follows:

### Facilitator

Ask each person in the group to describe one SLM practice that appears especially prominent or promising in local communities and projects they work with and to explain what makes it stand out.

Referring to the list of practices on the flip chart, ask each person to describe ways of monitoring the progress and the effectiveness of the practice that they have observed or experienced. Consider formal as well as informal/local approaches to monitoring. List the monitoring approaches next to or below the name of the practice. If a participant is unaware of how the SLM practice they described is being monitored, ask what they think might be a viable method and record it, focusing especially on approaches which local communities might use or engage in through project activity. Ask each person to identify a key challenge they are aware of or may expect to find in monitoring the practice.

Encourage the group to look for patterns across the information recorded. Ask the following questions:

- What similarities and differences are apparent among the SLM practices, the approaches to monitoring and the challenges in monitoring?
- Is everyone in the group doing and experiencing the same thing?
- What differences are notable?
- Does the analysis reveal any common challenges?

### Recorder

List the "best" SLM management practices on the flip chart. Leave space between or next to each item on the list for the additional information from the questions. Record the responses of group members, including key challenges in monitoring the practices. Document major themes from participants' responses. Prepare to share highlights from the group analysis with other participants in the plenary session.

# Lesson 2 • SLM Practices for Landscape Outcomes

## Learning Objectives

Identify good SLM practices that lead to landscape scale benefits.



## Preparation

- ✓ Review the materials for the Landscape Measures Approach in Unit 1, Module 1.
- ✓ Based on participants' experiences, as well as the example power point presentation provided in this lesson, determine 3-4 strong examples of SLM "best practices" for landscape scale benefits. Use these practices to frame a presentation on the topic

## Procedure

- **Activity 1:** Give a presentation that connects SLM practices to landscape-scale benefits. (30 minutes)
- **Activity 2:** Facilitate group discussion around four SLM practices and others that show landscape-scale benefits. (30 minutes)
- **Activity 3:** Lead plenary session on small group discussions and synthesize. (30 minutes)

## Total Time

1 hour 30 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Group Work on SLM Practices for Landscape Outcomes

## Readings

EcoAgriculture Partners. 2012. Landscape-Scale Management Approaches to Achieving Agricultural Production, Ecosystem Services Conservation and Livelihood Security in Sub-Saharan Africa: Literature Review and Synthesis for Policymakers and Practitioners.

[http://ecoagriculture.org/publication\\_details.php?publicationID=624](http://ecoagriculture.org/publication_details.php?publicationID=624)



## Activity 1

Present a PowerPoint that connects SLM practices to landscape-scale benefits. Use the presentation to show participants that they are already doing landscape work. The presentation should provide an overview of landscape-scale benefits and then focus on four SLM practices that show landscape-scale benefits. They can be categorized as:

- Soil conservation practices
- Soil fertility management practices
- Water conservation practices
- Tree based conservation practices

An example presentation on SLM for landscape-scale benefits is provided at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/SLM-for-landscape-scale-benefits-PPT.pdf>.

## Activity 2

Divide participants into small groups of approximately five people, and ask them to discuss the SLM practices presented and others with landscape-scale benefits. Use the following guiding questions.

1. Have you seen any landscape-scale benefits from these practices, and if so, under what conditions (to help or hinder these benefits)?
2. Which practices are most likely to generate these benefits and under what conditions?
3. Can you illustrate how any of these practices will change and the benefits will accrue or are dynamic over time?

## Activity 3

Ask one representative from each small group to report on the three questions. Use these responses to guide a large group discussion on SLM practices and landscape-scale benefits.

### Summary of Main Learning Points

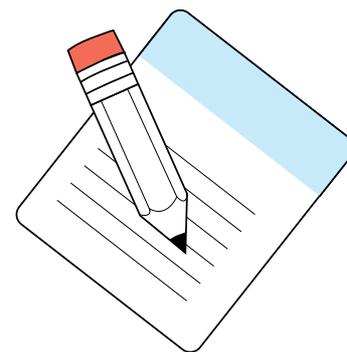
1. A landscape perspective broadens the understanding of SLM practices and benefits. Existing SLM practices and experiences are already leading to landscape-scale benefits.
2. Practices evolve and change over time and therefore their utility is dynamic and changeable. There are predictable pathways towards intensification and people will invest in intensification with the right incentives. SLM leaders need to anticipate the trajectories of change based on predictable pathways and build that into monitoring & evaluation systems.
3. As a leader in SLM, it is important to bring an understanding of SLM and landscape dynamics into the design of a monitoring & evaluation system.

### Trainer's Notes

For the presentation, utilize SLM practice examples that are relevant for participants. These can be drawn from participants' experiences or other related materials. If there is time, consider using specific examples from this module's [Lesson 1](#). For further examples of SLM practices with landscape-scale benefits, refer to the readings in [Unit 4, Module 1](#).



## Exercise 1



# Group Work on SLM Practices for Landscape Outcomes

In small groups of 5-6 people, discuss the SLM practices presented, and others with landscape-scale benefits.

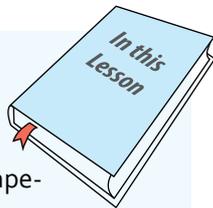
### Guiding Questions

1. Have you seen any landscape-scale benefits from these practices, and if so, under what conditions (to help or hinder these benefits)?
2. Which practices are most likely to generate these benefits and under what conditions?
3. Can you illustrate how any of these practices will change and the benefits will accrue or are dynamic over time?

# Lesson 3 • Verifying Good Common Landscape-Scale Practices

## Learning Objectives

Verify excellent common practices across communities that lead to landscape-scale benefits.



## Preparation

- ✓ Review SLM best practices from your community and from TerrAfrica materials.

## Procedure

- **Activity 1:** Identify which practices people are adopting in small groups. (30 minutes)
- **Activity 2:** Share results of group work. (30 minutes)
- **Activity 3:** Wrap-up and review lesson. (30 minutes)

## Total Time

1 hour 30 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Exercise 1:** Group Work on Verifying Good Common Landscape-Scale Practices

## Readings

Liniger, Hanspeter, Rima Mekdaschi Studer, Christine Hauert, and Mats Gurtner. 2011. Sustainable Land Management in Practice – Guidelines and Best Practices for Sub-Saharan Africa. TerrAfrica, World Overview of Conservation Approaches and Technologies (WOCAT) and Food and Agriculture Organization of the United Nations (FAO).

[https://www.wocat.net/fileadmin/user\\_upload/documents/Books/SLM\\_in\\_Practice\\_E\\_Final\\_low.pdf](https://www.wocat.net/fileadmin/user_upload/documents/Books/SLM_in_Practice_E_Final_low.pdf)



## Activity 1

Divide participants into small groups of 5-6 people to discuss good common landscape scale practices. Explain the group exercise and distribute the instructions to group leaders. Use the following guiding questions.

1. What SLM practices are we currently doing that already demonstrate landscape-scale benefits?
2. What SLM practices are we currently doing which could have landscape-scale benefits if we made changes in configuration and /or location and management? What changes are needed?
3. Are there additional SLM practices that could generate landscape-scale benefits that you would like to promote? Why? Are any of these located in or around farmers' fields?

## Activity 2

Ask one representative from each group to report the results of the group work. Record these best practices for discussion.

Links to two example group work results are provided at [http://ecoagriculture.org/publication\\_details.php?publicationID=625](http://ecoagriculture.org/publication_details.php?publicationID=625) and [http://ecoagriculture.org/publication\\_details.php?publicationID=626](http://ecoagriculture.org/publication_details.php?publicationID=626).

## Activity 3

Facilitate a discussion around the presented practices. Look for agreement among participants about the practices that they consider to have landscape-scale benefits. Verify that most or all of the SLM practices that are identified will lead to landscape-scale benefits over time.

### Trainer's Notes

The focus of this lesson is the output of the group work, so spend time ensuring the groups understand their tasks. The output examples provide two different ways to organize responses.

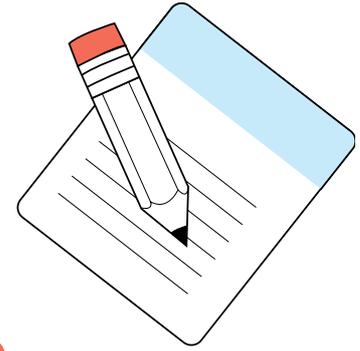


### Summary of Main Learning Points

1. People are adopting a variety of SLM practices that will lead to ecosystem conservation, agricultural production and livelihood benefits at the landscape-scale. Furthermore, their efforts to coordinate the planning and implementation of SLM practice will lead to institutional strengthening that can help to realize the full benefits of SLM practice and sustain them over time.
2. The realization of landscape-scale benefits from SLM practices depends on how the practices are planned and designed in the landscape, including their location, configuration and management. This planning and design depends on genuine local participation and thoughtful coordination.
3. Similarly, systems for monitoring and evaluating landscape-scale SLM require the engagement and coordination of local land users and other stakeholders who care about what happens to their investments in SLM.

## Exercise 1

# Group Work on Verifying Good Common Landscape Scale Practices



In small groups, discuss verifying good common landscape scale practices. Use the information from the previous lesson to help identify SLM practices and their ways of configuring, locating and managing them that generate landscape-scale benefits.

### Guiding Questions

1. What SLM practices are we currently doing that already demonstrate landscape-scale benefits?
2. What SLM practices are we currently doing that could have landscape-scale benefits if we made changes in configuration and /or location and management? What changes are needed?
3. Are there additional SLM practices that could generate landscape-scale benefits that you would like to promote? Why? Are any of these located in or around farmers' fields?

## Module 2

# What Does the Landscape Perspective Offer to Monitoring & Evaluation for Sustainable Land Management?

### Overview

*This module builds on the introduction to landscape approaches made in Module 1.1. It introduces the landscape approach as a helpful perspective for spanning different jurisdictions and stakeholders for sustainable land management (SLM). It also introduces the key elements of a landscapes approach, the adaptive collaborative management cycle and the role of monitoring & evaluation (M&E) in supporting integrated landscape management.*

### Time

1 hour

### Lessons

**Lesson 1: Foundations for a Landscapes Approach (30 minutes)**

**Lesson 2: Landscape Planning and Management Cycle (30 minutes)**

# Lesson 1 • Foundations for a Landscapes Approach

## Learning Objectives

Illustrate the foundational concepts of a landscapes approach.



## Preparation

- ✓ The week before the workshop, read the policy brief by Scherr et al. (2013) listed in the readings for this lesson and look over this lesson's handout on Key Concepts for Understanding an Integrated Landscape Approach. Pay particular attention to the five elements of a landscape approach listed at the end of the handout. Based on the readings and the description in Activity 1 of this Lesson, prepare a presentation for the first activity.
- ✓ Before the workshop, also consider a case study or a landscape initiative that might demonstrate the five elements of a landscape approach. Adapt the experiences described in the case study to draft a story that will highlight the five elements in the context of a particular landscape initiative to use for Activity 2. If no relevant cases are available, invent a fictional story about a landscape initiative taking place in a context that would be familiar to participants that highlights the five elements of the landscape approach.
- ✓ The day of the lesson, write the five common elements of a landscape approach on a flip chart for Activity 1. Prepare the projector and screen for a plenary presentation.

## Procedure

- **Activity 1:** Introduce the five common elements of a landscape approach. (10 minutes)
- **Activity 2:** Present story and facilitate plenary discussion on the five common elements a landscape approach. (20 minutes)

## Total Time

30 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Key Concepts for Understanding a Landscape Approach

## Readings

Scherr, S. J, S. Shames and R. Friedman. 2013. Defining Integrated Landscape Management for Policy Makers. Ecoagriculture Policy Focus. No. 10. Washington, DC: EcoAgriculture Partners.

<http://ecoagriculture.org/publication/defining-integrated-landscape-management-for-policy-makers/>

Sayer, J, S Maginnis, L Buck, S Scherr, Jeff Sayer, and Stewart Maginnis. 2008. Learning from Landscapes. Arbor Vitae Special. EcoAgriculture Partners and International Union for Conservation of Nature. <http://ecoagriculture.org/publication/defining-integrated-landscape-management-for-policy-makers/>



## Activity 1

Begin the presentation by reminding participants of the diverse communities of practice that often use landscape approaches (e.g. watershed management, ecosystem-based management, forest restoration projects, landcare, etc.), some of which were discussed in Unit 1, Module 1. A fuller list of the communities of practice using landscape approaches can be found in the Scherr et al. (2013) reading for this lesson. Then introduce the five common elements that these diverse landscape approaches have in common.

## Unit 2 - Module 2 - Lesson 1

1. Shared or agreed management objectives encompass multiple benefits (the full range of goods and services needed) from the landscape.
2. Field, farm and forest practices are designed to contribute to multiple objectives, including human well being, food and fiber production, climate change mitigation and conservation of biodiversity and ecosystem services.
3. Ecological, social and economic interactions among different parts of the landscape are managed to realize positive synergies among interests and actors or to mitigate negative trade-offs.
4. Collaborative, community-engaged processes for dialogue, planning, negotiating and monitoring decisions are in place.
5. Markets and public policies are shaped to achieve the diverse set of landscape objectives and institutional requirements.

Remind participants of the handout which has the definition of a landscape approach and lists the five common elements.

*An example presentation on the foundations for a landscape approach is available at [http://ecoagriculture.org/publication\\_details.php?publicationID=654](http://ecoagriculture.org/publication_details.php?publicationID=654).*

## Activity 2

Explain to participants that you will read them a story or case study on one landscape's experience implementing a landscape approach. Ask them to listen carefully for examples of how the case demonstrates the five elements of a landscape approach. Point out that they can consult the flip chart or the handout to remind themselves of the five elements.

After the story is over, beginning with the first element listed on the flip chart, ask participants to identify the elements that they heard in the story.

*An example case study for this activity can be found at [http://ecoagriculture.org/publication\\_details.php?publicationID=627](http://ecoagriculture.org/publication_details.php?publicationID=627).*

### Trainer's Notes

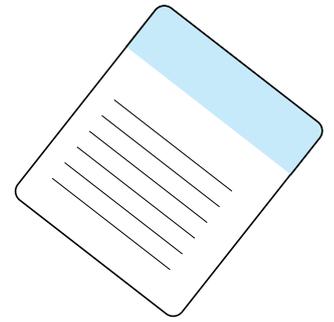
Depending on the diversity of participants, it may be desirable to use a story for Activity 2 that is more or less similar to the experience of participants. Several case studies that could be used or adapted for this activity can be found in the Landscape Measures Resource Center, at [http://landscapemeasures.info/?page\\_id=14](http://landscapemeasures.info/?page_id=14).



### Summary of Main Learning Points

1. Five elements are common to landscape approaches, listed in Activity 1.
2. Landscape approaches take into consideration multiple functions and scales as described in the handout.

# Handout 1



## Key Concepts for Understanding a Landscape Approach

### What is a landscape?

A 'landscape' is a socio-ecological system that consists of a mosaic of natural and/or human-modified ecosystems, with a characteristic configuration of topography, vegetation, land use and settlements that is influenced by the ecological, historical, economic and cultural processes and activities of the area. The mix of land cover and use types (landscape composition) usually includes agricultural lands, native vegetation and human dwellings, villages and/or urban areas. The spatial arrangement of different land uses and cover types (landscape structure) and the norms and modalities of its governance contribute to the character of a landscape.

Depending on the management objectives of the stakeholders, landscape boundaries may be discrete or fuzzy. They may correspond to watershed boundaries, distinct land features and/or jurisdictional boundaries, or cross-cut such demarcations. Because of this broad range of factors, a landscape may encompass areas from hundreds to tens of thousands of square kilometers.

### What is integrated landscape management?

Integrated landscape management refers to long-term collaboration among different groups of land managers and stakeholders to achieve the multiple objectives required from the landscape. These typically include agricultural production and provision of ecosystem services (such as water flow regulation and quality, pollination, climate change mitigation and adaptation, cultural values, etc.); protection of biodiversity, landscape beauty, identity and recreation value; and local livelihoods, human health and well-being. Stakeholders seek to solve shared problems or capitalize on new opportunities that reduce trade-offs and strengthen synergies among different landscape objectives. Because landscapes are coupled socio-ecological systems, complexity and change are inherent properties that require management.

### What are the five common elements of integrated landscape management?

1. Shared or agreed management objectives encompass multiple benefits (the full range of goods and services needed) from the landscape.
2. Field, farm and forest practices are designed to contribute to multiple objectives, including human well-being, food and fiber production, climate change mitigation and conservation of biodiversity and ecosystem services.
3. Ecological, social and economic interactions among different parts of the landscape are managed to realize positive synergies among interests and actors or to mitigate negative trade-offs.
4. Collaborative, community-engaged processes for dialogue, planning, negotiating and monitoring decisions are in place.
5. Markets and public policies are shaped to achieve the diverse set of landscape objectives and institutional requirements.

# Lesson 2 • Adaptive Collaborative Management Cycle

## Learning Objectives

Be able to explain the components of an adaptive collaborative management cycle for integrated landscape management.



## Preparation

- ✓ Prepare a presentation that introduces the adaptive collaborative management cycle.

## Procedure

- **Activity 1:** Introduce the adaptive collaborative management cycle. (15 minutes)
- **Activity 2:** Facilitate small group discussions on how the M&E phase of the adaptive collaborative management cycle is linked to other phases in the cycle. (15 minutes)

## Total Time

30 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Adaptive Collaborative Management Cycle

## Readings

Hart, Abigail K., Louise E. Buck, Robin R. Marsh, Jeffrey C. Milder, and Sara J. Scherr. 2010. *Ecoagriculture and the Collaborative Management of Rural Landscapes*. Washington, DC. <http://ecoagriculture.org/publication/ecoagriculture-and-the-collaborative-management-of-rural-landscapes/>



## Activity 1

Introduce the adaptive collaborative management cycle for integrated landscape management. Encourage participants to consult their handouts throughout the workshop to revisit the cycle. Discuss the types of activities that occur in each phase of the cycle, highlighting that M&E activities typically occur in the phases of understanding and evaluating. Explain the role of M&E facilitators in the adaptive collaborative management cycle (e.g. to integrate disparate knowledge systems, data needs and ways of communicating; as a tool for thinking about scaling up SLM to ensure landscape scale benefits, etc.).

*An example presentation for this activity can be found at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/EcoAgriculture-and-collaborative-management-of-rural-landscapes-PPT.pdf>.*

## Activity 2

Ask participants to form small groups of 4-6 individuals. Leave the slide with the adaptive collaborative management cycle displayed on the projector screen and remind participants again of the handout for the lesson. Ask the groups to discuss the following questions:

- How is M&E linked to other phases of the adaptive collaborative management cycle?
- How does a robust M&E system strengthen the phases of the cycle?

### Trainer's Notes

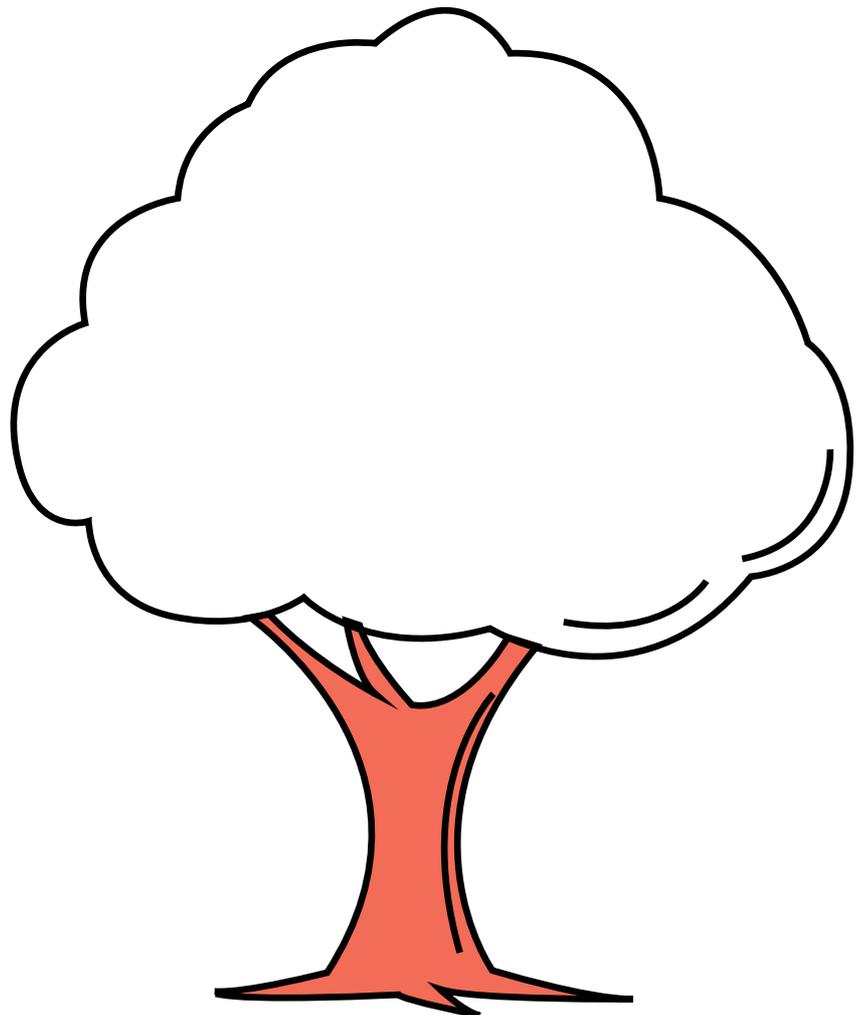
When introducing the diverse communities of practice that fall under the umbrella of landscape approaches in Activity 1, be sure to mention several that will be familiar to participants so that they can begin to envision a landscape approach in their own context.

In addition to the adaptive collaborative management cycle presented in this lesson, there are other valid versions of the cycle as well, used by different organizations and projects. In the presentation for Activity 2, feel free to adapt the descriptions in the phases of the cycle so that the terms will resonate with participants.

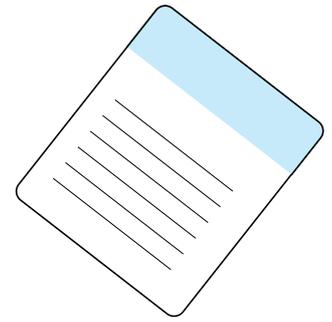


### Summary of Main Learning Points

1. The phases of the adaptive collaborative management (ACM) cycle for integrated landscape management can aid in understanding integrated landscape management as a process and how the process works.
2. M&E is linked to each of the phases in the ACM cycle.
3. A robust M&E system strengthens all of the phases of the cycle.



# Handout 1



# The Adaptive Collaborative Management Cycle

## Understand the Landscape

This phase is about identifying the different types of land use and land users in the landscape, as well as other relevant stakeholder groups. This phase focusses on assessing the state of the landscape and identifying areas where change is needed to address perceived needs and challenges. The assessment can provide useful baseline information for a landscape monitoring & evaluation system.

## Negotiate Desired Outcomes in the Landscape

In this phase, stakeholders negotiate their ideals and ideas for changing the landscape until they agree on a common vision that will guide their decisions about what actions they could take to change their landscape. This phase often involves developing alternative scenarios for the future and then negotiating the pursuit of one vision that all stakeholders can agree on pursuing through integrated landscape management.

## Plan Landscape Changes

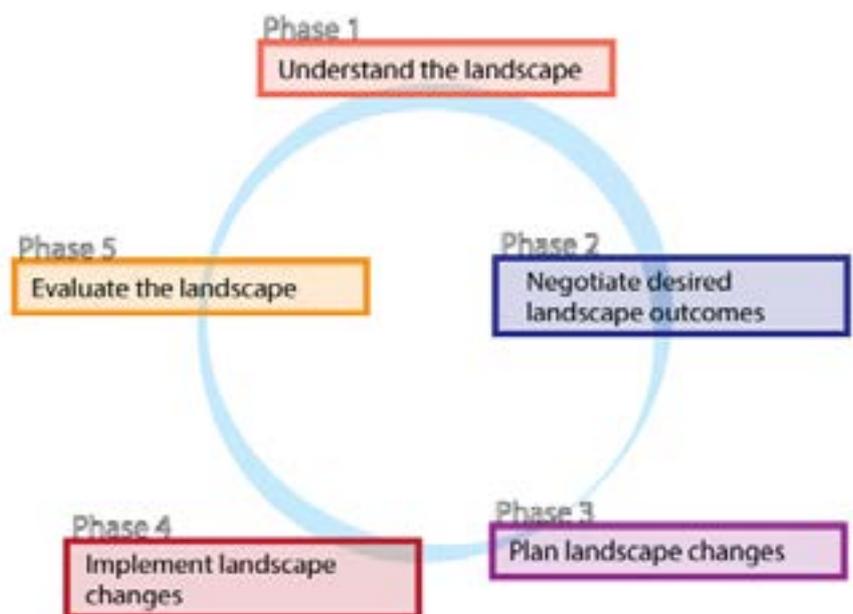
This phase involves identifying and designing changes to make at particular sites in the landscape that will help stakeholders achieve their vision for the landscape. It may be necessary for stakeholders to bring in technical expertise from outside the landscape to help them locate and design changes that will allow them to achieve their various goals and realize their common vision.

## Implement Landscape Changes

In this phase, stakeholders begin implementing the planned changes agreed upon in earlier stages. It is important in this phase to document baseline conditions in the sites where the interventions will be implemented, so they can be monitored against the baseline as they develop and expand.

## Evaluate the Landscape

As stakeholders continue to monitor the outcomes of the changes made in the previous phase, they can evaluate the effectiveness of their actions for achieving their goals. This phase in turn leads to improving stakeholders' understanding of their landscape and may lead them to adapt their goals to meet changing realities in their landscape.



# Module 3

## How Are We Monitoring Sustainable Land Management Practices?

### Overview

*This module examines how participants' monitoring & evaluation (M&E) systems are working in practice. How are goals and criteria being established? How are indicators being chosen and measured? How are stakeholders being engaged in the process? The lessons in the module help participants think about ways that their M&E systems for sustainable land management (SLM) are similar and different to help them compare experiences and learn from one another to improve their practices. The module also introduces key components of a landscape M&E system and invites participants to reflect on ways that their M&E systems align with the Landscape Measures Approach.*

### Time

**1 hour 45 minutes**

### Lessons

**Lesson 1: Effective M&E Practices for SLM from Country or Project Experiences (1 hour)**

**Lesson 2: Processes for Engaging Partners in an M&E System (45 minutes)**

# Lesson 1 • Effective M&E Practices for SLM from Country or Project

## Learning Objectives

Illustrate diverse and common M&E practices and characteristics across countries and regions.

Compare similar and diverse M&E characteristics and practices across countries and regions.



## Preparation

- ✓ Well before the training course, assign participants to describe the types of M&E practices they are using in their work. Send responses to the training team. A week before the session, review the assignments, paying special attention to the indicators and means of measure that participants are using. Invite three participants working with diverse indicators and innovative means of measuring to prepare presentations on these M&E practices.
- ✓ The day of the lesson, set up the projector and screen for a plenary presentation and place the flipchart at the front of the room.

## Procedure

- **Activity 1:** Participants present on effective M&E practices. (30 minutes)
- **Activity 2:** Oversee small group discussions on M&E practices used in participant projects. (15 minutes)
- **Activity 3:** Facilitate plenary synthesis of small group discussions. (15 minutes)

## Total Time

1 hour

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart and markers

## Activity 1

Introduce the three participant presenters and explain that they will be describing some of the most effective indicators and means of measuring they use in their projects. Remind presenters that they will have 7-8 minutes to present and 2-3 minutes for questions following their presentations.

## Activity 2

Ask participants to get into small groups of 3-5 people. Write the first question from the pre-workshop assignment on the flipchart: What has been your most successful experience with managing SLM projects and programs? Invite participants to pull out their completed pre-workshop assignments and discuss their responses within their small groups, highlighting effective M&E practices that they used.

## Activity 3

Invite participants to return to a large group format for a plenary discussion. Use the following question to guide your discussion: What are the characteristics of the M&E practices you considered successful?

*An example output from a sharing of interesting M&E innovations for measuring and capturing data can be found at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Sharing-interesting-ME-innovations-for-measuring-and-capturing.pdf>.*

### Trainer's Notes

This is the first lesson in which participants are asked to consult their own pre-workshop assignments. Make sure that each participant brings his or her own completed assignment to the lesson or distribute a copy of each person's completed assignment to them in their folder at the time of registration.

In Activity 3, pay attention to the characteristics that participants mention and note if they align with any of the four components of the Landscape Measures Approach introduced in Module 1.1 (e.g. goals, criteria, indicators and means of measure). If the characteristics they mention do not align with these components, note what they are and why they are important and valuable to participants. This information will be helpful for tying the discussion in this lesson to the activities in Lesson 2.



### Summary of Main Learning Points

1. Participants are using diverse and innovative M&E practices in their projects, and their M&E systems can benefit from learning about one another's practices.
2. Similarities and differences in M&E practices within and across participant experiences can be usefully examined through the components of the Landscape Measures Approach; setting desired outcome goals for the landscape, agreeing on landscape performance criteria, choosing which indicators to measure to assess the effects of SLM interventions on landscape performance, developing optimal methods for measuring the indicators and engaging stakeholders at each stage.

## Lesson 2 • Processes for Engaging Partners in an M&E System

### Learning Objectives

Understand when and how it is possible to engage multiple partners in an M&E system.



Explore how participants' current M&E systems engage partners in the four basic components of the Landscape Measures Approach and where there is room for improvement.

### Preparation

- ✓ Review the four components of the Landscape Measures Approach and consider some of the ways it is possible to engage partners in setting goals, developing criteria and selecting indicators and means of measure. Also review the benefits of engaging multiple partners in M&E, presented in [Unit 1, Module 2](#). Consider how processes like facilitation, joint learning, linking knowledge systems and others can help engage partners. Prepare a brief introductory presentation for Activity 1 that highlights the benefits of engaging partners and some processes that participants might consider including in Activity 2.
- ✓ Prepare four sheets of flip chart paper to hang on the wall for Activity 3. Write "Goals," "Criteria," "Indicators" and "Means of Measure" on the respective sheets. Hang them at the front of the room for taking notes during the popcorn-style synthesis time.
- ✓ **Procedure**
  - **Activity 1:** Introduce processes for engaging partners in M&E. (10 minutes)
  - **Activity 2:** Oversee partner exercise and M&E self-assessment. (20 minutes)
  - **Activity 3:** Facilitate popcorn-style large group synthesis. (15 minutes)

### Total Time

45 minutes

### Materials

- ✓ Flipchart
- ✓ Markers
- ✓ Bean bag, ball or something to toss

### Handouts & Exercises

- **Handout 1:** M&E Self Assessment

## Activity 1

Give a brief introduction that links back to the four components of the Landscape Measures Approach introduced in Unit 1, Module 1: goals, criteria, indicators and means of measure. Emphasize that there are opportunities to engage partners in each of these components. Remind participants of some of the benefits of engaging partners described in Unit 1, Module 2.

- It allows each stakeholder to bring unique knowledge of the landscape.
- It lends legitimacy and credibility to the process.
- It generates innovation (new ideas and methods from collective problem solving).
- It promotes a balance of emphasis and data on production, conservation, livelihoods and institutional impacts of SLM interventions.
- It creates metrics for a unifying language in the landscape to help foster joint learning and concerted action.
- It helps build learning networks that improve the quality of information.
- It enhances transparency and objectivity in SLM decision-making platforms and improves negotiation around resource use and management.
- It provides a framework through which complementary goals can be achieved.

Then, describe a few processes for engaging partners, such as:

- Facilitation,
- Joint learning and
- Linking knowledge systems (e.g. local and expert knowledge).

Mention that there are many other similar and innovative processes for engaging partners that participants may already be using or may want to introduce into their M&E systems to gain some of the benefits listed above.

## Activity 2

Ask participants to refer to the M&E Self-Assessment handout for this lesson. Invite them to form a pair with another participant sitting near them. Ask them to answer the following questions, first individually by making notes on their handouts, then discussing their responses with their partners.

1. How are you currently engaging partners in each of the four components? Give examples of processes that you are using to engage partners.
2. Considering your responses to the first question, where might your M&E system be weak at engaging partners? Where could you include more processes and activities for engaging partners to strengthen your M&E system? What specific processes could you use to do so?

Remind them that they will have ten minutes to note their individual responses and ten minutes to share with their partners.

## Activity 3

Explain that each participant has had a chance already to process their responses in depth, but that it will benefit the large group to hear ideas for engaging partners in each of the four components. Explain that the purpose of popcorn-style sharing is not to go into detail but to quickly generate a list of the processes for engaging partners. Ask participants to use a few words or a short phrase to answer the following question:

What is one important process that you could adopt to strengthen partner engagement in your M&E system, and which component of the system does it correspond to?

Give a bean bag, ball or other soft object to one participant. Explain that he or she will start off the exercise by answering the question and then toss the object to the next respondent

until each participant has had a chance to respond. Note participant responses on the four sheets of flip chart paper you placed at the front of the room before the lesson.

### Trainer's Notes

This lesson is important for helping participants begin to make strong linkages between a landscapes approach and their own M&E systems. Take care to take good notes of the session to provide feedback to participants in the large group discussions.

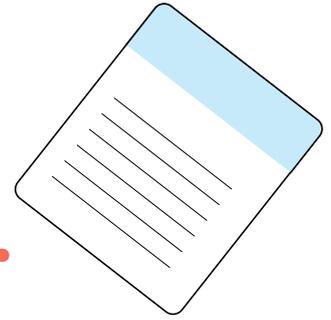


### Summary of Main Learning Points

1. This lesson is important for helping participants begin to make strong linkages between a landscapes approach and their own M&E systems. Take care to take good notes of the session to provide feedback to participants in the large group discussions.

# Handout 1

## M&E Self Assessment



<i>Goals</i>	<i>Criteria</i>	<i>Indicators</i>	<i>Means of Measure</i>

Processes for Engaging Partners

## Unit 3

# Landscape Leadership for Sustainable Land Management .....

# Module 1

## A Leadership Model for Sustainable Land Management in Africa

### Overview

*This module is designed to present African leadership values in relation to sustainable land management (SLM). The module also helps participants understand how distributed leadership in SLM platforms that recognize multiple partners can improve the management of monitoring & evaluation (M&E) systems. The concepts and skills in this module are important for all SLM team members, including M&E specialists. Focusing on leadership skills can aid SLM M&E specialists in engaging multiple partners in the collection, verification, evaluation and communication of data using collaborative approaches. The module is designed to advance leadership skills for all SLM practitioners and provides examples of how to use the materials in ways most relevant to M&E specialists.*

### Time

**1 hour 30 minutes**

### Lessons

**Lesson 1: Leadership Values in Africa (45 minutes)**

**Lesson 2: Distributed Leadership in SLM Platforms (45 minutes)**

# Lesson 1 • Leadership Values in Africa

## Learning Objectives

Evaluate traditional leadership values in African culture and the ways they can support a leadership model for SLM programs with multiple partners.

Judge how well leadership capacities are performing in the current SLM project or country programs.

## Preparation

- ✓ Review the eight African leadership values and associated proverbs in the exercise.
- ✓ Adapt proverbs and/or values as needed to incorporate relevant examples from your country or for your target audience.

## Procedure

- **Activity 1:** Present African leadership concepts and key values. (30 minutes)
- **Activity 2:** Form pairs to complete the proverb exercise on leadership. (15 minutes)

## Total Time

45 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

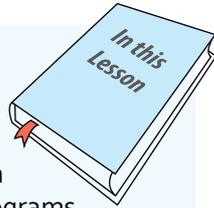
## Handouts & Exercises

- **Exercise 1:** Using African Proverbs to Explore Distributed Leadership in SLM Platforms

## Readings

Malunga, Chiku, and Charles Banda. 2013. Understanding Organizational Sustainability through African Proverbs : Insights for Leaders and Facilitators. Practical Action Publishing.

<http://eldis.org/fulltext/proverbs.pdf>



April, Kurt, and Neville Ephraim. 2006.

"Implementing African Leadership: An Empirical Basis to Move beyond Theory." In 1st International Conference on Values--Based Leadership in Stellenbosch University, South Africa.

<http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Implementing-African-Leadership.pdf>

Malunga, Chiku. 2006. "Learning Leadership Development from African Cultures: A Personal Perspective." INTRAC PraxisNote 25: 1–13.

<http://www.intrac.org/resources.php?action=resource&id=252>



## Activity 1

### Ubuntu

Begin the session by writing "Ubuntu" on a flipchart or another regionally relevant word that expresses unity or leadership. Ask the audience, "What does Ubuntu mean to you?" or "How do you interpret Ubuntu?" Take several answers and put notes on the flipchart. After adding a few interpretations, write out the following description: "I am because we are; I can only be a person through others." Then ask, "What does this statement mean to you?" Take several more responses and then move on, saying, "Ubuntu embodies traditional views of leadership and decision-making processes in Africa. How are traditional African leadership values similar or different from modern leaders? We will use the remainder of this session to explore some of these values of traditional African leadership, each of which can be understood through African proverbs."

### Respect for the Dignity of Others

Write the following proverb on a new flipchart, "A man who pays respect to the great paves the way for his own greatness." Then ask, "What does this proverb mean?" Take responses and then write the key value: Respect for the Dignity of Others.

### Unit 3 - Module 1 - Lesson 1

If desired, share an additional proverb, "Neighbors who respect each other, earn respect from their enemies." Discuss how in indigenous African communities, relationships are given very high priority and characterized by respect.

Ask, "Is this a value that can be applied to modern leadership? How?" and take several responses before moving to the next leadership value.

Repeat the process for the other key values, starting with the proverbs provided.

#### Group Solidarity

- "Kinship is like a bone; it does not decay."
- "An injury to one is an injury to all."
- Stresses the importance of people and relationships over material possessions.

#### Teamwork

- "When cobwebs unite, they can tie up a lion."
- "None of us is greater than all of us."
- "If you want to go fast, go alone; if you want to go far, go together."
- "United, the ants can take a dead elephant to their cave."

#### Service to Others in the Spirit of Harmony

- "The bird that remembers its flockmates never missed the way."
- "You will be pleasantly served by multitudes when you generously serve few."

#### Interdependence

- "One finger cannot pick up a grain."
- "One piece of firewood cannot keep fire for long."
- Each one of us needs all of us.
- You can achieve more through co-operation.

#### Collective Responsibility for the Organization

- "It takes a village to raise a child."
- Stresses sharing and collective ownership of opportunities, responsibilities and challenges.

- When a visitor came to the community, they were a visitor for the whole community and not only the household.
- Your friend's child is your own child.

#### Patriotism

- "A river that forgets its source will soon dry up."
- The kingdom came first in all decisions, before any personal interest.
- Discussants should engage with tensions between traditional meaning and modern relationship to climate change.

#### Reconciliation

- "Those who refuse to forgive break a bridge on which they must pass."
- "When two elephants fight, it is the grass that gets trampled."
- Reconciliation is a goal of conflict management and resolution. Principles of conflict management emphasize the values of trust, fairness and reconciliation. This proverb also deals with the importance of relationships.

If there is additional time, use the questions below to guide a discussion.

- Do these concepts resonate with the leadership values you are familiar with?
- Do you see these values in the leadership of your SLM projects?

## Activity 2

Distribute the exercise: Using African Proverbs to Explore Distributed Leadership in SLM Platforms. Go over the exercise with participants and ask them to form pairs from the same country (if at a regional workshop), from the same project (if at a country level workshop) or another configuration of partners that makes sense.

Before the group work begins, ask if there are any questions and answer them. Then allow groups to proceed while monitoring progress and answering additional questions as needed.

### Trainer's Notes

The exercise is intended mainly as a reflection tool to prepare for the next lesson. It is not necessary to debrief as a group on participants' individual scores from the exercise. However, as a modification, one or two participants may volunteer to share their reflections on each leadership value after the group returns to plenary. Another modification may be to do Activity 2 first (i.e. the exercise) and then go through each value as a large group and reflect on the questions about relevance to modern leadership in SLM projects.

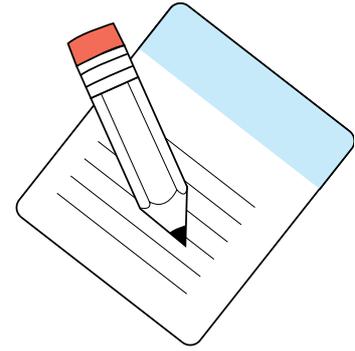


### Summary of Main Learning Points

1. African proverbs can provide a useful framework for exploring leadership values relevant to SLM projects. Give an example from the inputs of the group discussion.
2. Ubuntu can be a useful concept for leadership in SLM projects because it embodies traditional views of leadership and decision-making processes in Africa. Traditional decision-making processes rely on compromise, persuasion, discussion and accommodation, listening and freedom of speech. These qualities support a leadership culture that recognizes and accommodates different types of leaders located in different institutions within an SLM platform that need to work together for robust M&E systems to function well.



## Exercise 1



# Using African Proverbs to Explore Distributed Leadership in SLM Platforms

Ubuntu, "I am because we are; I can only be a person through others," embodies traditional views of leadership and decision-making processes in Africa.<sup>1</sup> Traditional decision-making processes rely on compromise, persuasion, discussion and accommodation, listening and freedom of speech. These qualities combine with eight key values to create a leadership culture that may support distributed leadership in SLM platforms. Eight key values of traditional African leadership are:

- Respect for the Dignity of Others,
- Group Solidarity,
- Teamwork,
- Service to Others in the Spirit of Harmony,
- Interdependence,
- Collective Responsibility for the Organization,
- Patriotism, and
- Reconciliation.

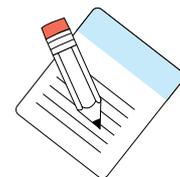
## Reflection: Building Upon Traditional Leadership Values for Distributed Leadership in SLM Programs

In groups of two, reflect on each leadership value within your SLM project or program and how this value may support distributed leadership in SLM platforms. Utilize the proverbs to assist in understanding each value and its role within your SLM project. Discuss how each value is represented in leadership practice within your current SLM project/program and rate it on a scale of 1-5. The rating scale is provided here.

1. Very weak representation within my SLM project
2. Weak representation within my SLM project
3. Average representation within my SLM project
4. Strong representation within my SLM project
5. Very strong representation within my SLM project

<sup>1</sup> Malunga, Chiku, and Charles Banda. 2013. *Understanding Organizational Sustainability through African Proverbs : Insights for Leaders and Facilitators*. Practical Action Publishing.

## Using African Proverbs to Explore Distributed Leadership in SLM Platforms



<i>Leadership Value</i>	<i>Reflection Proverb</i>	<i>Rating</i>	<i>Explanation</i>
Respect for the Dignity of Others	"A man who pays respect to the great paves the way for his own greatness."		
Group Solidarity	"Kinship is like a bone; it does not decay."		
Teamwork	"When cobwebs unite, they can tie up a lion."		
Service to Others in the Spirit of Harmony	"The bird that remembers its flockmates never missed the way."		
Interdependence	"One finger cannot pick up a grain."		
Collective Responsibility for the Organization	"It takes a village to raise a child."		
Patriotism	"A river that forgets its source will soon dry up."		
Reconciliation	"Those who refuse to forgive, break a bridge on which they must pass."		

# Lesson 2 • Distributed Leadership in SLM Platforms

## Learning Objectives

Demonstrate a workable leadership pattern for SLM platforms with multiple partners.



## Preparation

- ✓ Review readings to ensure understanding of distributed leadership and key concepts.
- ✓ Prepare some examples of distributed leadership in SLM projects and programs that are familiar to you.

## Procedure

This lesson is based upon the work on distributive leadership in learning and teaching in Australian Universities (see reading).

- **Activity 1:** Facilitate the plenary session by introducing distributed leadership patterns for SLM. (15 minutes)
- **Activity 2:** Introduce and oversee group work on the exercise for mapping distributed leadership in SLM platforms with multiple partners. (30 minutes)

## Total Time

45 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Distributed Leadership in Sustainable Land Management Platforms

- **Exercise 1:** Mapping Distributed Leadership in SLM Projects with Multiple Partners

## Readings

RMIT University. 2014. "Distributed Leadership." Accessed April 14.

<http://emedia.rmit.edu.au/distributedleadership/>



## Activity 1

Open the session by linking traditional African leadership values to the concept of distributed leadership. Tell participants that distributed leadership is an approach for supporting SLM leaders working with multiple partners in sustainable land management platforms. Remind participants that in the previous lesson, they completed a short exercise based on African proverbs to explore different leadership values and how well they are represented in their programs and projects. Explain that many such values, including teamwork, interdependence and collective responsibility, support leadership qualities important for the success of a distributed leadership approach for SLM partnership platforms.

Next, explain the basic components of distributed leadership for SLM. Distributed leadership for SLM is based upon the premise that there are multiple networks of individuals with expertise and knowledge within the SLM platform that can contribute positively to creating joint outcomes from coordinated investments in SLM. For instance, there may be individuals with soil and water conservation expertise, financial management, M&E, integrated watershed management, landscape management, management of on farm biodiversity, farming practice innovations that conserve water and others. Distributed leadership therefore requires broad-based collaborative engagement processes to bring together individuals with varying expertise and knowledge.

Distributed leadership approaches recognize formal positional leadership and managerial authority and are based on trust and respect for others' knowledge and

expertise. Therefore, distributed leadership is an approach that invests in and places emphasis on the “development of collaborative relationships that encourage, nurture and develop leadership capabilities in many people” (RMIT University, 2014). It can be a means to support the strengthening of institutional leadership capacity. Highlight how distributed leadership can also help fulfill the overall goals of the SLM platform to create sustained dialogue on the sustainability of productive land, while managing risks from climate and land use change. List a few examples of how, such as by aligning fragmented investments, information and institutions through harmonized agendas and investments, multi-disciplinary work and mutual accountability at different scales.

Put up the following definition of distributed leadership: “It is an approach in which collaborative work processes are undertaken between individuals who trust and respect each other’s contributions. It occurs as a result of an open culture within and across institutions...It happens most effectively when people at all levels engage in action, accepting leadership in their particular areas of expertise.”

Provide one or two examples of a distributed leadership approach from an SLM project that you are familiar with. Typically, TerrAfrica partners align themselves through an annual joint work program that includes activities led by African ministries of agriculture, environment, finance, etc.; international and regional organizations; UNCCD bodies; OECD countries; NGOs; and so on. The work program typically focuses on country level activities that improve investment programming and implementation, while reinforcing country leadership on the land management agenda.

Stop and take questions from participants on the concept of distributed leadership and ask if one or two other participants can give examples of distributed leadership in their SLM programs or projects. Possible discussion or buzz group questions include:

- How does this resonate with your concept of leadership in SLM platforms in Africa?
- Is leadership in your country/platform often concentrated in one person? Is it hierarchical? Can you find examples of multiple leaders?

Next, aim to convey how distributed leadership may be facilitated by an SLM or M&E facilitator in an SLM platform through four dimensions: enacting, engaging, enabling and encouraging (the four E’s).

Distributed leadership assumes there are cycles of planning, acting and reflecting among various leaders, such as the adaptive collaborative management cycle for landscape planning that was introduced in Unit 2, Module 2, Lesson 2. Put up the adaptive collaborative management cycle again

and remind participants how the cycle constitutes planning, action and reflection in collaborative processes.

Explain that as part of this cycle, and recognizing the diverse types of actors in typical SLM platforms, processes should engage different types of leaders. Emphasize that expertise is not always derived from formal position or education. Therefore, we want to recognize and engage leaders with different types of knowledge in the SLM platform. Give some examples such as: formal and informal leaders, subject experts or resource persons (including farmers, etc.). For a distributed leadership approach in SLM platforms, you will also want to make sure that you are engaging a diverse set of actors. List some different ways to bring a diversity of actors:

- Functions (e.g. M&E, administrative management, technical areas),
- Disciplines (e.g. water, soil sciences),
- Groups and organizations (e.g. public, private, civic), and
- Levels (e.g. local, regional, national).

To support a pattern of distributed leadership in SLM platforms that 1) recognizes leaders for their different areas of knowledge and 2) trusts and respects the application of their knowledge, it will be important to create an enabling environment in the SLM platform for:

- An open culture of trust, respect and willingness to change,
- The adoption of new ways of working, and
- Investment in stakeholder engagement that builds positive collaborative relationships among partners, and especially between technical experts, policy makers and community leaders, whom all may have their own preferred modes of communication and systems of knowledge they respect.

Some possible ways that the SLM/M&E facilitator can encourage this enabling environment and opportunities for engaging in planning, acting and reflecting in the adaptive collaborative management cycle include creating spaces and mechanism for:

- Professional development,
- Communities of practice,
- Collective decision making,
- Mentoring,
- Recognition & reward for contribution,
- Facilitation of networks,
- Networking, and
- Space, time and finance for collaboration.

Remind participants that distributed leadership in SLM platforms can also help create forums for institutional capacity building that can improve SLM outcomes. Distributed leadership can encourage the strengthening of institutional leadership capacity and help fulfill the overall goals of the SLM platform to create sustained dialogue on the sustainability of productive land, while managing risks from climate and land use change. Fragmented investments, information and institutions must be aligned through harmonized agendas and investments, multi-disciplinary work and mutual accountability. Go through the following types of capacity building activities with participants.

Institutional capacity building supports needed processes and mechanisms for distributed leadership and can be encouraged in the following ways.

- Collaborative problem solving
  - » Finding complimentary goals
  - » Developing collective action
  - » Being open to others' perspectives
- Cross-sectoral priority-setting
  - » Understanding the values of other groups
  - » Exploring preferred forms of knowledge
  - » Knowing how to speak to leaders from different sectors
- Delegated roles in institutional arrangements
  - » Recognizing the roles of others
  - » Avoiding duplication of work
  - » Optimizing function and matching people's roles with functions (their comparative advantage)
- Partnership building
  - » Highlighting the multiple institutions with SLM mandates and the need to work across those institutions
  - » Working together, keeping in mind the proverb: The sum is greater than its parts.

Give the participants the handout on Distributed Leadership Patterns for Sustainable Land Management Platforms.

## Activity 2

Prepare participants for Activity 2 by explaining that they will examine how distributed leadership works in their own SLM projects. They will also explore opportunities for facilitating the adaptive collaborative management cycle, creating an enabling environment of respect and trust and encouraging mechanisms that will support various leaders to contribute their skills and knowledge.

Ask participants to form groups of two with a partner from their SLM project or program. Distribute the exercise and go over the instructions and guiding questions with the participants. Before the group work begins, ask if there are any questions and answer them. Then allow groups to proceed while monitoring progress and answering additional questions as needed.

Guiding questions:

- Which organizations are charged with SLM implementation? Research? Extension?
- Are all relevant institutions engaged (including those with less formally recognized knowledge)?
- What are current modes for encouraging respect and trust among leaders with different functions and disciplines? At different levels?
- What are current mechanisms being used to encourage collaborative planning, action and reflection?
- What are some of the barriers to making distributed leadership in SLM platforms work well?

Briefly wrap-up by asking for presentations from a few of the group exercises and ask the plenary group to reflect on solutions to overcoming common barriers.

### Trainer's Notes

During Activity 2, you can arrange the groups in various ways based on the participants who are present. It may make sense to have all participants from the same SLM project work together. If there are participants from more than one SLM project/program they can exchange and share their initial outputs with a different group.

The group work can be made more specific to M&E and leadership by asking participants to focus on the roles of different institutions and leaders in the SLM platform on M&E. For instance, participants may discuss possible roles of various partners in M&E when there are multiple leaders in different institutions. Different individuals or institutions may take the lead in M&E processes of selection, measurement, analysis and interpretation.

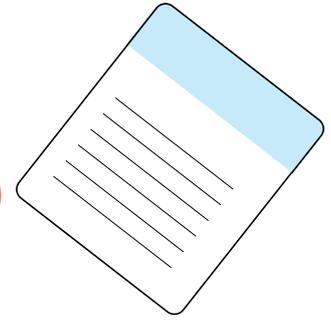


### Summary of Main Learning Points

1. Distributed leadership is an approach to leadership that builds upon traditional African leadership values of teamwork, interdependence and collective responsibility, among others.
2. Distributed leadership recognizes formal positional leadership and managerial authority and also recognizes all types of leaders based on their knowledge, expertise and contributions to the SLM platform.
3. Distributed leadership can be facilitated in SLM platforms through the four dimensions of enacting, engaging, enabling and encouraging.

# Handout 1

# Distributed Leadership in Sustainable Land Management Platforms



Distributed leadership - "an approach in which collaborative work processes are undertaken between individuals who trust and respect each other's contributions. It occurs as a result of an open culture within and across institutions... It happens most effectively when people at all levels engage in action, accepting leadership in their particular areas of expertise."<sup>1</sup>

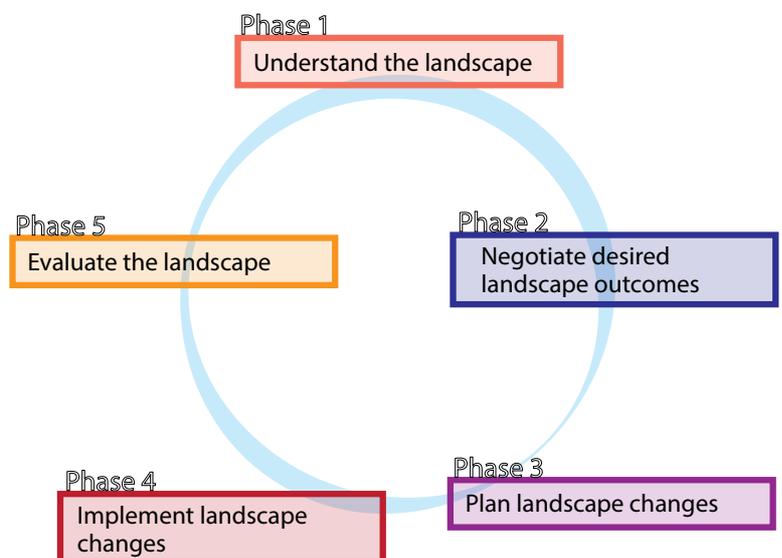
Distributed leadership for SLM platforms has four dimensions.

- It is enacted through an adaptive collaborative management cycle.
- It engages various types of leaders with diverse knowledge.
- It enables an environment for collaborative processes and mutual respect and trust.
- It encourages mechanisms for collaboration, sharing knowledge and institutional capacity building in the SLM platform.

Distributed leadership is enacted through cycles of planning, acting and reflecting among various leaders, for instance, the adaptive collaborative management cycle for integrated landscape management.

As part of this cycle, and recognizing the diverse types of actors in typical SLM platforms, processes should engage different types of leaders. Expertise is not always derived from formal position or education. Therefore, we want to recognize and engage leaders with different types of knowledge in the SLM platform. This may include formal and informal leaders, subject experts or resource persons (including farmers, etc.). In a distributed leadership approach in SLM platforms, you will also want to make sure that you are engaging a diverse set of actors based on their functions (M&E, administrative management, technical areas, etc.), disciplines (water, soil sciences, etc.), groups and organizations (public, private, civic) and levels (local, regional, national).

To support distributed leadership in SLM platforms that recognize leaders for different areas of knowledge and their application, it is important to enable an environment in the SLM platform of trust, respect, openness to change and new ways of working. The setting must also allow for stakeholder engagement that builds positive collaborative relationships among partners and especially between technical experts, policy makers and community leaders, whom may all have their own preferred modes of communication and systems of knowledge they respect.



1 <http://emedia.rmit.edu.au/distributedleadership/>

## Distributed Leadership in SLM Platforms



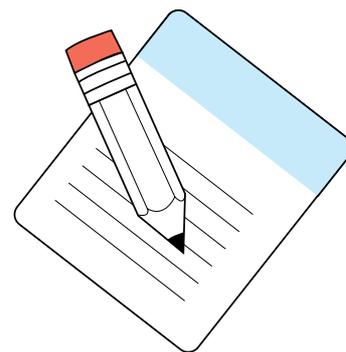
Some possible ways that the SLM/M&E facilitator can encourage this enabling environment and opportunities for engaging in planning, acting and reflecting in the adaptive collaborative management cycle include creating spaces and mechanisms for:

- Professional development,
- Communities of practice,
- Collective decision making,
- Mentoring,
- Recognition & reward for contribution,
- Facilitation of networks,
- Networking, and
- Space, time and finance for collaboration.

Distributed leadership can also encourage the strengthening of institutional leadership capacity and help fulfill the overall goals of the SLM platform to create sustained country dialogue on the sustainability of productive land, while managing risks from climate and land use change. Fragmented investments, information and institutions must be aligned through harmonized agendas and investments, multi-disciplinary work and mutual accountability. To encourage institutional capacity building that supports the needed processes and mechanisms for distributed leadership, focus on the following skills needed to strengthen institutional leadership capacity and help fulfill the overall goals of the SLM platform to create sustained country dialogue.

- Collaborative problem solving
  - » Finding complimentary goals
  - » Developing collective action
  - » Being open to others' perspectives
- Cross-sectoral priority-setting
  - » Understanding the values of other groups
  - » Exploring preferred forms of knowledge
  - » Knowing how to speak to leaders from different sectors
- Delegated roles in institutional arrangements
  - » Recognizing the roles of others
  - » Avoiding duplication of work
  - » Optimizing function and matching people's roles with functions (their comparative advantage)
- Partnership building
  - » Highlighting the multiple institutions with SLM mandates and the need to work across those institutions
  - » Working together, keeping in mind the proverb: The sum is greater than its parts.

## Exercise 1



# Mapping Distributed Leadership in SLM Projects with Multiple Partners

In pairs (groups of two), map the different institutions responsible for SLM in your country or project. Include how you engage with each institution and how they engage with each other. You may do this by creating a list, a flowchart, a Venn diagram or any other method you like. When finished, meet with another pair to form a group of four to share mapping exercises and responses to the discussion questions. Then return to large group for wrap-up and plenary.

### Guiding Questions for Group Discussion

- ✓ Which organizations are charged with SLM implementation? Research? Extension?
- ✓ Are all relevant institutions engaged, including those with less formally recognized knowledge?
- ✓ What are current modes for encouraging respect and trust among leaders with different functions, disciplines, and at different levels?
- ✓ What mechanisms are being used currently to encourage collaborative planning, action and reflection?
- ✓ What are some of the barriers to making distributed leadership in SLM platforms work well?

# Module 2

## Innovative Leaders for Sustainable Land Management

### Overview

*This module introduces ways that sustainable land management (SLM) country teams and partners in the SLM platform can apply distributed leadership in collaborative processes to encourage innovation for improved monitoring & evaluation (M&E) systems and SLM outcomes. The three lessons in this module impart awareness and skills for managing innovation processes and engaging in creative problem solving.*

### Time

2 hours 45 minutes

### Lessons

**Lesson 1: Types of Sustainable Land Management Innovations (1 hour 15 minutes)**

**Lesson 2: Creativity: A Core Leadership Skill (45 minutes)**

**Lesson 3: Encouraging Innovation in SLM Platforms (45 minutes)**

# Lesson 1 • Types of Sustainable Land Management Innovations

## Learning Objectives

Construct a framework for thinking about innovations that contributes to improving SLM project and program management and outcomes.



## Preparation

- ✓ Review the innovation framework entitled "Summary of Types of SLM Innovations" described in Activity 1 and Handout 1; become familiar with the five categories of innovation.
- ✓ Review Handout 2, which is a one-page case study of "SLM innovations in the Lower Burqa Abagabir Watershed in the Tigray Region of Ethiopia", for living examples of SLM innovations.
- ✓ Review the websites that are identified in Handout 1 for further background for facilitating discussion on the topic, as well as the readings for the lesson.
- ✓ On a flip chart, write the definition of an innovation for SLM that is presented in Activity 1, Step 2.
- ✓ Prepare a visual for introducing the five SLM innovation types to participants. It may work well to write each innovation type on a separate flip chart, slide or other visual method so that you can introduce them one by one. Consider an example of each innovation type in the context of an SLM program or project that is familiar to you, to enable you to initiate discussion about the different categories of SLM innovations that will be meaningful to participants.
- ✓ On a flip chart, list the ways that innovations are useful (from Activity 1, Step 5).
- ✓ Prepare a flip chart listing the five types of innovation, each in a different color, for Activity 2.

## Procedure

- **Activity 1:** Lead plenary concept development. (15 minutes)
- **Activity 2:** Facilitate group work in identifying SLM innovations. (30 minutes)
- **Activity 3:** Direct plenary synthesis of group work. (30 minutes)

## Total Time

1 hour 15 minutes

## Materials

- ✓ Five different colored index cards, sticky notes or similar medium
- ✓ Flipchart
- ✓ Markers
- ✓ Projector (optional)
- ✓ Laptop (optional)

## Handouts & Exercises

- **Handout 1:** Innovations for Sustainable Land Management
- **Handout 2:** Case Study: SLM Innovations in the Lower Burqa Abagabir Watershed in the Tigray region of Ethiopia
- **Exercise 1:** Group Work – Identifying SLM Innovations

## Readings

Nyinamutozo, H., Tenywa, M., Tukahirwa, J. M. B., & Kamugisha, R. (2009). Scaling sustainable land management (SLM) innovations: insights and lessons from rural grassroots initiatives in Eastern Africa. In Fourth Biennial Landcare Conference 2009, 12-16 July, 2009, Limpopo South Africa (pp. 1–12). Nairobi, Kenya: World Agroforestry Center (ICRAF).

<http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Scaling-sustainable-land-management-innovations.pdf>

Eneku, G., Wagoire, W., Nakanwagi, J., & Tukahirwa, J. (2013). Innovation platforms: A tool for scaling up sustainable land management innovations in the highlands of eastern Uganda. *African Crop Science Journal*. African Crop Science Society (Uganda). doi:10.4314/acsj.v2i11.

<http://www.ajol.info/index.php/acsj/article/view/98446>

WOCAT. (2010). WOCAT Success Stories. Retrieved August 15, 2014.

<https://www.wocat.net/en/wocat-stories.html>



## Activity 1

Introduce the session by reminding participants of the previous lesson on a leadership model for sustainable land management in Africa. Ask a participant to remind others how the embodiment of African-based leadership values and distributed leadership patterns in SLM platforms could contribute to achieving the SLM platform's goals. Re-emphasize that distributed leadership, combined with decision processes that rely on compromise, persuasion, accommodation and discussion, help foster the team work and collaborative engagement of stakeholders needed to stimulate new ideas and agreeable solutions to complex problems in SLM.

Suggest that developing a common understanding of SLM innovations and innovation processes can be a useful collaborative management tool for preparing SLM leadership for managing teams comprised of the diverse sources of expertise needed to design and evaluate viable landscape SLM interventions.

Introduce SLM innovation by following these steps:

1. Ask participants, "What is an innovation for SLM?" Record responses on a flip chart. When they have exhausted their list, put up the definition from Step 2, below.
2. Define "innovation" as follows: An innovation for sustainable land management is a novel practice, activity or approach that helps accelerate or improve the delivery of solutions to sustain landscapes, address land and water degradation and adapt to a changing climate.

3. Introduce the five categories of innovations by giving an example of an SLM country program or project's best practices; include an example of each of the five types. Put the examples up first on the flip chart or PowerPoint. Then, after explaining what makes them innovations for SLM, add the following categories to illustrate each of the different types of innovations.
  - a. Technical innovations in crop and livestock production, farm conservation practices and biodiversity conservation practices
  - b. Strategies for financing sustainable land management
  - c. Markets and marketing approaches
  - d. Training, extension and capacity building practices
  - e. Institutional and policy mechanisms
4. See if participants can identify an additional example of each category (type) of innovation and add to those that you introduced.
5. Ask participants to contribute ideas about why innovations are useful. Once participants have exhausted their own ideas, put up a flip chart that summarizes ways that innovations are useful. Innovations may:
  - a. Improve an SLM practice or management approach for an SLM project or program such as an M&E system;
  - b. Help fix a part of a system that is broken;
  - c. Offer a breakthrough that changes the way leaders address the complex challenges of sustainable land management;
  - d. Catalyze change toward more integrated solutions for sustaining landscapes through their location, configuration and/or management; and
  - e. Help bridge dividing lines among sectors and between public, private and civic groups for planning and collaboration in the SLM platform.
6. Pass out Handout 1, Innovations for Sustainable Land Management

## Activity 2

Instruct participants that they will have an opportunity to identify SLM innovations in small groups, focusing on their own experiences and using the framework developed here. Encourage them to consider innovations that they have had a role in recognizing, stimulating and/or applying for the benefit of their SLM projects and programs.

Divide participants into groups of 5 or 6 people. Before the groups disperse, go over the flip chart color-code that you prepared, and explain that they will receive index cards/sticky notes of the colors that correspond with each innovation category. It is helpful to prepare a smaller copy of this code for each group to take with it during break out discussions. Provide each group with a copy of the instructions for Exercise 1, along with Handout 2. Go over the instructions and example in plenary and have participants go to their separate workspaces to review aloud. Distribute the colored index cards or sticky notes to the groups, ensuring each has sufficient cards/sticky notes in each color.

## Activity 3

Put up five flip chart pages with the title of each of the five innovation categories. During a tea break or before the plenary have each group place its index cards or sticky notes on the corresponding flip chart page titled with one of the five categories of innovation. In plenary, have a presenter from each group briefly highlight an example of one innovation that was shared in the group that particularly caught his or her attention for one of the five categories. Then move to the next category and do the same, until each group has had an opportunity to highlight an innovation briefly from each category. Find a place along the walls of the training room to display the five flip chart pages throughout the remainder of the workshop, to remind participants of the many ways that participants are already SLM innovation leaders.

To conclude, ask participants to reflect on the following questions:

- Did you find it easier or more difficult to identify any one of the categories of innovations? Why?
- For which types of innovations does there appear to be stronger leadership among us? For which types of innovations does leadership among us appear more limited? Why?

Summarize the main learning points of the lesson. Emphasize that participants in the course are already SLM innovation leaders and that maintaining awareness about different types of innovations will strengthen their leadership capacities.

### Trainer's Notes



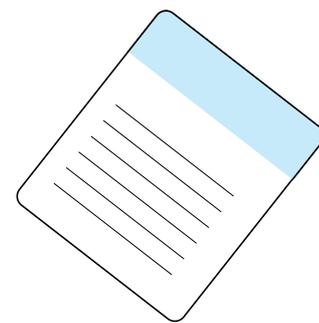
In order to best relate the innovation types to the participants, the lesson focuses on examples from SLM projects and programs that are familiar. It also introduces participants' own experiences in providing leadership in the development and application of SLM innovations. When preparing the groups for Activity 2, consider presenting additional examples on the projector of SLM innovations from the WOCAT database website (see reading section). This helps participants appreciate that the locations of technical innovations can have an important influence on the impacts they have.

### Summary of Main Learning Points

1. An innovation for sustainable land management is a novel practice, activity or approach that helps accelerate or improve the delivery of solutions to sustain landscapes, address land and water degradation and adapt to a changing climate.
2. Discussion of innovations often focus on technical issues and practices; equally important are financial strategies, marketing approaches, institutional and policy mechanisms and training and capacity building measures to find more integrative solutions to SLM with landscape scale benefits.
3. Innovations may: help fix a part of the system that is broken; improve an SLM practice, system or approach; and/or provide a breakthrough in the complex challenges of sustainable land management.
4. Successful landscape-scale SLM projects and programs will depend on all five types of innovations (technical, financial, market, capacity development and policy) working together, synergistically.
5. Successful SLM leaders will be prepared to recognize, stimulate and harness all types of innovations, whether they are novel ideas and approaches, or adaptations of tried and proven ideas and approaches to new situations.

# Handout 1

## Innovations for Sustainable Land Management



### What is an innovation for sustainable land management (SLM)?

An innovation for sustainable land management is a novel practice, activity or approach that helps accelerate or improve the delivery of solutions to sustain landscapes, address land and water degradation and adapt to a changing climate. Of particular interest are those SLM innovations that may contribute to multiple landscape outcomes and benefits. Innovations may already be on the ground and successful (e.g. good practices that can be adapted or scaled up) or may be new ideas.

Innovations may help deliver the needed solutions by improving an existing SLM practice, approach or the management of an SLM project or program; by fixing a part of the system that is broken; or by offering a breakthrough or transformation that changes the way we think about or respond to the complex challenge of sustainable land management.

### How can we use SLM innovations to help generate landscape-scale benefits?

SLM innovations may be a catalyst for change to more integrated solutions for sustaining landscapes. They may do so through their location in the landscape, their configuration with other land uses in the landscape or through active management in ways that produce landscape-scale benefits. They may also help cross traditional dividing lines among sectors and between public, private and civic groups for planning and collaboration in the SLM platform.

### There are five types of SLM innovations that contribute to multiple landscape outcomes and benefits.

1. **Technical Practices for Land and Water Management.** These practices include crop and livestock farming conservation practices that increase soil fertility, water retention, carbon sequestration and other ecosystem services at the landscape level, while reducing levels of water and energy needed and pollutants generated. They may also include biodiversity conservation practices, such as conservation corridors, buffers and others that improve habitats and reduce negative interactions between wildlife, farming and other human activity, while promoting local livelihood security.
2. **Strategies for Financing Sustainable Land Management.** These strategies strengthen enabling investments and develop financial mechanisms that attract private sector asset investors for landscape solutions and provide incentives and support for collaborative investment by public, private and civic sectors. Such finance models, mechanisms or institutions spatially target and harmonize investments so that they can efficiently yield public goods and private financial returns, while mitigating investment risks.

# Innovations for Sustainable Land Management



1. **Markets and Marketing Approaches.** These approaches reward farmers for ecologically sustainable production practices through access to viable markets and prices that cover their costs and return a profit.
2. **Training, Extension and Capacity Building Practices.** These practices strengthen knowledge, skills and capacities for designing, planning, implementing and monitoring systems for sustaining landscapes, addressing land and water degradation and adapting to a changing climate.
3. **Institutional and Policy Mechanisms.** These mechanisms include legal frameworks, tenure arrangements, collaborative frameworks, agreements, incentives, regulations and enforcement mechanisms that support integrated solutions to sustaining landscapes, addressing land and water degradation and adapting to a changing climate. Supportive institutional arrangements and robust multi-level institutions must effectively deliver multiple outcomes for sustainable land management.

## Databases for SLM Innovations

Databases for SLM innovations offer repositories where SLM leaders can get ideas that may be adapted for their own practices and approaches or to stimulate thinking around new methods or approaches for addressing SLM challenges.

- The World Overview of Conservation Approaches and Technologies (WOCAT) is recommended by the United Nations Convention to Combat Desertification as the primary database for best practices on SLM technologies. The database system consists of the database on SLM Technologies and Approaches and the Mapping database. <https://www.wocat.net/en/knowledge-base.html>
- The TerrAfrica Knowledge Base is designed to be a user-friendly tool to connect SLM stakeholders, foster collaboration and promote the scaling-up of SLM practices across Africa. The Knowledge Base information resources are organized around the vision shared by TerrAfrica partners for achieving SLM in Africa. <http://terrafraica.org/knowledge-management/knowledge-base/>
- The Landscapes for People, Food and Nature Learning Network is an online platform for landscape leaders to share experiences, find tools and resources and tackle challenges together. The Learning Network showcases experiences and innovations to address specific challenges often found in common across landscapes, aiming to integrate approaches to address land and water degradation, sustain landscapes and adapt to a changing climate. <http://www.peoplefoodandnature.org/learning-network/>

# Innovations for Sustainable Land Management



## Summary of Types of SLM Innovations

<i>Innovation Types</i>	<i>Intended Outcomes of Innovations</i>	<i>Examples</i>
Technical innovations in crop and livestock production, farm conservation practices and biodiversity conservation practices	<ul style="list-style-type: none"> <li>✓ Increased soil fertility, water retention, carbon sequestration and other ecosystem services</li> <li>✓ Reduced levels of water and energy needed</li> <li>✓ Reduced generation of pollutants</li> <li>✓ Reduced negative interactions between wildlife, farming and other human activity</li> <li>✓ Promoted local livelihood security</li> </ul>	<ul style="list-style-type: none"> <li>➤ Conservation agriculture</li> <li>➤ Precision agriculture</li> <li>➤ Sustainable intensification of livestock</li> <li>➤ Sustainable rice intensification</li> <li>➤ Land terraces</li> <li>➤ Agroforestry</li> <li>➤ Integrated soil fertility management</li> <li>➤ Recycling of crop residue for bio-energy production</li> <li>➤ Conservation corridors and patches</li> </ul>
Strategies for financing sustainable land management	<ul style="list-style-type: none"> <li>✓ Strengthened finance models, mechanisms or institutions that provide incentives for collaborative investment by public, private and civic sectors</li> <li>✓ Efficient yield of public goods and private financial returns with investment risks mitigated</li> <li>✓ Strengthened tools that help partnerships among public and private sector actors to calculate risk and expected return across multiple dimensions over time</li> <li>✓ Strengthened enabling investments for training, extension and capacity building practices and institutional and policy mechanisms</li> <li>✓ Strengthened asset investments for crop and livestock production, farm and biodiversity conservation practices, environmentally and socially responsible enterprises and large-scale green infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>➤ TerrAfrica Strategic Investment Programs (SIP)</li> <li>➤ Public-private investment partnership agreements that move beyond sector-based approaches to target landscape scale action</li> <li>➤ Biodiversity Risk and Opportunity Assessment (BROA) Tool</li> <li>➤ Multi-objective investment mechanisms that move beyond cross-sectoral coordination and create new financing mechanisms designed explicitly to meet multiple climate, ecological and social objectives</li> </ul>

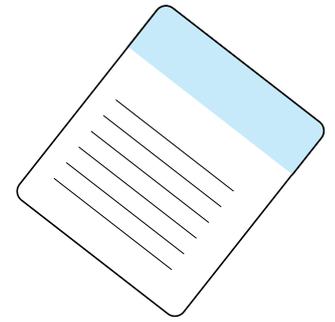
# Innovations for Sustainable Land Management



<i>Innovation Types</i>	<i>Intended Outcomes of Innovations</i>	<i>Examples</i>
Markets and marketing approaches	<ul style="list-style-type: none"> <li>✓ Farmers rewarded for ecologically sustainable production practices</li> <li>✓ Local farmers have access to opportunities for value addition to gain greater power in the market place</li> </ul>	<ul style="list-style-type: none"> <li>➤ Differentiated markets and eco-certification, landscape labeling</li> <li>➤ Local small and medium enterprises that provide value-adding services for smallholders</li> </ul>
Training, extension and capacity building practices	<ul style="list-style-type: none"> <li>✓ Improved capacities for advancing approaches to address land and water degradation and adapt to a changing climate, while delivering landscape-level solutions</li> <li>✓ Improved extension and knowledge systems for generating, sharing and using relevant knowledge and information</li> </ul>	<ul style="list-style-type: none"> <li>➤ National SLM knowledge portals (See for example <a href="http://www.onedd-burkina.info/">http://www.onedd-burkina.info/</a>)</li> <li>➤ Large-scale training programs for SLM project/program staff in climate-smart agriculture</li> <li>➤ Shared learning in multi-stakeholder platforms such as TerrAfrica country SLM partnership platforms</li> </ul>
Institutional and policy mechanisms	<ul style="list-style-type: none"> <li>✓ Robust institutions and institutional arrangements that deliver multiple outcomes for SLM</li> <li>✓ Favorable policy instruments (enabling mechanisms, tenure arrangements, regulations and incentives) support landscape-scale action for SLM outcomes</li> </ul>	<ul style="list-style-type: none"> <li>➤ Providing economic incentives for landscape goals</li> <li>➤ Coordinating policies on agriculture, climate, water, forests, biodiversity and land on a national level</li> <li>➤ Nested SLM platforms from local to regional to national levels</li> <li>➤ Farmers as stewards management agreements (access for protection agreements)</li> </ul>

Source: Adapted from EcoAgriculture Partners. (2013). Greening Agricultural Development in Mbeya: Using Maps to Advance Innovations. Workshop Report. Washington, DC: EcoAgriculture Partners. Retrieved from <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Greening-Ag-Dev-Mbeya-Handout.pdf>.

# Handout 2



## Case Study: SLM Innovations in the Lower Burqa Abagabir Watershed in the Tigray Region of Ethiopia

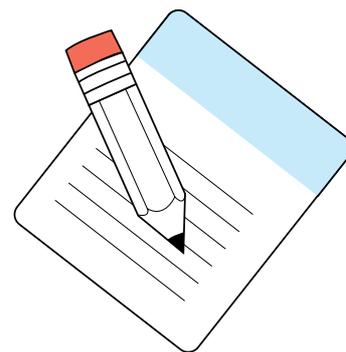
The Lower Burqa Abagabir watershed in the Tigray region of Ethiopia has been an intervention area of the national sustainable land management program for the past five years. Communities have been successful in rehabilitating the degraded environment through demonstrated outcomes, such as improvements in vegetation cover, proliferation of formerly endangered plant species and the re-appearance of springs and rivers. SLM practices also increased rural incomes through enhanced crop and livestock productivity, diversification of livelihoods and adoption of better technology, especially high yielding crop and livestock varieties.

To achieve these outcomes in the Lower Burqa Abagabir watershed, sustainable land management practices included soil and water conservation and water harvesting structures that integrated physical and biological conservation methods. The main physical conservation structures were hillside terracing, percolation deep trenching/normal trenching, pond, channel creation, stone bund, spate (type of diversion technology) and gully treatment (gully check dam and gully diversion), while biological conservation was practiced mainly through planting of trees, grasses and fruits.

Afforestation with indigenous and new species suitable to the local ecology and use of biomass for domestic fuel energy needs were two other biodiversity conservation interventions adopted. Institutional interventions included the organization of income generation groups that led to both livelihood and ecological benefits from the production of fruits and crops in treated gullies. New management structures through legalized bylaws permitted farmers to diversify their livelihood through beekeeping in enclosed areas that also contribute to rehabilitation of the environment through combating gully formation and biophysical degradation and providing habitat and forage for bees in areas near crop production. Other institutional interventions included access to systems of modern land certification, delineation of land for particular SLM activities (such as for beekeeping, irrigation and fattening, etc.), empowering marginalized and landless groups for business opportunities (such as beekeeping and fattening) and the development of legalized community bylaws.

Source: Case study prepared by Dr. Desalegn Yayah Ayal in collaboration with EcoAgriculture Partners for the TerrAfrica Regional Leadership Course on M&E for SLM: 21-25 April 2014, Mekelle, Ethiopia.

## Exercise 1



# Group Work on Identifying SLM Innovations

Choose a facilitator and a recorder for the group. The facilitator explains the task for the group: to identify innovations in each of the five categories that were presented in the plenary and Handout 1. The focus is on innovations that members of the group have had a role in identifying, stimulating and/or applying to improve an SLM project or program in which they have been involved.

The facilitator gives each group member an opportunity to describe an example of an innovation they are familiar with; that they have personally stimulated through dialogue or facilitation of collaborative learning; and/or that they helped apply to improve a problem situation. The facilitator asks each member to describe the innovation and, with help from the group, to place it into the appropriate category. Summarize each innovation in a few words on index card/sticky note of the appropriate color as determined at the start of the lesson.

Encourage group members who are actively involved in monitoring and evaluation in SLM projects and programs to describe innovations that apply to their M&E systems and activities. What types of innovations have they helped to bring about that have improved the way SLM M&E is practiced and/or the information the system generates? How do these innovations correspond with the five categories presented in the plenary and the handout?

Pay attention to time to ensure that each person in the group has an opportunity to describe at least one innovation. Try to ensure also that the group members describe at least one innovation in each of the five categories. Describe and categorize as many innovations as time allows.

The recorder collects the note cards/sticky notes and organizes them by color. He or she will prepare to highlight briefly (in one minute or less) one innovation in each of the five categories that particularly catches his or her attention, or that the group recommends be carried forward verbally to the plenary session that follows.

# Lesson 2 • Creativity: A Core Leadership Skill

## Learning Objectives

Distinguish creativity as a distinct and teachable skill for distributed leadership for SLM and SLM M&E.



## Preparation

- ✓ Prior to the course, prepare a five-minute role play based on the context and the character descriptions included in this lesson.
- ✓ The evening before the course or during the first day, select four participants to enact the role play and prepare them for their roles.
- ✓ Before the lesson prepare flip charts with the materials indicated in the lesson.
- ✓ If possible, access and read: Grivas, C., & Puccio, G. (2012). *The Innovative Team: Unleashing Creative Potential for Breakthrough Results*. San Francisco: Jossey-Bass. (Not available in open-source format; the book is available for approximately \$US 12-20 from various online outlets.)

## Procedure

- **Activity 1:** Facilitate role play. (15 minutes)
- **Activity 2:** Lead plenary session to introduce the innovation process with a buzz group exercise. (30 minutes)

## Total Time

45 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** The Four Phases of the Creative Problem Solving Process

## Activity 1

A brief five minute role play allows participants to discover the four phases of the innovation process. The role play illustrates the four phases and allows participants to observe that individuals commonly have a preference for engaging in one or more of the phases. The role play is set in the context of an SLM project, program or platform.

Give the role play a context that will resonate with processes that participants might be involved with in their home institutions or SLM platform. These may include, for instance, an annual work planning process, an M&E system planning meeting, a project verification meeting, a workshop for initiating a new SLM activity or a quarterly regional SLM steering committee meeting to review project progress.

The role play will be performed by four characters demonstrating the following types of behavior:

- SLM Team member 1 has endless ideas about how the project can be implemented, what the activities should be, who should be involved, how the activities should be organized, etc. If others try to focus on one idea for too long, this team member becomes anxious that the team might be missing some angle or idea that will offer a better solution and tries to bring the group's focus back to generating more ideas; he or she likes to develop a comprehensive understanding of the situation.
- SLM Team member 2 is concerned with all the sources of data, research or evidence needed to support the work plan, project, etc. that is relevant to the scenario you have selected for the role play (for example, baseline data for new project, comparison research on intervention types, etc.). This team member would like to spend as much time as possible on data collection and verification and would like to make sure that the team does not miss any relevant data. S/he is not very concerned with ensuring the project will be completed within the necessary timeframe, and when others suggest a timeline that does not permit a long data collection and verification period, this individual becomes uncomfortable; s/he likes to open many doors and explore alternatives.
- SLM Team member 3 is interested in one particular idea and further improving the service or activity

embodied in the idea. For instance, if the activity is rolling out conservation agriculture under a new Ministry of Agriculture program, this individual zeroes in on one proposed idea for how the program should be implemented; for example, through creation of a new national extension program. This team member then would prefer to spend his or her time to ensure that the idea has a solid plan and will work in practice; for example that procurement timelines are feasible, quality control is in place and risks have been evaluated and minimized; s/he likes to focus on working out a realistic solution.

- SLM Team member 4 is focused on delivery of the project. This team member is not interested in spending a lot of time discussing different ideas and solutions or gathering a lot of data. This individual wants to move to the implementation phase as quickly as possible and when others stray too far from this focus, this person inserts concerns about delivering on the donor's schedule; s/he likes to evaluate success based on action.

Give each of the four participants one of the descriptions of an SLM team member's behavior and instruct the group in the scenario that you have selected for the SLM team. Ask them to develop a five-minute role play using the scenario and the descriptions of their characters' behavior. Tell them to ensure each team member has an opportunity to display their favorite way to be creative, as well as an opportunity to react or express concerns to others' focus. Explain the role play is intended to be light hearted and good natured and to illustrate the four phases of the innovation process through a bit of exaggeration of each of the characters' preferred behavior.

Tell participants they will watch a five minute role play about an SLM team and how they work together to plan and implement project activities. Ask them to observe the team to see if they can identify characteristics of each of the team members that explains how they prefer to engage in collaborative creative thinking processes. Ask participants to note down words that come to mind to describe each team members' behavior or actions.

When the role play has concluded, conduct a reflection with participants. Ask them:

- What did you see?
- What different roles did you identify?
- What did you observe about each team member's preferences?

Conclude by summarizing the key messages of the role play:

- Everyone engages in creative processes, often without being overtly conscious of the process itself.
- Most people have a preference for engaging in particular phases of the creative problem solving process.

## Activity 2

Spend a few minutes with participants linking work up until now with the current lesson using the following script:

*"Previously we discussed how distributed leadership patterns can support multiple networks of individuals with expertise and knowledge to contribute positively to creating joint outcomes from coordinated investments for SLM. In the last lesson, we tried to better understand how we could build a robust and common framework for thinking about SLM innovations and experimented with our own process for identifying innovations. Now we are going to explore how we can make that process of identifying innovations more systematic, more deliberate and less of a mystery. In short, we are introducing creativity as a core skill for SLM leaders. In this lesson, we aim to discover how a partnership of multiple institutions with SLM goals can successfully crack the toughest challenges by being intentionally focused on innovation. We seek to explore together the opportunities to solve complex problems in ways that will transform the way actors seek to achieve coordinated investments for SLM."*

Put up a flipchart with the following statement:

*"Only a small number of people are gifted with the ability to imagine and manifest new possibilities."*

Then ask the group whether they think the statement is true or false. Take a few responses and then introduce the following three key learning points:

- The creative process is universal.
- We all engage in creative thinking.
- Creative thinking is a trainable skill.

Ask participants to react to the statements. After a few responses suggest that creativity brings novelty and usefulness together. For instance, a novel idea for SLM practice that has no value will remain in a report or be contained to discussions in meetings, but will not be implemented on the ground.

Ask the group the following questions:

*"What are some of the dynamic changes that you face in implementing SLM projects and M&E systems within them? Are they technological? Are they new forms of operation? Other issues?"*

Spend 2-3 minutes gathering responses from the larger group and listing them on the flip chart. Ask participants to form a buzz group by pairing with their neighbor to discuss how they deal with the changes listed on the flip chart when managing SLM activities, projects or programs. Ask groups to describe to their partner how they recently improved something (made the most of a good situation), resolved a problem (fixed something that was broken) or came up with a breakthrough to a complex challenge. Have them ask one another: How do you currently solve problems? What process do you follow? What do you do if it works? What do you do if it doesn't work?

Ask members of two or three buzz groups to share their story. Then summarize key learning points.

- The breakthrough thinking process is something that we all do naturally as part of the innovation process.
- Innovation is not all about coming up with new ideas. It is also about changing things for the better. It includes figuring out which challenges are the most important and focusing your energies there.

Remind participants of the role play. Recall the four different individuals with different preferences for how to channel their creative energy towards addressing challenges. Ask participants if they can identify and characterize any of the four phases. After a few minutes, put up a flip chart with the four phases.

- **Clarify the situation (played by SLM team member #1).** Understand the situation well and appreciate the inherent challenges in order to be able to target responses in later steps.
- **Generate ideas (SLM team member #2).** Open doors to alternate ways of approaching the problem you are working on.
- **Develop solutions (SLM team member #3).** Transform novel ideas into workable solutions.
- **Implement and monitor plans (SLM team member #4).** Make your idea a success through action.

Summarize another key learning point, that this is not a new process. By consciously following this creative problem solving process with multiple partners towards common or complementary goals, SLM leaders are more likely to succeed in achieving their goals in innovative ways.

Explain that in each of these four phases of the creative thinking process, there are what we call convergent and divergent points. These are important to remember and to be conscious of to help manage the flow of the process when many partners are involved. Put up a flip chart or slide with the following terms and definitions.

- **Diverging** is part of each phase where we generate facts and ideas, perfect solutions or refine implementation plans. In this part of each phase, we generate varied and original options and ideas. Brainstorming is a technique we may use when in the diverging part of the process.
- **Converging** is part of each phase where we sift through the possibilities and select the best ones. This is when we use techniques, such as guiding questions or critical analysis, to narrow down the information or the choices or to zero in on the right elements of a solution or workable parts of an implementation plan.

Give an example of diverging and converging. For instance, in the clarifying phase, diverging may include digging deeper for different sources of data, while converging may be questioning which sources of data are relevant. The power comes in how SLM leaders manage the process of converging and diverging when many voices are present.

Give participants the handout with the four phases of the creative problem solving process.

### Trainer's Notes

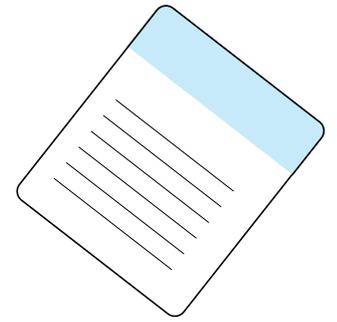
This lesson introduces new terminology. Trainers may wish to use words for each phase that they feel may be better grasped and understood in the local context.



### Summary of Main Learning Points

1. Innovation helps us improve the way things are done, develop new ideas and technologies and fix things that are broken. It is particularly useful in addressing complex problems or situations that do not have immediate apparent solutions, such as those that arise in SLM.
2. The collaborative innovation process helps us address complex problems that each partner in the SLM platform cannot address alone. The process can help the partners in an SLM platform look at challenges and opportunities from new perspectives, use imagination to generate original ideas and develop alternative ways to evaluate and strengthen the most promising solutions to increase their potential for being implemented.
3. Innovation includes figuring out which challenges are the most important and focusing our energies there.
4. Part of innovating involves creative thinking. While creative thinking is a natural process, it is also a trainable skill.
5. The revelation in the creative thinking process for SLM leaders is to consciously foster the process with multiple SLM platform partners towards shared goals for coordinated investments in SLM.
6. Individuals often have preferences for clarifying situations, generating ideas, working through solutions or implementing practical ways forward. Recognizing and working with these different preferences is a core role of SLM leaders in managing creative thinking and innovation processes in a conscious manner.
7. In collaborative thinking and creative problem solving, there are points where convergence and points where divergence is beneficial. Being conscious of these points is another core role of SLM leaders in consciously managing the innovation process.

# Handout 1



## The Four Phases of the Creative Problem Solving Process

Innovation helps us improve the way things are done, develop new technologies and fix things that are broken. It is particularly useful in addressing complex problems or situations that do not have immediately apparent solutions, such as those that arise in SLM. Innovation is not all about coming up with new ideas. It also includes figuring out which challenges are the most important and focusing your energies there.

The collaborative innovation process helps us address complex problems that each partner in the SLM platform cannot address alone. This process can help partners in an SLM platform look at challenges and opportunities from new perspectives, use imagination to generate original ideas, use new ways and methods to evaluate and strengthen the most promising solutions, increase the adoption of these solutions and navigate resistance to their adoption.

In each phase of the creative problem solving process, there are points to converge and diverge. Being conscious of these points is a core role of SLM leaders in managing the innovation process in a conscious manner. The four phases of the creative problem solving process are as follows.

### 1. Clarifying the Situation

#### *What to do in this phase*

Get the data, and identify where the real challenges and opportunities are. State a long-term goal, and gather all the data around this goal. Determine which problem(s) to solve by sorting out the real problem from the symptoms or distractions. Look at all relevant data, and measure all aspects of the situation. Ask probing questions. Work to understand the history of the situation and assemble as complete a picture as possible so that you are poised to address the most crucial issues or seize the most significant opportunities. Identify that portion of the situation that will have the greatest impact if it is improved. Examine the situation and define the challenges.

#### *Diverging*

The diverging part of this phase is in data collection. This may involve identifying new and intriguing data or identifying an unexplored cause of the issue.

#### *Converging*

The converging part of this phase involves selecting key data that is most relevant and most essential to understanding the challenge. Consider unique and unusual information, factors or data that have not been previously explored. By converging on data you end up with several themes of related information or areas of data.



# The Four Phases of the Creative Problem Solving Process

## *Outcome of this phase*

The outcome of this phase should be one to two open-ended challenge questions on which to focus your efforts. These questions should invite solutions. Select questions that yield the most potential for creative results. You should have a strong sense of the direction your problem solving needs to take.

## *Pitfalls to avoid in this phase*

Do not skimp on the types of data that you collect or make assumptions that lead you to ignore certain data or rush the time for analyzing the data to get to implementation. These pitfalls can all lead you to select the wrong problem(s) to solve or lead you to move ahead without enough data to support ongoing decisions. Without this investment of time to clarify, improvement efforts become like shooting in the dark. You can end up with scattered, inefficient, wasteful or duplicate approaches by different partners.

## 2. Generating Ideas

### *What to do in this phase*

Generate ideas, and consider what makes the ideas unique (even if they seem unreasonable on the surface). Retain the novelty of ideas, and consider what you could build on. Ideas to improve the current approach can be radical and producing great change or can be less dramatic and produce incremental change. Note that brainstorming is more effective with a trained facilitator who reinforces the guidelines of brainstorming during the idea generation phase.

### *Diverging*

During the diverging part of the phase, aim for as many ideas as you can. As you develop answers to your challenge questions, search for many original options.

### *Converging*

Once you have enough ideas to choose from, it's time to decide which ones are worth pursuing. During the converging part of the phase, narrow down the list of ideas to the best ones, then select those ideas that hold the greatest promise or the most potential for achieving innovative results.

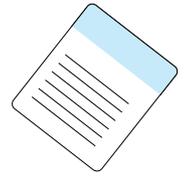
## *Outcome of this phase*

The outcome of this phase should be to go beyond the initial brain dump of ideas and open doors to alternate ways of approaching the problem you are working on.

## *Pitfalls to avoid in this phase*

Do not dismiss ideas too early while you are selecting. Avoid thinking this phase is only about divergent thinking; simultaneously apply both the diverging and converging stages when attempting to come up with ideas. Also avoid stopping the idea generation before the group gets to truly novel ideas or settling only for the first set of ideas that come to mind. Moving through this phase too quickly produces lackluster ideas and rarely creates a true breakthrough. Staying in this phase too long creates a risk of overwhelming partners with too many options and nothing gets put into action. It is important to have a dedicated facilitator, as too often without a facilitator brainstorming sessions can become idea-killing sessions that rarely produce the desired results.

# The Four Phases of the Creative Problem Solving Process



## 3. Developing Solutions

### *What to do in this phase*

Examine ideas, and look at all the factors that may work or not work. Get into the idea and play with it, try options and see what fits. Verify whether or not the solution you came up with will actually work. Test the new approach and “break it” if possible. Test the idea, measure its effect and figure out how it might be improved. Identify the errors, tinker with improvements and test the idea. Improve what you are doing by methodically picking apart and reconstituting those ideas that you thought held the most promise. Create the best solution you possibly can.

For successful implementation, involve others in the solution development process as a key part of managing the change. This approach offers the best chance at having the diverse skill sets needed to improve the idea and increases the sense of ownership of the solution. With buy-in and increased views from multiple partners, the innovative solution stands more of a chance of succeeding.

### *Diverging*

The diverging part of this phase lies in thinking how to take ideas from good to great, that is, coming up with all of the ways that you could strengthen the idea.

### *Converging*

The converging part of this phase involves deciding how to actually strengthen the idea.

### *Outcome of this phase*

The outcome of this phase should be a test run for the proposed solution that ensures your solution fits your problem.

### *Pitfalls to avoid in this phase*

Avoid thinking that an idea is perfect right out of the gate and not taking the time to examine it from all sides. Do not move too quickly from concept to implementation.

# The Four Phases of the Creative Problem Solving Process



## 4. Implementing & Monitoring Plans

### *What to do in this phase*

Develop a plan of action, including strategies for implementing with multiple partners and consideration of opportunities and threats by stakeholders. Create and complete project plans, and manage change. Plan for the best while preparing for the worst. Build steps in the action plan that anticipate potential resistance to the change that is being implemented. Schedule dedicated reflection time at regular intervals that is built into leaders' calendars and action plans.

### *Diverging*

The diverging part of this phase includes identifying all the ways to overcome resistance, gain support and put the plan into action.

### *Converging*

The converging part of this phase involves deciding on the sequencing and timeline for the steps and who will do what.

### *Outcome of this phase*

The outcome of this phase is making your idea a success through action.

### *Pitfalls to avoid in this phase*

Do not ignore the emotional aspect of change rather than learning to expect, recognize and make plans for navigating currents underlying change.

Source: Adapted from Grivas, C., & Puccio, G. (2012). *The Innovative Team: Unleashing Creative Potential for Breakthrough Results*. San Francisco: Jossey-Bass.

# Lesson 3 • Encouraging Innovation in SLM Platforms

## Learning Objectives

Differentiate your own and the diverse creative preferences of distributed leaders in the SLM platform.



## Preparation

- ✓ Review the handout to ensure you are comfortable with the characteristics of individuals' preferences for each phase of the creative problem solving process.
- ✓ Prepare a flip chart with the four phases and individuals' preferences for each phase.
- ✓ Prepare a flip chart with the benefits of knowing the preferences of different individuals in the creative thinking process.
- ✓ If possible, access and read: Grivas, C., & Puccio, G. (2012). *The Innovative Team: Unleashing Creative Potential for Breakthrough Results*. San Francisco: Jossey-Bass.

## Procedure

- **Activity 1:** Help participants identify their own preferences in the creative thinking process. (20 minutes)
- **Activity 2:** Lead a plenary discussion with buzz groups on the importance of participants understanding their own and others' preferences in the creative thinking process. (25 minutes)

## Total Time

45 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Knowing Your Own and Others' Preferences for Engaging in Creative Thinking Processes in a Distributed Leadership Team

## Activity 1

Remind participants that in the previous lesson they observed a role play with four characters' preferences for engaging in the creative thinking process. Ask participants to recall some of the characteristics that were observed and discussed. After a few minutes of discussion, put up the flip chart with the four preferences and review them.

- **Clarifiers** prefer to spend their energy on analyzing and clarifying the situation and issues and gathering the facts.
- **Idea generators** prefer to spend their energy as big picture thinkers, to continuously generate ideas and come up with as many great options as possible.
- **Developers** prefer to spend their energy developing and perfecting the situation, working with one solution to strengthen it through testing assumptions and measurement. They prefer to refine and perfect an idea or concept and bring it to the table in a coordinated and complete manner to ensure what is recommended addresses the problem or will meet the goal.
- **Implementers** prefer to spend their energy to get the job done, to implement the plan and move on to the next challenge. They put the work into action to get results, anticipate resistance and leverage factors that might enable acceptance.

Ask probing questions to help participants distinguish their own preferences among the four (clarifiers, idea generators, developers, implementers). For instance, when trying to address an issue do they like to have enough time to sort through all possible sources of information and to get into the details of the facts, or do they get only what they need and go forward as quickly as possible? Some have a lot of patience when it comes to gathering information, while

### Unit 3 - Module 2 - Lesson 3

others could improve on slowing down and taking the time to get all of the necessary facts.

Introduce a buzz group exercise (each person turns to a neighbor) to reflect on individual preferences during the creative thinking process. Ask the pairs of participants to think about the following questions: Where do your preferences lie in the creative thinking process? Where do you prefer to spend your energy? Can you give an example of your preference?

After 5 minutes call the buzz groups back to the larger group and ask for a quick show of hands, who identified a preference for each for the four phases. How many people feel strongly that their preferences lie with one of the four phases? How many are undecided or have a preference for more than one phase?

Sum up the reflection exercise with the core learning point: we all are creative. Knowing how we are creative is key to being able to apply ourselves effectively to any given SLM challenge. Self-knowledge about our own creativity can help us create conditions for ourselves and others that will enable innovative results.

Put up a flip chart that summarizes benefits of self-knowledge about individual preferences.

- Recognize your strengths and areas of comfort as you engage in the thinking required for innovation.
- Understand your blind spots and potential pitfalls as you move through the creative process.
- Learn what areas of thinking you need to develop to strengthen your own role in each phase of the creative innovation process.

## Activity 2

Introduce the next discussion topic with the following script:

*“An SLM leader must recognize that each of the other leaders in a distributed leadership team within the SLM platform may approach the creative thinking process differently. An important role of the SLM leader is to help others understand and appreciate that leaders among the many partners will have different preferences for where they like to spend their time in the creative thinking process. Being aware of how you manage yourself through the creative process and how you engage with others on your team is central to getting truly innovative results. As a leader, you will guide people who have different preferences than you in how to spend their energy in the creative thinking process. It is important to become more comfortable with the other phases of the creative thinking process where you may not have as strong of a preference, in order to enable others to adequately lead all the phases. Understanding your preferences and those*

*of your team members is also important for increasing your ability to provide innovative solutions to key issues. Take time to reflect on these preferences at various checkpoints in the process to help the partners become deliberate about the creative thinking process and converging and diverging in each phase. While we have used this framework of four phases to help us better understand and consciously manage the creative thinking process, it is rare to find people who have one completely dominant preference that guides their thinking while working on solving problems or using their creativity.”*

Conduct a plenary discussion around the following questions.

- If your own preferences lie in one or more phases, for instance, in getting the job done or in implementing, do you give your team and other partners enough time to clarify and explore novel options and alternative scenarios and opportunities? How might your preferences affect others?
- What benefits are there in knowing your own and others' preferences in a distributed leadership team among multiple partners?

After 10 minutes of discussion, put up a flip chart with the following list of benefits in knowing the preferences of different individuals in the creative thinking process.

- Transition from the use of judgmental or negative labels when someone has a different way of thinking to an appreciation of differences, thus creating a more positive climate for creative thinking.
- Reduce tension or conflict on a team that has diverse preferences by helping partners recognize how those differences may lead to frustration, sometimes hidden and sometimes overt, when working together to solve problems or produce innovative ideas.
- Improve overall performance by revealing biases a team might possess with respect to the creative process, thereby encouraging the team to strive to adequately address all areas of the creative process.

Summarize the discussion with the following points. Moving partners through the phases can be a challenge because individuals have varied preferences. To move other leaders through the various phases of the innovation thinking process, it is useful to have a framework that helps keep the team on task and engaged, and to plan and design group time well in order to get the results needed. For example, when in the diverging part of the idea-generating phase, it is useful to facilitate brainstorming in a structured way that helps the group move beyond an initial round of ideas to truly

novel thinking. SLM leaders should invest time in framing some of the meetings around phases and preferences for creative problem solving to stimulate innovative solutions to challenges in the project or program.

Distribute the handout to participants, which provides a review of main points from this lesson.

### **Trainer's Notes**

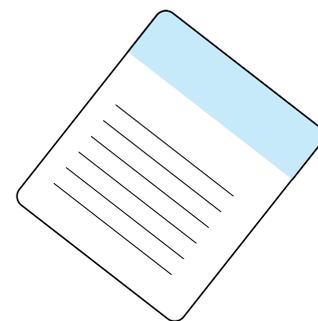
In the suggested reading for this lesson (Grivas, C. and Puccio, G. 2012), you will find more tips for how to move SLM partners through each phase of the creative problem solving process. You will also find examples of tools and structures that can be useful to keep the team on task and engaged. You may want to add an additional activity or lesson to generate classroom practice with some of the tools and techniques presented in the book.



### **Summary of Main Learning Points**

1. We all are creative. Knowing how we are creative is key to applying ourselves effectively to any given challenge and participating effectively in innovative teamwork.
2. Understanding your own preferences and those of your team members is important for increasing your ability to facilitate innovative solutions to key issues.
3. As a leader, you will lead people who have different preferences than you in the creative thinking process. As an SLM leader in a platform with multiple leaders, you can reduce tension or conflict in a team that has diverse preferences by helping partners recognize and appreciate those differences, and adequately addressing all areas of the creative process for solving problems with innovative solutions.

# Handout 1



## Knowing Your Own and Others' Preferences for Engaging in Creative Thinking Processes in a Distributed Leadership Team

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Everyone has a naturally built-in way of engaging in the creative thinking process. Individuals may prefer to clarify situations, generate ideas, develop solutions or implement plans, depending on how they prefer to prepare and organize information.

The four preferences are:

- **Clarifiers** prefer to spend their energy analyzing and clarifying the situation and the issues and gathering the facts.
- **Idea generators** prefer to spend their energy thinking about the big picture, to continuously generate ideas and come up with a variety of good options.
- **Solution developers** prefer to spend their energy developing and perfecting the situation, working with one solution to strengthen it through testing assumptions and measurement. They prefer to refine and perfect an idea or concept and bring it to the table in a coordinated and complete manner to ensure what is recommended addresses the problem or will meet the goal.
- **Implementers** prefer to spend their energy to get the job done, to implement the plan and move on to the next challenge. They put the work into action to get results, anticipate resistance and leverage factors that might enable acceptance.

Knowing your preference at an individual level allows you to:

- recognize your strengths and natural areas of comfort as you engage in the thinking required to come up with innovations,
- understand your blind spots and potential pitfalls as you move through the creative process, and
- learn what areas of thinking you need to develop to strengthen your own role in each phase of the creative process.

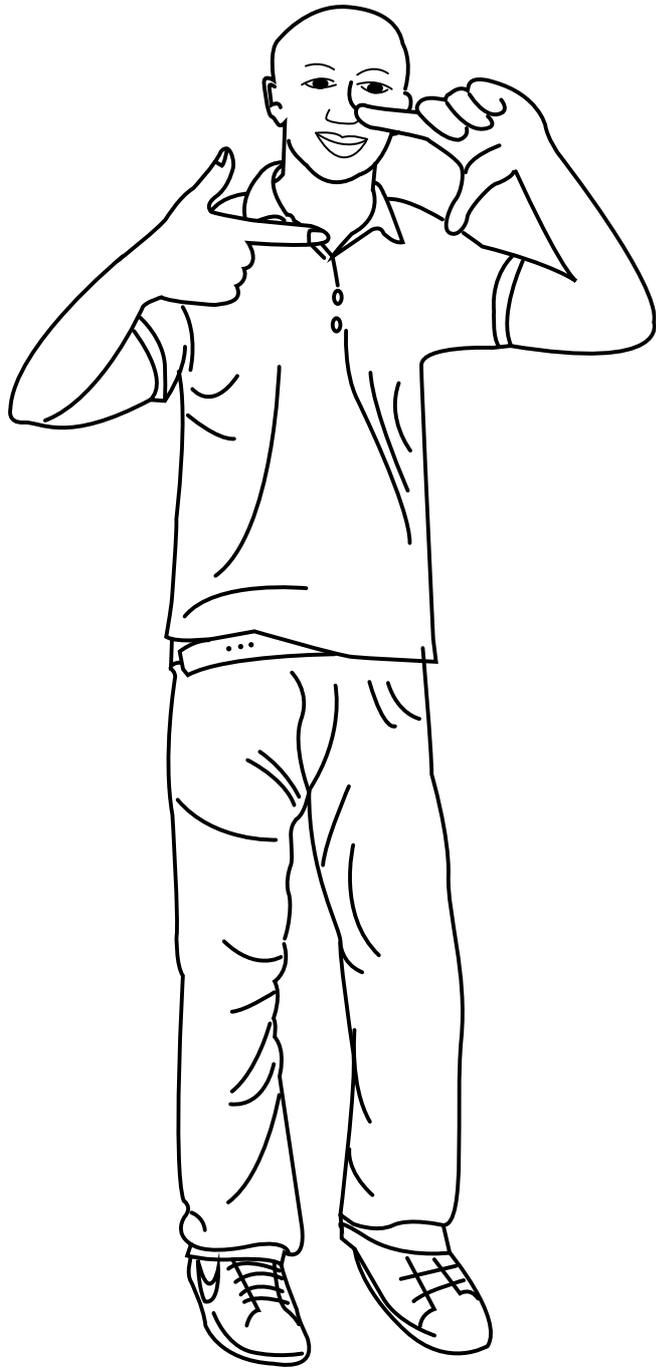
# Knowing Your Own and Others' Preferences for Engaging in Creative Thinking Processes in a Distributed Leadership Team



Knowing your own and others' preferences in a distributed leadership team among multiple partners has important benefits, including:

- transition from the use of judgmental or negative labels when someone has a different way of thinking to an appreciation of differences, thus creating a more positive climate for creative thinking,
- reduction of tension or conflict on a team that has diverse preferences by helping partners recognize how those differences may lead to frustration, sometimes hidden and sometimes overt, when working together to solve problems or produce innovative ideas, and
- improvement in overall performance by revealing biases a team might possess with respect to the creative process, thereby encouraging the team to strive to adequately address all areas of the creative process.

Source: Adapted from Grivas, C., & Puccio, G. (2012). *The Innovative Team: Unleashing Creative Potential for Breakthrough Results*. San Francisco: Jossey-Bass.



## Unit 4

# Field Trip for Monitoring & Evaluation of Sustainable Land Management

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# Module 1

## Planning and Conducting a Successful Field Trip

### Overview

*This module provides guidance on how to plan and conduct a successful field trip for a sustainable land management (SLM) monitoring & evaluation (M&E) course. Lesson 1 describes the steps involved in planning the field trip program. Lesson 2 provides guidance on facilitating a well-planned field trip to ensure an optimal outcome. The Module draws on the experience of a field trip that was conducted in the Lower Burqa Abagabir Watershed, Tigray Region, Ethiopia in April 2014 to provide examples of approaches and tools that can lead to a well-designed and well-appreciated field trip.*

### Time

2-4 weeks

### Lessons

Lesson 1: Planning a Successful Field Trip (2 to 4 weeks)

Lesson 2: Conducting a Successful Field Trip (full 8 hour day)

# Lesson 1 • Planning a Successful Field Trip

## Learning Objectives

Design a stimulating and memorable field based experience for course participants that enables them to learn through direct exposure to SLM and M&E practices in a landscape where such activity is visible.



## Preparation

- ✓ Consider organizations and individuals with whom to plan the field trip and contact them.
- ✓ Consider candidate sites for a successful field trip based on areas where co-organizers have direct experience or good working relationships with organizations and leaders who are knowledgeable about SLM, as well as M&E.
- ✓ Consider when the best day for the field trip would be during the multi-day course; mid-way through often is a good time.

## Procedure

- **Activity 1:** Draft objectives for the field trip.
- **Activity 2:** Form a team with the co-organizers of the field trip.
- **Activity 3:** Decide on appropriate roles and responsibilities in the field trip planning team.
- **Activity 4:** Decide on the scope and location of the field trip.
- **Activity 5:** Specify locations where desired learning activities can occur.
- **Activity 6:** Design an itinerary.
- **Activity 7:** Prepare a description of the field trip program for participants.

## Total Time

2-4 weeks

## Materials

- ✓ Financial resources and access to vehicle for conducting recognizance visit
- ✓ Map(s)
- ✓ Background documents about SLM and M&E in landscape where field trip takes place

## Handouts & Exercises

- **Handout 1:** Handout Example Field Trip Itinerary
- **Handout 2:** Handout Example Field Trip Program Guide
- **Handout 3:** Handout Example Overview Document

## Readings

Ayal, Desalegn Yayeh. 2014. Appraisal of Sustainable Land Management Practices and M&E Methods: A Case Study of Lower Burqa Abagabir Watershed, Tigray Region, Ethiopia.

<http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Appraisal-of-SLM-and-ME-Methods-in-Lower-Burqa-Abagabir.pdf>



## Activity 1

Draft objectives for the field trip. While original objectives will likely need modification as planning for the field trip proceeds, it is important to write them when planning begins, as they will serve as a guide in making decisions throughout the planning process. Examples of possible objectives that can be adapted for the field trip are:

- ✓ Familiarize participants with practical examples of SLM practices that can have landscape-scale impacts,
- ✓ Demonstrate the use of promising or proven approaches or tools for monitoring SLM practices, programs and outcomes, and
- ✓ Share successes and challenges of M&E for SLM in a particular landscape.

## Activity 2

Form a team with the co-organizers of the field trip. While working with a team to plan the course as a whole, form a special team or task force for the field trip to ensure that one or more members are intimately familiar with the landscape to be visited.

## Activity 3

Decide on appropriate roles and responsibilities in the field trip planning team. Like planning for the course as a whole, two distinct categories of activity need to be closely coordinated: the program and the logistics. It can work well to designate leadership for each. Coordination is especially important in the process of interacting with organizations in the landscape that will authorize the visit (if needed) and help deliver the program. An ideal distribution of roles and responsibilities might include one overall coordinator – the team leader responsible for the entire field trip and possibly the course as a whole – together with a team member responsible for the logistical component and another responsible for the program component. Work out specific roles and responsibilities according to needs and human resources available.

## Activity 4

Decide on the scope and location of the field trip. Inquire about transportation options, traveling times and distances to help gauge the extent of area that can be covered and the number of stops that can be made.

## Activity 5

Specify locations where desired learning activities can occur. Have members of the planning team who are knowledgeable about the landscape, SLM and M&E conduct a reconnaissance visit to locate and document prospective learning opportunities. Focus on areas where SLM practices are demonstrated or likely to have landscape scale impacts, and where the use of effective M&E methods can be showcased. Secure the interest and support of organizations in the landscape that can identify and mobilize individuals to speak about particular features, technologies and issues that can help to realize the learning objectives. Consider preparing a case study about the landscape as an output of the reconnaissance visit. This can become a useful background reading for course participants prior to the field trip. Download an example case study at the link in the Reading section at the start of this Lesson.

## Activity 6

Design an itinerary. Specify between 3 and 5 stops for the day, including a lunch stop. Calculate the time required for getting to and from the landscape and moving around within it. If possible, prepare a simple map of the itinerary to share with collaborators and participants. Ensure there are good viewpoints on the itinerary and places where participants can enjoy brief walks to stretch and experience the landscape. See Trainer's Notes for more information and a sample guide for designing an itinerary.

## Activity 7

Prepare a description of the field trip program for participants. Consider including the following components in the program guide:

- ✓ Learning objectives,
- ✓ Observation questions to help participants focus their learning based on what they observe, and
- ✓ An itinerary that specifies the planned activity for each stop.

In addition, to help participants appreciate linkages between SLM practices, potential landscape scale benefits and uses of M&E to build understanding about these relationships, consider preparing an overview of SLM and M&E practices that are evident in the landscape. Information and insight generated from the reconnaissance visit suggested in Activity 5 can aid in preparing the overview. A sample overview document is provided as a handout, and can be adapted.

### Trainer's Notes



When planning the field trip, it is important to include stops at different locations throughout the landscape that highlight a variety of SLM interventions and their potential impacts on local livelihoods, ecological conservation and restoration and sustainable food production. The selection of stops must also provide opportunity to showcase M&E approaches, activities or methods that are being used, or could be used in the landscape with some success.

Each stop should also have an identified resource person who is willing to share their experiences and activities within the landscape. Alternatively, a group of resource people who represent different SLM activities and know the landscape well could accompany the course participants to all stops of the field visit. This would allow them to share their perspective at each stop and produce a more complete picture of integration in the landscape.

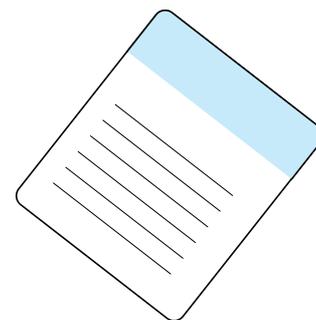
Each stop should last approximately 20-30 minutes, with additional time factored in for travel from one stop to another. When making a schedule of the field stops, be sure to include a description of where each stop is located in the landscape and what activities take place there. If possible, begin with a stop that provides an overview of the landscape to course participants, or end the field trip with a bird's eye view. Allow time to recap once the field visit ends; often this activity can be integrated into the last stop.

### Summary of Main Learning Points

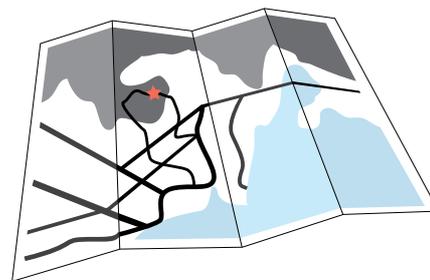
1. The field trip component of an SLM M&E course is an opportunity to bring to life many of the concepts and methods that are addressed in the "classroom" components of the course. It is likely that the field trip will be the most memorable component of the course, whether successful or not. Thus, it is worthwhile to invest the time and effort required to plan an excellent field trip.
2. A field trip provides the opportunity to demonstrate ways that SLM practices can lead to landscape scale benefits for livelihood security, ecosystem service conservation and delivery and sustainable production systems in a real landscape.
3. By observing SLM practices and the M&E used to track their adoption and impact, listening to beneficiaries and other stakeholders tell their stories and discussing innovations and issues, course participants stand to gain rich insight for use in their own programs.

# Handout 1

## Example Field Trip Itinerary



Please note that stops can be designed and put in any order to meet learning objectives. Times will also vary in each itinerary. When possible, it works well to include stops that combine a variety of SLM and M&E activities in one stop.



### [Name of SLM M&E Landscape] Field Visit Guide

Date

#### Stop 1 - 9:00

- ✓ Bird's eye view of landscape (if possible)
- ✓ Provide a brief description of where the stop is located in the landscape and what SLM interventions and landscape changes participants will see.
- ✓ Identify the name of the resource person and what they will discuss.

#### Stop 2 - 11:00

- ✓ Example of SLM water management intervention and participatory M&E approach to tracking changes in water flow
- ✓ Provide a brief description of where the stop is located in the landscape and what participants will see.
- ✓ Identify the name of the resource person and what they will discuss.

#### Stop 3 - 14:00

- ✓ Example of SLM hillside terracing intervention and soil organic matter assessment to track change in soil quality
- ✓ Provide a brief description of where the stop is located in the landscape and what participants will see.
- ✓ Identify the name of the resource person and what they will discuss.

#### Stop 4 - 16:00

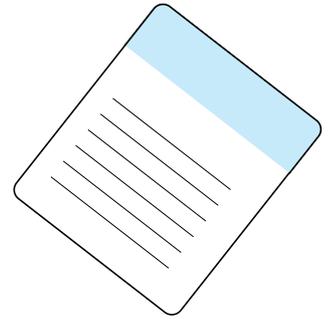
- ✓ Example SLM fruit and vegetable production made possible by changes in water management activity and ground-based photo-monitoring method of tracking change in land use
- ✓ Provide a brief description of where the stop is located in the landscape and what participants will see.
- ✓ Identify the name of the resource person and what they will discuss.

#### Trip ends and recap – 18:00

# Handout 2

## Example Field Trip Program Guide

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*Lessons from Successful M&E for SLM in the lower Burqa Abagabir Watershed, Raya Azebo District, Tigray, Ethiopia*

*Thursday April 24, 2014*

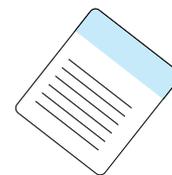
### *Objectives*

- ✓ Familiarize participants with practical examples of SLM practices that can have landscape-scale impacts.
- ✓ Familiarize participants with promising methods for monitoring and evaluating such practices.
- ✓ Introduce ground-based photo-monitoring (GBPM) as a tool for measuring land use cover.
- ✓ Share successes and challenges of M&E for SLM in the lower Burqa Abagabir watershed case.

### *Observation Questions*

1. What do you think about this M&E system? Does it look similar to your own country or SLM program system for M&E?
2. In what ways may this M&E system inform and improve your own M&E practices?

# Example Field Trip Program Guide



3. What would make this M&E system more helpful?

## Field Trip Program

Departure time from Mekelle: 06:00

Time	Name of Stops	Description/Points of Interest	Key M&E Aspects in the Landscape	Presenters
09:00	Tsega	<p>Gully check dam, trench, roof water harvesting, enclosure, biological (e.g. soil and plant structure, safflower, sunflower, geisho)</p> <p>livelihood diversification (beekeeping, fattening, fruit and vegetable cultivation, zero grazing), threats (gully, deforestation)</p> <p>Panoramic view of treated and untreated hillside</p>	<p>Biophysical and livelihood effect of integrated SLM practices</p> <p>M&amp;E experience Practical utilization of GBPM to assess SLM</p>	<p>Mulate, District SLM Coordinator and Tuemay Ashebre, community watershed team member</p> <p>Participatory watershed management concept in Ethiopia</p> <p>Overview of SLM program in the District</p> <p>Tsega SLM practices and monitoring successes</p> <p>Weekly, monthly and bi-annual monitoring practices with all stakeholders</p> <p>Ayal Desalegn, EcoAgriculture Partners</p> <p>Ground-based photo-monitoring (GBPM) as means of measure for land use cover</p> <p>John Recha, EcoAgriculture Partners</p> <p>Landscape-scale benefits of SLM practices in Tsega</p>
09:40	Weinalem (river diversion point)	River water diversion structure, terracing and stone bunds for irrigation	<p>Dual purpose of river diversion to control soil erosion and sedimentation and conserve water for vegetable and fruit production</p> <p>Monitoring water flow and distribution for irrigation</p>	<p>Mulate, District SLM Coordinator and Zenabu Reda, community watershed team member</p> <p>The nature of rainfall and its adverse effects (flooding, erosion and sedimentation) in the watershed</p> <p>Monitoring water flow and distribution for irrigation</p> <p>Ayal Desalegn, EcoAgriculture Partners</p> <p>Multipurpose uses for the river diversion and level of adoption</p> <p>Landscape-scale benefits and tracking change using GBPM</p>

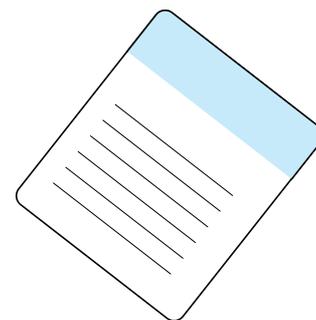
# Example Field Trip Program Guide



<i>Time</i>	<i>Name of Stops</i>	<i>Description/Points of Interest</i>	<i>Key M&amp;E Aspects in the Landscape</i>	<i>Presenters</i>
10:20	Weinalem (nursery plantation site)	Tree nursery with indigenous species (e.g. Gesho), exotic species (e.g. papaya) and moringa species managed by landless youth	<p>Role of seedlings for job creation and rehabilitation in the landscape</p> <p>Monitoring growth of seedlings, rehabilitation of hillsides and job creation for youth</p>	<p>Mulate, District SLM Coordinator and Hailu Kebede, Youth group chair man, Weinalem Nursery</p> <p>The role of seedling plantations to sustain the nursery and provide means of income to the youth</p> <p>Landscape impacts from rehabilitation</p> <p>John Recha, EcoAgriculture Partners</p> <p>The role of vegetation cover for improving soil organic matter</p> <p>Monitoring soil organic matter in the landscape</p>
11:30-12:15	Mehoni	Lunch		
13:15	Embahasti, Endamkoni District	Kolla Embahasti micro-watershed hill side development, bench terrace, night storage (water harvesting structure), vegetables and fruit trees	<p>SLM practices in Kolla Embahasti</p> <p>Weekly, monthly and seasonal M&amp;E practices in the Kolla Embahasti micro-watershed</p>	<p>Amare Habitmariam District SLM Coordinator</p> <p>Level of adoption of SLM practices and landscape-scale benefits in Kolla Embahasti</p> <p>Mehari Gebremdhin and Twodros Gebreegiabher, Ministry of Agriculture/GIZ</p> <p>Monitoring in Kolla Embahasti micro-watershed</p>
15:45	Mekelle	Tea/Coffee Break		
16:15-17:00	Meeting Room, Axum Hotel	Reflection on Field Trip		

# Handout 3

## Example Field Trip Overview Document



### Overview of SLM Practices and M&E Methods: A Field Visit to Lower Burqa Abagabir Watershed, Tigray Region, Ethiopia

The lower Burqa Abagabir watershed in Tigray, Ethiopia is a rugged environment with little vegetative cover. Having a very fragile environment, the Tigray region is classified under arid and semi-arid agro-ecological conditions characterized by high temperature, erratic rainfall and frequent drought. The lower Burqa Abagabir watershed is one area in the region severely affected by land degradation. Decreasing rainfall, increasing temperature and rainfall intensity and steep topography are the main natural factors for different types of environmental degradation in the area, such as gully development, sheet erosion, rill erosion and deforestation. Human factors that have contributed to degradation include population growth and increases in the demand for cultivable land, fuel wood, water and other natural resources.

#### SLM Practices

To address this degradation, integrated SLM practices have been initiated through the coordinated efforts of the federal and regional governments, development agencies, NGOs, research institutes, farming communities and donors. SLM practices have led to numerous benefits in the lower Burqa Abagabir watershed, including:

- Improvements in vegetation cover,
- Proliferation of formerly endangered plant species,
- Reappearance of springs and rivers,
- Increases in rural incomes through enhanced crop and livestock productivity, diversification of livelihoods and adoption of better technology, especially high yielding crop and livestock varieties, and
- Significant changes in the attitudinal and behavioral conditions of farmers.

Specific SLM practices have also resulted in landscape-scale benefits:

SLM Practice	Adoption Level	Landscape-Scale Benefit(s)
Hillside terracing	High	Reduce the velocity of runoff, minimize erosion, increase soil fertility, rehabilitate forests
Percolation deep/normal trenching	Medium	Enable rain water harvesting, enhance underground water recharge, control sediments, rehabilitate degraded landscapes
Pond construction/ water harvesting	High	Harvest rain water for domestic purposes, livestock and vegetable and fruit production
River water diversion	Low	Enable use of water for irrigation, regulate river water flow
Stone bund	High	Reduce the velocity of runoff, minimize erosion, increase soil moisture, restore barren land, increase crop production
Spate (type of diversion technology)	High	Reduce the velocity of runoff, minimize erosion, stimulate irrigation practices, increase crop production
Gully treatment (gully check dam, gully diversion)	High	Enhance recharge of underground water, retain moisture, prevent land degradation, trap sediment, encourage cash crop production (e.g. Gesho)
Tree plantations	High	Improve vegetation coverage, reduce erosion, increase land pasture productivity, increase number of wild animals
Grass planting	Medium	Control erosion and provide source of grass to forage and cover house roof
Additional income streams (honey, vegetables)	Medium	Reduce pressure of land degradation and support watershed sustainability

# Example Field Trip Overview Document



## Monitoring and Evaluation System

Stakeholders utilized a Joint Monitoring Mission (JMM) to trace the change of SLM practices on the lower Burqa Abagabir watershed. The JMM approach engages stakeholders in monitoring and evaluation. In the JMM, federal experts, the regional bureau, district offices and the community evaluate the SLM performance qualitatively (i.e. through discussion). In the watershed, stakeholders used observation as a tool to take corrective measures.

One tool that could be used in the future to improve the M&E system is the ground-based photo-monitoring technique (GBPM). It is an effective M&E tool that could show directions of change over time if taken repeatedly

at selected photo points. However, current limitations to GBPM include:

- Lack of training in camera operation,
- A shortage of tools such as GPS, camera, compass, external hard disc, desktop computer and laptop, and
- Only 2 computers for 24 personnel, which are frequently infected by computer viruses.

The GBPM M&E tools utilization is hampered by technical knowhow and infrastructure. We propose the government, NGOs and the community should use GBPM to document SLM intervention effects. Hence, priority should be given to digital infrastructures, facilities and knowhow to use GBPM as an M&E tool.

**Photo-point Name:** Tsega-001

**Date:** 11 January 2014

**Photographer:** Lindsay Myron

**Location Description:** Kase, looking east, above a gully

**GPS Coordinates:** "T01-0011"  
S 12° 26' 14.5" E 32° 21' 32.8"

**Weather:** Hot and dry, hazy, no clouds, bright sun

**Field Notes:** Mountain in middle ground, ~70% slope, deep trenches



<i>Photo Name (coded)</i>	<i>Photo Filename</i>	<i>Compass Direction</i>	<i>Keywords</i>
T01-140111-001-001	BON_0048.JPG	130°	Key words: reshaped gully, deep trenches, chochineal insect, percolation channel and pond, sunflower, safflower, gully erosion, cactus, shallen, Geisho

## Lesson 2 • Conducting a Successful Field Trip

### Learning Objectives

Conduct a stimulating and memorable field based experience for course participants that enhances their learning through direct exposure to SLM and M&E practices in a landscape where such activity is visible.



### Preparation

- ✓ Review and adapt (if necessary) the field trip planning activities described in [Unit 4, Module 1, Lesson 1](#).

### Procedure

- **Activity 1:** Conduct a field trip.

### Time

Full 8-hour day

### Materials

- ✓ Water
- ✓ Lunches
- ✓ Handouts

### Readings

Documents created in Lesson 1 of this module:

- ✓ Field Trip Program Guide
- ✓ Example Overview Document (optional)
- ✓ Case Study (optional)

## Activity 1

Conduct a field trip. Implement the field trip based on the activities carried out in Lesson 1 of this module. Refer to Trainer's Notes for further recommendations to successfully conduct the field trip.

### Trainer's Notes

Stay on schedule. Take measures to begin the field trip on time. The day before the field trip, stress to participants the importance of arriving for the bus at the designated meeting place on time. Throughout the field trip ensure the group does not over-stay time scheduled at each stop. The program will lose some of its learning value and cause inconveniences if it is running chronically late.

Orient participants to the objectives, program and itinerary. Provide participants with Field Trip Program Guide (optional: Overview Guide, Case Study). En route to the landscape and throughout the trip, comment on relevant features visible from vehicles.

Ensure optimum interaction. At each stop, ensure speakers can be heard and everyone can see examples. Provide time at each stop for participants to ask questions.

Wrap up the field trip with a reflection. At the last stop, seek spontaneous feedback from participants. Ask a few general questions about what they consider highlights of the day and how the experience affected them.



### Summary of Main Learning Points

1. Ensure the team demonstrates their facilitation skills during the field trip to make participants comfortable and confident and to maintain the planned schedule.
2. Work together in a supportive way to ensure that participants are clear about expectations, able to hear and observe what the program has to offer at each stop and are encouraged to ask questions and make comments.
3. Help participants make linkages among different stops on the itinerary and among the key learning elements of the field trip program (SLM practices, landscape-scale benefits and M&E methods that help to document landscape SLM).

## Unit 5

# Innovations in Sustainable Land Management Monitoring & Evaluation Systems



# Module 1

## Means of Measuring Landscape Change

### Overview

*The first lesson of this module introduces strong tools for measuring SLM indicators. The second lesson offers leaders insight into establishing a baseline against which stakeholders can engage in evaluating change in landscape performance stemming from SLM interventions.*

### Time

2 hours 45 minutes

### Lessons

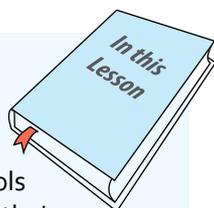
**Lesson 1: Strong Tools for Measuring SLM Indicators of Change (1 hour 45 minutes, see preparation options)**

**Lesson 2: Designing a Baseline for Assessing Change in Landscapes (1 hour)**

# Lesson 1 • Strong Tools for Measuring SLM Indicators of Change

## Learning Objectives

Appraise innovative and effective means of measuring indicators using tools that participants can adapt and apply in their M&E projects and programs.



## Preparation

- ✓ Review the handouts on five strong tools: 1) the Landscape Performance Scorecard, 2) Soil Organic Matter Assessment, 3) Ground-Based Photo-Monitoring, 4) Spatial Planning and Monitoring with Maps and 5) Landscape Measures Resource Center (LMRC). Become familiar with the background resource materials identified in the handout for each tool.
- ✓ Review the PowerPoint on visual assessment of soil organic matter, which can be downloaded at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/Visual-assessment-of-soil-organic-matter-PPT.pdf>.
- ✓ Make a choice regarding the procedure to use, depending on the amount of lead-time possible to devote to preparing for the lesson and the desirable depth of exposure to the tools during the training course. The procedure specified in this lesson is based on engaging participants prior to the course or at its beginning to become sufficiently familiar with one of the tools to help instruct others in its use.
- ✓ Form five cross-project, multi-country groups of participants. Assign each group the responsibility of delivering a 15 minute presentation on one of the five tools based on the handout and the reading provided for each tool. Ask the participant groups to include the following elements in their presentations: 1) a brief description of the tool, what it is designed to do, how it is meant to work and what makes it promising, 2) two brief examples of how the tool might be used to enhance SLM M&E

systems that are familiar to presenters and 3) one or two possible problems or concerns about using the tool in the context of the familiar SLM M&E systems discussed. Try to engage all members of the group in the presentation: ask that one member provides the overview, others provide examples of potential uses, others identify prospective constraints in integrating it into their M&E systems and one wraps-up the presentation. Stress the importance of delivering the session succinctly within the 15 minutes allowed.

- ✓ If time for preparation and delivery is limited, simplify the delivery method and reduce the time. In this case, prepare to spend 5 minutes introducing each tool as you provide the handouts on each, and encourage participants to explore the use of the tools in their own setting after the course is over. Or, choose some of the tools to cover in more depth within the time available.

## Procedure

- **Activity 1:** Introduce five strong tools for measuring SLM indicators of change. (10 minutes)
- **Activity 2:** Groups present five strong tools (1 hour 15 minutes)
- **Activity 3:** Guide a plenary discussion on the use of strong tools to measure landscape SLM indicators. (15 minutes)
- **Activity 4:** Wrap-up and ask for questions. (5 minutes)

## Time

1 hour 45 minutes

## Materials

- ✓ Laptop
- ✓ Projector

- ✓ Screen
- ✓ Flipchart
- ✓ Markers

### Handouts & Exercises

- **Handout 1:** Landscape Performance Scorecard
- **Handout 2:** Management and Monitoring of Soil Organic Matter
- **Handout 3:** Ground-Based Photo-Monitoring
- **Handout 4:** Spatial Planning and Monitoring of Landscape Interventions: Maps to Link People with Their Landscapes
- **Handout 5:** Landscape Measures Resource Center

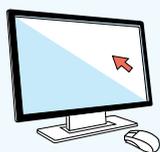
### Readings

Guidelines for Using the Landscape Performance Scorecard [www.landscapemeasures.info/?p=93](http://www.landscapemeasures.info/?p=93)

McGarry, D. A Methodology of a Visual Soil Field Assessment Tool. FAO. [ftp://ftp.fao.org/agl/agll/lada/vsfast\\_methodology.pdf](ftp://ftp.fao.org/agl/agll/lada/vsfast_methodology.pdf)

Lassoie, J.P., L. Myron, and L.E. Buck. 2014. Ground-Based Photo-Monitoring of Landscape Changes Arising from Sustainable Land Management Practices: A User's Guide. Washington, DC: EcoAgriculture Partners. <http://ecoagriculture.org/publication/a-landscape-perspective-on-monitoring-evaluation-for-sustainable-land-management/ground-based-photo-monitoring-of-landscape-changes-arising-from-sustainable-land-management-practices/>

Willemen, L., R. Kozar, A. Desalegn, and L.E. Buck. 2014. Spatial Planning and Monitoring of Landscape Interventions: Maps to Link People with their Landscapes: A User's Guide. Washington, DC: EcoAgriculture Partners. <http://ecoagriculture.org/publication/a-landscape-perspective-on-monitoring-evaluation-for-sustainable-land-management/spatial-planning-and-monitoring-of-landscape-interventions-maps-to-link-people-with-their-landscapes/>



Landscape Measures Resource Center  
Data Collection Tools [www.landscapemeasures.info/?p=21](http://www.landscapemeasures.info/?p=21)

## Activity 1

Introduce the idea of a “strong tool” in a landscape SLM monitoring and evaluation system. A strong tool provides a means of measuring key indicators of landscape performance, especially integrative indicators and leverage indicators. These tools have several important properties such as: ease of use, propensity to generate valuable (reliable, valid) data about integrative or leverage indicators, propensity to engage diverse stakeholders in using it and affordable to acquire and adapt.

Ask participants to identify strong measurement tools that they have used, or that their M&E projects and programs are using at present, and have participants suggest what makes each tool strong. List the responses on a flip chart. Probe to ensure that tools for measuring social phenomena as well as biophysical characteristics of SLM programs and outcomes are listed. Ensure also that tools for generating quantitative as well as qualitative data are listed. After listing 4-5 measurement tools in use by current SLM M&E systems and characteristics that make them strong, summarize that a wide variety of methods can be used to measure key SLM and landscape performance indicators. Deciding which to use should be a matter not of habit, but of considering innovative way(s) to use ensure that the measurement component of the M&E system contributes to collaborative landscape management. Finally, indicate that participants will spend the next hour and fifteen minutes learning about five potentially strong tools that may aid in developing innovative and robust means of measuring conservation, production, livelihood and institutional indicators of change in landscape performance.

## Activity 2

In this activity, groups present the five strong tools. Ask each group to deliver the learning exercise as follows:

1. overview of the strong tool,
2. examples of possible uses of the tool in participant's M&E systems,
3. potential constraints in making use of the tool in their programs, and
4. wrap-up.

## Activity 3

Facilitate discussion about the potential value of the measurement tools that have been presented. Begin by asking, based on the presentations, if any of the tools seem likely to have a place in participants' SLM programs or project M&E systems. Why? Why not? Which of them seem especially promising? Which seem particularly problematic? What actions might be taken to encourage the use of the most promising tool(s) in participants' programs?

## Activity 4

Wrap-up the session about strong tools with thoughts that you synthesize from the presentations and discussion.

- The tools presented and discussed are simply examples of a few that may have possible roles in SLM M&E programs; many possible measurement tools could be assessed for their potential as strong tools for landscape monitoring and management.
- There has only been time to briefly introduce how these tools might be used and adapted in various M&E systems, and until one gains experience with them it is difficult to assess their value as a strong tool. Participants might want to consider choosing one or two tools to gain experience with and share experiences with others.
- If some of the tools are appealing to several or many country and project-based M&E systems, their coordinated use could contribute to harmonizing landscape SLM M&E across different geographical and programmatic regions in the TerrAfrica platform.
- If more than one of the tools discussed (including the variety of data collection tools that are available through the LMRC) is appealing, participants may want to consider combining them to help the M&E team and SLM program stakeholders tell robust and compelling stories about managing change in SLM landscapes.

### Trainer's Notes

If one or more of the five tools presented in the handouts is especially appealing to you and your training team, you may choose to allocate proportionately more time in the lesson to those. Also, if members of your training team have direct experience with any of the tools described in the handouts, find roles for them to share their valuable insight. Stress that these are examples of a few strong tools and that there are many others in use and on the cusp of being developed. From this lesson, participants should gain a way of thinking about and evaluating what might be a strong measurement tool in their program.

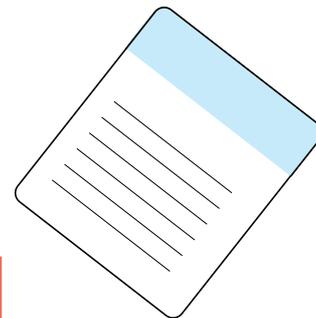


### Summary of Main Learning Points

1. Participants are already using numerous effective tools for measuring SLM indicators.
2. The five "strong tools" presented in the handouts have been selected or invented to measure integrative and/or leverage indicators of landscape change. Data generated from use of the tools should help foster cross-sectoral insight about landscape-level change in SLM projects and programs; as such, they may add value to existing SLM M&E systems.
3. Gaining practice with the tools presented in this lesson is needed to evaluate their potential place in participants' M&E "toolbox." Sharing experiences with other SLM M&E teams about the use and value of the tools will accelerate the evaluation process and may help promote harmonization across M&E systems within the TerrAfrica SLM platform.

# Handout 1

## Landscape Performance Scorecard



Landscape performance scoring brings together stakeholders involved in managing a landscape to assess the status of their landscape with respect to key four goals: 1) ecological conservation, 2) agricultural production, 3) livelihood security and 4) institutional capacity for integrated landscape management.

The activity uses a Landscape Performance Scorecard that is organized around 20 criteria for landscape performance. Participants in the activity score each criterion on a scale of 1 to 5 based on their best judgment about how well or how poorly the landscape is performing in each.



The scores of all participants in the activity are combined to give a picture of landscape performance for each of the four goals and for the landscape as a whole. Reviewing the results of the scoring analysis can help foster discussion among participants about strengths and weaknesses of the landscape and what might be done to improve performance in the future. Results can also be used to track change in the landscape over time.

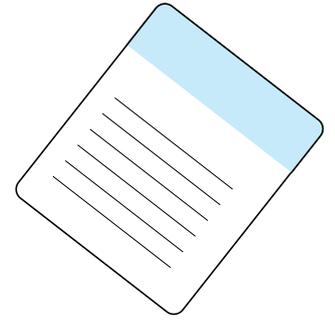
For detailed guidance and materials for conducting a landscape scoring activity, visit the Landscape Measures Resource Center at [www.landscapemeasures.info/?p=93](http://www.landscapemeasures.info/?p=93).



*Stakeholders in the Lari Landscape of Kenya's Aberdare Range discuss landscape performance.*

# Handout 2

## Management and Monitoring of Soil Organic Matter



### What is Soil Organic Matter (SOM)?

Organic matter is made up of different components that can be grouped into three major types.

- Plant residues and living microbial biomass
- Active soil organic matter (detritus)
- Stable soil organic matter (humus)

The living microbial biomass includes the microorganisms responsible for decomposition (breakdown) of both plant residues and active soil organic matter (SOM) or detritus. Humus is the stable fraction of the soil organic matter that is formed from decomposed plant and animal tissue. It is the final product of decomposition. The first two fractions contribute to soil fertility as they break down, releasing plant nutrients such as nitrogen, phosphorus, potassium, etc. The humus fraction has less influence on soil fertility because it is the final product of decomposition (hence the word “stable”). However, humus is still important for soil fertility management, contributing to soil structure, soil tilth and cation exchange capacity (the ability of the soil to hold onto and supply over time essential nutrients such as calcium, magnesium and potassium). Humus is also the fraction that darkens the soil’s color.

### Landscape-Scale Benefits of Stable SOM

There are numerous benefits to having a relatively high stable organic matter level in an agricultural soil. These benefits can be grouped into three categories: physical, chemical and biological.

#### *Physical Benefits*

- Enhances aggregate stability, improves water infiltration and soil aeration and reduces runoff
- Improves water holding capacity
- Reduces the stickiness of clay soils, making them easier to till
- Reduces surface crusting, facilitating seedbed preparation

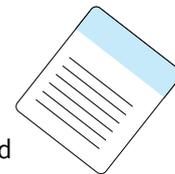
#### *Chemical Benefits*

- Increases the soil’s cation-exchange capacity
- Improves the ability of a soil to resist pH change, also known as buffering capacity
- Accelerates decomposition of soil minerals over time, making the nutrients in the minerals available for plant uptake



*Soil organic matter is an important indicator of landscape performance.*

# Management and Monitoring of Soil Organic Matter



## Biological Benefits

- Provides food for the living organisms in the soil
- Enhances soil microbial biodiversity and activity, helping in the suppression of diseases and pests
- Enhances pore space through the actions of soil microorganisms, which helps to increase infiltration and reduce runoff

## Visual Assessment of SOM in the Landscape

**Smell:** The more fertile a soil, the higher the amount of SOM and the stronger the musty/earthy smell. Another aspect of soil smell is to test that the soil is not too sour (low pH due to unbalanced organic acids), which can be quantitatively assessed by a soil pH measurement (using pH paper).

**Friability:** The friability of a soil is a good sign of the level of SOM. The soil should feel crumbly due to good aggregate structure, which indicates high biological activity.

**Color:** Generally as a soil improves under good management, its color should darken due to the increased SOM.

**Earthworm Counts:** An easily quantifiable method of assessing the SOM level is to count and identify the earthworms present. It is mostly the case that more earthworms means better soil. Some species (e.g. *Aporrectodea caliginosa*) are better indicators of good soil conditions than others. *Aporrectodea caliginosa*, also known as the grey worm, has a body length of 5-15 cm. Longer body length indicates more SOM. Earthworm activity in the subsoil can also be seen as the old worm burrows fill in with dark stable humus-soil particles.

**Litter Decomposition:** Perhaps the most direct assessment of SOM is to observe the rate at which litter is decomposed. This can be done by field observation of length of time for "aboveground" or incorporated crop residues to "vanish."

## Management of SOM in the Landscape

Over time, the application and incorporation of organic materials can result in an increase in stable SOM levels. Sources of organic materials include crop residues, animal manure, compost, cover crops (green manure), perennial grasses and legumes. The quickest increases are obtained with sources that are high in carbon such as compost or semi-solid manure. Some on-farm practices help maintain or increase soil organic matter levels.

**Adopt Conservation Agriculture Practices:** Tillage exposes the organic matter to air and results in the lowering of

stable organic matter due to increased mineralization rates and erosion losses.

**Rotate Annual Row Crops with Perennial Grass or Legume Sod:** This reduces erosion and builds up organic matter as a result of the decomposition of the root mass.

**Establish Legume Cover Crops:** This enhances organic matter accumulation by providing the nitrogen needed for decomposition of freshly added organic materials, especially those with a high carbon to nitrogen ratio (maize stover, cereal straw, heavily bedded manure, etc.).

**Avoid Soil Compaction:** Compaction increases waterlogging.

**Maintain Proper pH:** This enhances microbial activity and decomposition of freshly added materials.

In addition to the amount and source of organic material added and tillage and rotation practices, actual buildup of stable organic matter also depends on precipitation, microbial communities, soil temperature, moisture holding capacity, type, drainage class, and pH.

## Monitoring SOM

To get an idea of the effect of farm management practices on soil organic matter buildup or decrease, soil samples should be taken over time. Although other tests are available, most laboratories will do a loss-on-ignition test to estimate the organic matter content of the soil. In the laboratory, soil is exposed to 105°C for 1.5 hours to remove soil moisture and then to 500°C for 2 hours to determine loss-on-ignition. It is important to consistently use the same laboratory service for accurate records over time.

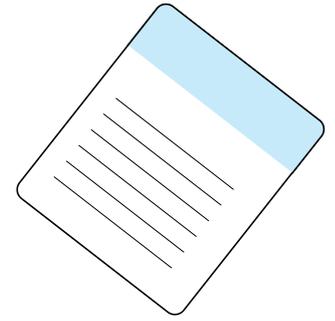
## Further Reading

Carter, Martin R. 2002. Soil Quality for Sustainable Land Management: Organic Matter and Aggregation Interactions that Maintain Soil Functions. *Agronomy Journal* 94: 38-47. [www.dzumervis.nic.in/pdf/Soil%20Quality%20for%20Sustainable%20Land%20Management.pdf](http://www.dzumervis.nic.in/pdf/Soil%20Quality%20for%20Sustainable%20Land%20Management.pdf).

McGarry, D. A Methodology of a Visual Soil Field Assessment Tool. FAO. [ftp://ftp.fao.org/agl/agll/lada/vsfast\\_methodology.pdf](http://ftp.fao.org/agl/agll/lada/vsfast_methodology.pdf).

Sanchez, P.A., Palm, C.A., Buol, S.W. 2003. Fertility capability soil classification: a tool to help assess soil quality in the tropics. *Geoderma* 114: 157-185. <http://www.sciencedirect.com/science/article/pii/S0016706103000405>.

# Handout 3



## Ground-Based Photo-Monitoring of Landscape Changes



Ground-Based Photo-Monitoring (GBPM) is a method of documenting and assessing visual changes in landscapes over time by repeatedly taking photographs from the same location. GBPM can provide unique, useful insights to supplement GIS data and strengthen existing M&E methods. Additionally, in cases where remote sensing techniques are prohibited, unavailable or too costly, GBPM can provide a relatively easy, cost-effective approach to M&E.

### Advantages of GBPM for assisting sustainable land management

1. It uses readily available equipment and is relatively inexpensive, technically simple and easily accessible by a wide variety of individuals.
2. Photographs are easily understood and interpreted by scientists, practitioners and local community members of any education level.
3. When used with an appropriate analytical framework, changes in visual indicators can be linked to management goals and outcomes.
4. Photographs offer a visual base for group discussions of management plans and outcomes.
5. Photographs and their interpretations are easily communicated in public meetings, professional workshops and conferences, scientific publications, project reports and outreach bulletins.
6. Photographs can be integrated easily into existing or future GIS platforms, such as Google Earth and ArcGIS.

### Six steps for developing and implementing a GBPM survey

1. Assemble a GBPM team.
2. Develop a visually descriptive analytical framework based on project objectives.
3. Select representative features in the landscapes, and devise an appropriate sampling scheme.
4. Photograph features of interest in the landscapes, and collect data about the image.
5. Organize, analyze and store the photographs.
6. Compare images over time to assess trajectories of change and evaluate impact.

# Ground-Based Photo-Monitoring of Landscape Changes



## Field-testing GBPM in Tigray, Ethiopia

GPBM was tested in the Burqa Abagabir Watershed in Southern Tigray, Ethiopia in December 2013.

The case study of the field test provides a detailed description of the steps and outcomes and suggests how SLM features in the landscape can be photo-documented to help tell a story of change in the watershed over time. The case study is included in the GBPM User's Guide referenced below.

Lassoie, J.P., L. Myron, and L.E. Buck. 2014. Ground-Based Photo-Monitoring of Landscape Changes Arising from Sustainable Land Management Practices: A User's Guide. Washington, DC: EcoAgriculture Partners. <http://ecoagriculture.org/publication/a-landscape-perspective-on-monitoring-evaluation-for-sustainable-land-management/ground-based-photo-monitoring-of-landscape-changes-arising-from-sustainable-land-management-practices/>.

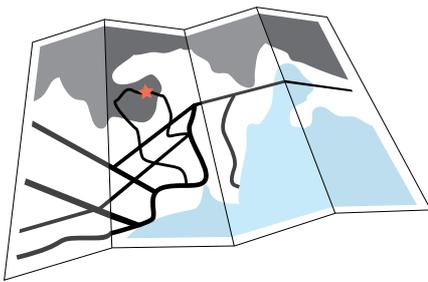
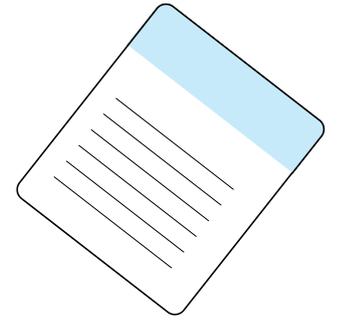


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*An image of the Burqa Abagabir Watershed in Southern Tigray, Ethiopia*

## Handout 4

# Spatial Planning and Monitoring of Landscape Interventions: Maps to Link People with Their Landscapes



The tool "Spatial Planning and Monitoring of Landscape Interventions: Maps to Link People with their Landscapes," developed by EcoAgriculture Partners and Cornell University for TerrAfrica, is designed to stimulate the use of maps in cross-sectoral collaboration for locating, designing and monitoring interventions in rural landscapes. The tool guides key stakeholders through a landscape planning and monitoring processes aimed at integrating goals for agricultural production, biodiversity conservation and livelihood security. The tool first advises on selecting, accessing and tailoring a range of maps that form the crucial basis of this spatially explicit, multi-stakeholder planning process. The use of these maps is described in the following eight steps for the tool depicted on the other side of this handout.

**Step 1:** Stakeholders use a map to point out important areas of landscape benefit supply such as water supply and regulation, crop production, habitat provision and moderation of extreme climate events.

**Step 2:** Stakeholders share ideas and point out areas on a map where changes for improved landscape benefits flows are desired and discuss if and why the landscape has changed there.

**Step 3:** Stakeholders identify the current decision-making stakeholders for these areas.

**Step 4:** Stakeholders carefully describe landscape benefits in a measurable way. Making landscape benefits explicit will help to set and communicate planning goals and track changes to measure impact of the landscape interventions over time.

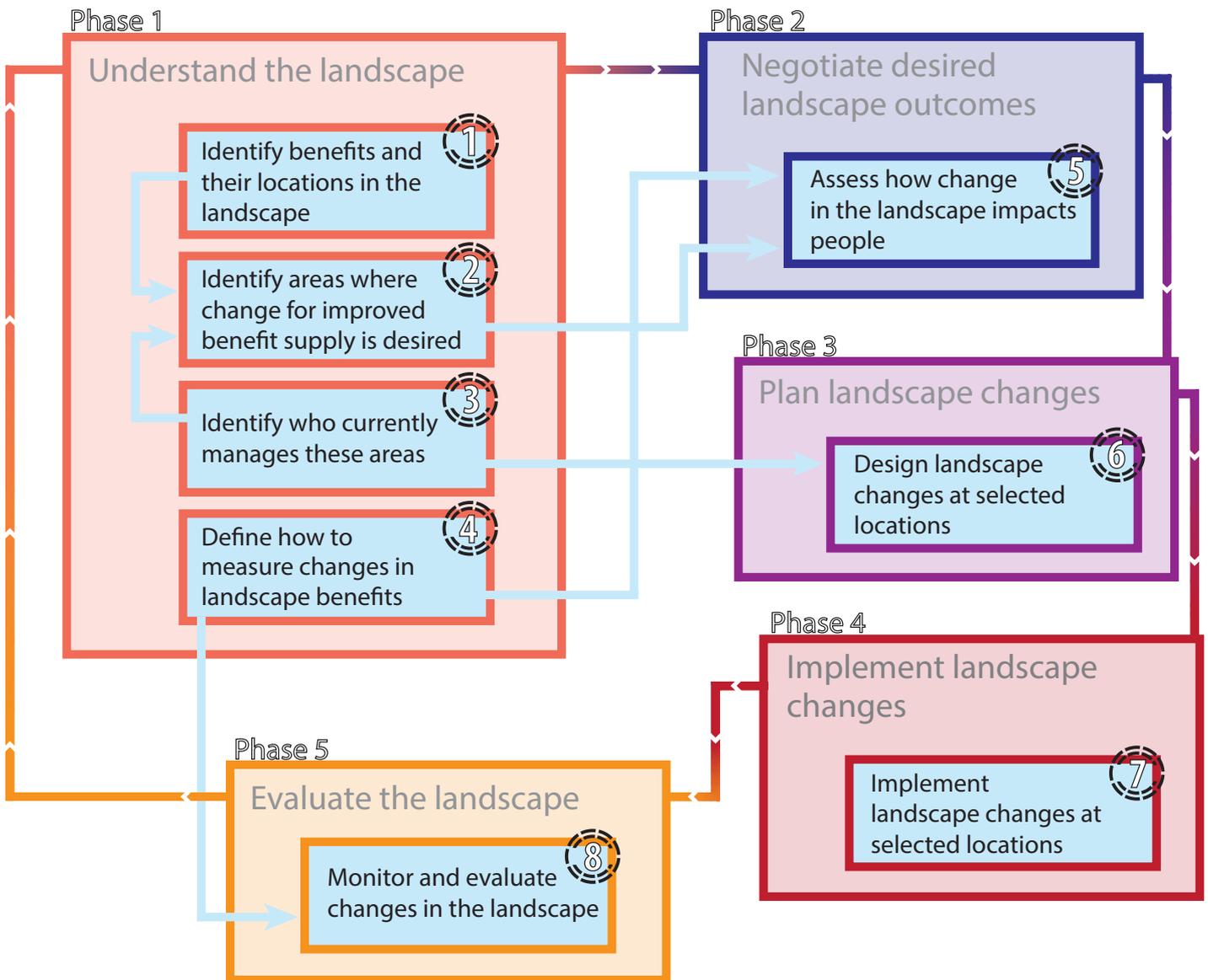
**Step 5:** Based on the specified landscape benefits and selected areas where change is desired, stakeholders use maps to jointly discuss how and where a potential interventions in the landscape will affect different landscape benefit flows and beneficiary groups.

**Step 6:** Stakeholders design landscape intervention(s) using a range of maps and other spatial information (e.g. expert knowledge, location specific weather tables, etc.) and plan for the exact location of the selected intervention.

**Step 7:** Stakeholders implement the intervention using a range of maps and involving relevant decision-makers.

**Step 8:** The last step guides stakeholders in setting up a strategy to monitor and evaluate changes in benefits flows after implementation of the planned intervention. Stakeholders also discuss how to make their landscape planning adaptive to possible future change.

# Ground-Based Photo-Monitoring of Landscape Changes

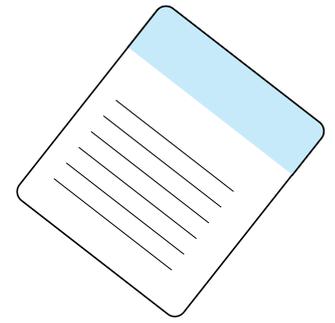


## Using maps to spatially plan and monitor landscape interventions

From: Willemen, L., R. Kozar, A. Desalegn, and L.E. Buck. 2014. Spatial Planning and Monitoring of Landscape Interventions: Maps to Link People with their Landscapes: A User's Guide. Washington, DC: EcoAgriculture Partners. <http://ecoagriculture.org/publication/a-landscape-perspective-on-monitoring-evaluation-for-sustainable-land-management/spatial-planning-and-monitoring-of-landscape-interventions-maps-to-link-people-with-their-landscapes/>

# Handout 5

## The Landscape Measures Resource Center



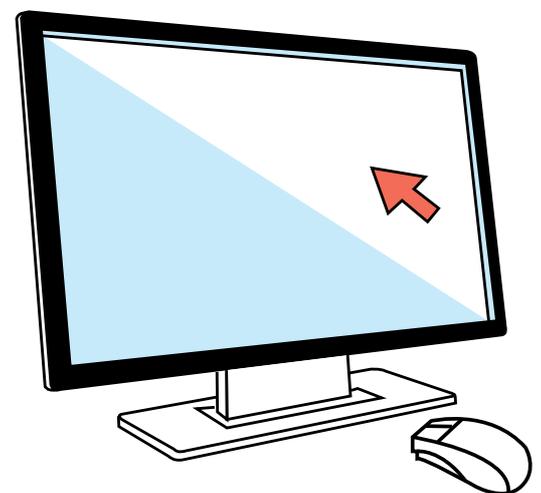
The Landscape Measures Resource Center (LMRC) is a collection of ideas and tools to aid in managing areas where interests in protecting biodiversity, producing food and securing rural livelihoods converge. The LMRC is rooted in the premise that measurement enhances management. Learning to measure how landscapes perform in delivering food, biodiversity and livelihood outcomes is the foundation for understanding how well landscapes perform multiple functions. These measurements also highlight the capacity for sustaining these multiple functions, while reducing or reversing the degradation of natural resources.

The creators of the LMRC recognize producers of crops, livestock, fish and forest resources as stewards of ecosystems and biodiversity. The LMRC is designed to bring the knowledge of these natural resource managers and their supporters to bear on the challenges of landscape measurement and management.

The LMRC is organized around six units that outline a process for assessing the performance of integrated (conservation and production) landscapes. The LMRC also links elements of the landscape assessment process to a variety of tools and resources that enable the practice of landscape measurement. Case studies illustrate the contexts in which LMRC may be a helpful resource, as well as the use of many tools. A glossary provides and defines key terms.

Visit the website to learn more about the Landscape Measures Approach, as well as many of the tools presented in this workshop on Landscape Perspectives for Sustainable Land Management Monitoring and Evaluation.

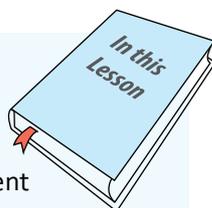
[www.landscapemeasures.info](http://www.landscapemeasures.info)



# Lesson 2 • Designing a Baseline for Assessing Change in Landscapes

## Learning Objectives

Demonstrate an ability to initiate the design of a baseline landscape assessment that engages stakeholders.



## Preparation

- ✓ Read the Landscape Measures Resource Center Unit 5, Establishing a Baseline at: <http://landscapemeasures.info/?p=70>.
- ✓ Ensure participants have access to the LMRC Unit 5.1 (Deciding What to Measure) by sending the link to them in advance of the workshop. If internet access is improbable, print out the home page and selection of key links to share during the course.
- ✓ Prepare a PowerPoint or a flip chart to aid in presenting the introduction learning activity.
- ✓ Consider how best to form groups. Ideally participants from the same or related SLM projects or country programs will comprise the groups to make the exercise as relevant as possible to their work.

## Procedure

- **Activity 1:** Give introductory presentation on designing a baseline for addressing change. (10 minutes)
- **Activity 2:** Facilitate group exercise. (30 minutes)
- **Activity 3:** Guide plenary presentations and discussion. (20 minutes)

## Total Time

1 hour

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Exercise 1:** Initiating the Design of a Landscape Performance Baseline

## Readings

Landscape Measures Resource Center Unit 5, Establishing a Baseline. Focus on Unit 5.1: Deciding What to Measure

<http://landscapemeasures.info/?p=70>



## Activity 1

To introduce the topic, review the purpose of establishing a baseline with participants: to document the status of key indicators of landscape performance prior to implementing interventions through an SLM project or program. Anticipate that all participants will understand the basic premise of a baseline in an M&E system. Stress that the focus of this lesson is to recognize that designing a baseline is the moment in building a landscape M&E system when choices will be made about which performance criteria, indicators and measurement tools you will use. Participants also need to think about who will use the tools, and where and how frequently they will sample.

Up until the baseline design stage, M&E system planning has largely entailed exploring options of what to include in the system. Now is the time to narrow down the choices that best reflect the values and the approach that you want to underlie and guide your M&E system. Time and financial resources might not be available to monitor and evaluate all of the indicators and means of measure that might be interesting to you. Therefore, what do you want to emphasize? Who do you want to involve in the process of designing your baseline, as well as implementing it?

To aid in designing a baseline, consider the following key steps: a) decide what to measure, b) create a measurement plan, c) create a base map, d) decide where and how densely to sample, e) collect and analyze data and f) document your baseline measures. Note that the final step of using data from your baseline to tell a story about the status of your landscape will be discussed in the Unit 5, Module 2.

Remind participants that guidance in undertaking these steps is provided in the LMRC Unit 5 reading.

## Activity 2

Introduce Exercise 1. The purpose of the exercise is to gain practice in initiating the design of a baseline study for a prospective new project or the expansion of an existing SLM project into a new area. The baseline design initiation activity will involve selecting and justifying the choice of a few key indicators, the use of a few strong tools, a spatial sampling strategy and strategies for engaging stakeholders. Ask participants to form groups of at least 4-5 members that correspond with SLM projects or country-based programs they are engaged in. Provide each group with a copy of the exercise instructions.

## Activity 3

Invite each group to use 3-4 minutes to briefly present highlights from their preliminary baseline design exercise using their single-page flip charts. After all of the groups have presented, facilitate discussion around the following questions.

- What similarities did you notice across the group presentations?
- Can you highlight any particularly innovative design features in the presentations?
- How do you think the combinations of indicators and measurement methods that the teams chose for their baseline designs will contribute to documenting and communicating stories of change in prospective SLM landscapes?
- What subsequent steps are needed to advance and complete the baseline designs? Where might you turn for guidance?

Wrap up the discussion with these key points, among other that may seem pertinent:

- We are learning that designing a baseline can be challenging and fun!

- Make sufficient time in the work plan to jointly explore and narrow in on options with teammates and partners. Also plan for time to facilitate a collaborative process of deciding on indicators and measurement methods to help tell stories of change in the project landscape. The investment in generating collective ownership for the design will be rewarded.

### Trainer's Notes

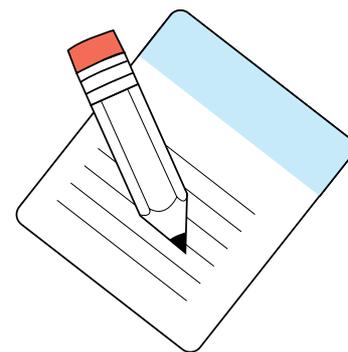
Designing a baseline is a complex process, which deserves considerable time and effort. Ensure participants recognize that this lesson is only an introduction to some of the most interesting and potentially innovative aspects of the M&E design process. Other aspects of designing the baseline will need additional attention in their respective project contexts. In addition to the LMRC Unit 5.1, participants can turn to resources available through their projects and programs for guidance and exchange ideas with other landscape M&E professionals. Forums for potential exchanges are highlighted in [Unit 6](#).



### Summary of Main Learning Points

1. The first measurements that participants take of their landscapes establish the baseline, a “snapshot” of the condition of the landscape prior to SLM program intervention. Choosing the best measures and how measurements should be taken is a pivotal moment in the development of an M&E system. These choices will frame the stories of landscape change that are told into the future.
2. Combining complementary data derived from the selection of “integrative” and “leverage” indicators and using “strong tools” that engage stakeholders in the measurement process will yield robust and compelling stories about landscape change.
3. Robust and compelling stories about landscape change are likely to further engage stakeholders in investing in the management and desired outcomes of the landscape.

## Exercise 1



# Initiating the Design of a Landscape Performance Baseline

Break into groups of 5-6 people that correspond with SLM projects or country-based programs, and identify a group facilitator and a recorder. The facilitator guides the group in the tasks specified below, while the recorder organizes the information onto one flip-chart page for presentation in the plenary session.

1. Outline a sequence of activity that specifies several discrete steps and leads to a choice of 3-4 key indicators, 3-4 strong tools for measuring the indicators and a spatial (location-specific) sampling strategy for telling a story about the status of a prospective new project landscape that will be updated over time (through monitoring and evaluating the chosen indicators).
2. For the key choices you make, suggest how beneficiaries and other stakeholders in the prospective project landscape might be involved in helping to construct the baseline picture and story against which change will be assessed.
3. In preparing your sequence of activity for initiating the design of a baseline study, consider the following: a) What concepts and tools might be useful in deciding what and how to measure in your baseline? b) What strategies and tools might you use to help engage local people in designing and implementing your measurement plan?
4. Prepare to explain your choices in a 3-minute presentation of your preliminary baseline design in plenary, using one flipchart page.

# Module 2

## Enhancing Evaluation in a Landscape Monitoring & Evaluation System

### Overview

*This module pertains to the evaluation phase of the landscape adaptive collaborative management cycle. Lesson 1 offers experience in assessing change in landscapes using multiple performance indicators and measurement methods. Lesson 2 engages in an examination of practical ways to improve a monitoring & evaluation (M&E) system to get better evaluation results.*

### Time

1 hour 35 minutes

### Lessons

**Lesson 1: Telling Stories of Change to Monitor Outcomes and Assess Impacts (50 minutes)**

**Lesson 2: Assessing Opportunities for Improving M&E in SLM Projects and Programs (45 minutes)**

# Lesson 1 • Telling Stories of Change to Monitor Outcomes and Assess Impacts

## Learning Objectives

Demonstrate an ability to use multiple sources of data to tell impactful stories about change in landscapes related to sustainable land management (SLM) projects and programs.



## Preparation

- ✓ Consider referring to and including an image of the adaptive collaborative management (ACM) cycle in your Activity 1 presentation. The cycle is discussed in Unit 2, Module 2, Lesson 2.
- ✓ For Activity 2, identify two participants to present how they use more than one source of data in their projects or programs to tell a story about what is changing as a result of SLM interventions, and how those changes are evaluated. Work with these participants ahead of time to create a brief, impactful PowerPoint presentation on evaluating progress from SLM interventions. If these participants have conducted impact analysis, have them include this in their presentation as well. Ask them to prepare by reading the key points in Activity 1 and Unit 6 of the Landscape Measures Resource Center available at: <http://landscapemeasures.info/?p=167>.

## Procedure

- **Activity 1:** Introduce evaluation in an M&E system for landscape SLM. (10 minutes)
- **Activity 2:** Allow two participants to present examples. (20 minutes)
- **Activity 3:** Facilitate a plenary discussion. (20 minutes)

## Total Time

50 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Readings

Landscape Measures Resource Center. Unit 6. Tracking Change.

<http://landscapemeasures.info/?p=167>



## Activity 1

Introduce evaluation in an M&E system for landscape-scale SLM. It may work well to use a question and answer format to tap into participants' knowledge about M&E and engage them in ensuring a common understanding about the meaning of evaluation in a landscape performance context.

Cover the following key points in your introduction:

- Evaluation is an important phase in the ACM cycle for integrated landscape management. During evaluation, information about progress and impact feeds into an improved understanding about the status of the landscape and types of changes needed to improve management (refer to ACM cycle introduced in Unit 2, Module 2, Lesson 2).
- Tracking change stemming from an SLM initiative involves evaluating progress over time and also evaluating impact.
- Evaluating progress involves asking if the project is on track with regard to its targets or milestones for putting specified activities in place and realizing intermediate, observable outcomes in the

landscape and looking for answers as to why or why not. This type of evaluation is sometimes called “outcome monitoring.”

- Evaluating impact involves asking if long term desired outcomes, such as “beneficiary well-being,” would have come about if the intervention had not been undertaken and comparing what actually happened with what would have happened in the absence of the intervention. Impact evaluation seeks to answer cause and effect questions, looking for changes in outcomes that are directly attributable to the program. The rigor involved in impact analysis makes it relatively knowledge intensive and expensive to undertake.
- By using outcome monitoring (progress evaluation) to tell compelling stories of change across multiple dimensions of landscape performance (i.e. conservation, production, livelihoods and institutions), we can help generate interest and support for SLM initiatives. These stories also deepen understanding by a broad spectrum of stakeholders and investors about trajectories of change in the landscape and prospective outcomes. This understanding will help to adapt and improve sustainable land management in the landscape. And eventually, evidence from outcome monitoring will contribute to rigorous impact analyses.

## Activity 2

Introduce the two participants who will present ways that they use multiple sources of data (including visual images) to tell stories about what is changing in landscapes where they work. Inform participants that they will use 8-10 minutes each to provide a snapshot of progress evaluations (outcome monitoring) that they have been involved in.

## Activity 3

Facilitate discussion about how other participants have used data from multiple sources to tell stories of change in their SLM projects and programs. Document notable points on the flip chart. Organize discussion around the following key questions:

- What are examples of country SLM programs using multiple data sets in evaluating SLM programs?
- Do any of the examples illustrate experiences with tracking change and evaluating impacts with multiple partners? Describe some of the innovative roles that partners and beneficiaries in SLM initiatives have assumed in conducting outcome monitoring or impact evaluation. How does this

involvement enrich the M&E experience and the products?

Ask all participants, including the two presenters from Activity 2, to comment on the following:

- Think about some of the integrative or leverage indicators and measurement tools that you included in your preliminary baseline designs (refer to Unit 5, Module 1, Lesson 2). How might some of these be used to enhance our stories of landscape change and help build an innovative landscape M&E system into our SLP programs?

### Trainer's Notes

The participant presenters should be well-prepared and review their presentation with the facilitation team ahead of time. This will ensure the presentations are brief, yet informative and engaging.



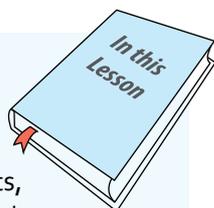
### Summary of Main Learning Points

1. Combining complementary data from diverse sources creates compelling and robust documentation of landscape changes.
2. Data richness improves storytelling and validity of data and engages multiple actors.

# Lesson 2 • Assessing Opportunities for Improving M&E in SLM Projects and Programs

## Learning Objectives

Identify practical ways to implement changes to improve M&E in SLM projects, programs and platforms, thereby improving the quality of evaluation.



## Preparation

- ✓ Review the participants' outputs from the previous lessons.

## Procedure

- **Activity 1:** Introduce lesson on opportunities for advancing an M&E system. (10 minutes)
- **Activity 2:** Facilitate group exercise on advancing M&E systems. (20 minutes)
- **Activity 3:** Lead a plenary discussion and wrap-up. (15 minutes)

## Total Time

45 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Exercise 1:** Opportunities and Strategies for Advancing Your M&E System

## Activity 1

Introduce the lesson by reminding participants of the work they have done up to this point. Distribute exercise worksheets to each participant. Read through each of the following areas of potential opportunity for advancing an M&E system one at a time, adding detail as necessary to ensure everyone understands the meaning of the descriptor.

- Improving your analytic framework, or theory of change, regarding your hypothesized pathway to realizing desired outcomes from your SLM project and program interventions
- Setting landscape outcome goals (conservation, production, livelihoods, institutions)
- Specifying landscape performance criteria
- Engaging multiple partners from diverse sectors
- Choosing cost effective (integrative and leverage) indicators and means of measure
- Capturing data effectively by using strong tools
- Organizing, presenting and communicating data to tell robust and compelling stories of change
- Improving leadership in the M&E system among multiple partners
- Improving opportunities for harmonization at country, regional, continental and global levels
- Improving linkages between costs and benefits of doing M&E (financing M&E)
- Improving opportunities for networking and exchange

## Activity 2

Ask participants to group in pairs or threes, choosing partners with whom they have some project or program activity in common. Referring to the worksheet, ask the groups to brainstorm and share ideas about opportunities for change they might describe for each item. Instruct participants to feel free to treat the sheet as their own individual road-map for change; that group discussion is meant to help stimulate ideas and not to generate a single set of descriptions.

## Activity 3

In plenary, ask participants for an example response for each item in the list of areas of potential opportunity for improving their M&E systems. Encourage as many different participants a turn to speak as possible. Facilitate a wrap up discussion around the following questions:

- How will changes you and your fellow participants have proposed help to make your landscape SLM M&E system more innovative?
- How will changes you have proposed lead to improvements in landscape SLM evaluation (an ultimate goal of an effective M&E system)?
- How will changes you have proposed lead to better harmonized M&E systems across the TerrAfrica M&E platform (an ultimate goal of this course)?

### Trainer's Notes

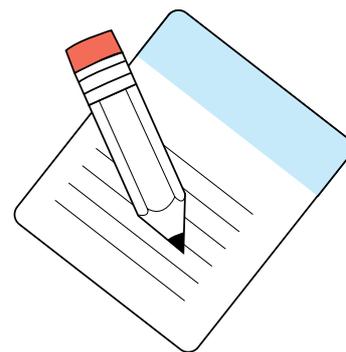
This lesson provides an important opportunity to review the key contents of the course, in addition to stimulating the preparation of an action plan that participants can flesh out and pursue at their places of work following the course. If financial sponsors of some of all of the participants require the preparation of a "follow-up plan" you may want to expand the time and level of effort that goes into to completing the exercise to help meet this requirement.



### Summary of Main Learning Points

1. Lessons learned in this course can be applied to improve individual M&E systems in different contexts.
2. Ideas generated in this course will lead to more innovative and better harmonized M&E systems in the TerrAfrica SLM platform

## Exercise 1



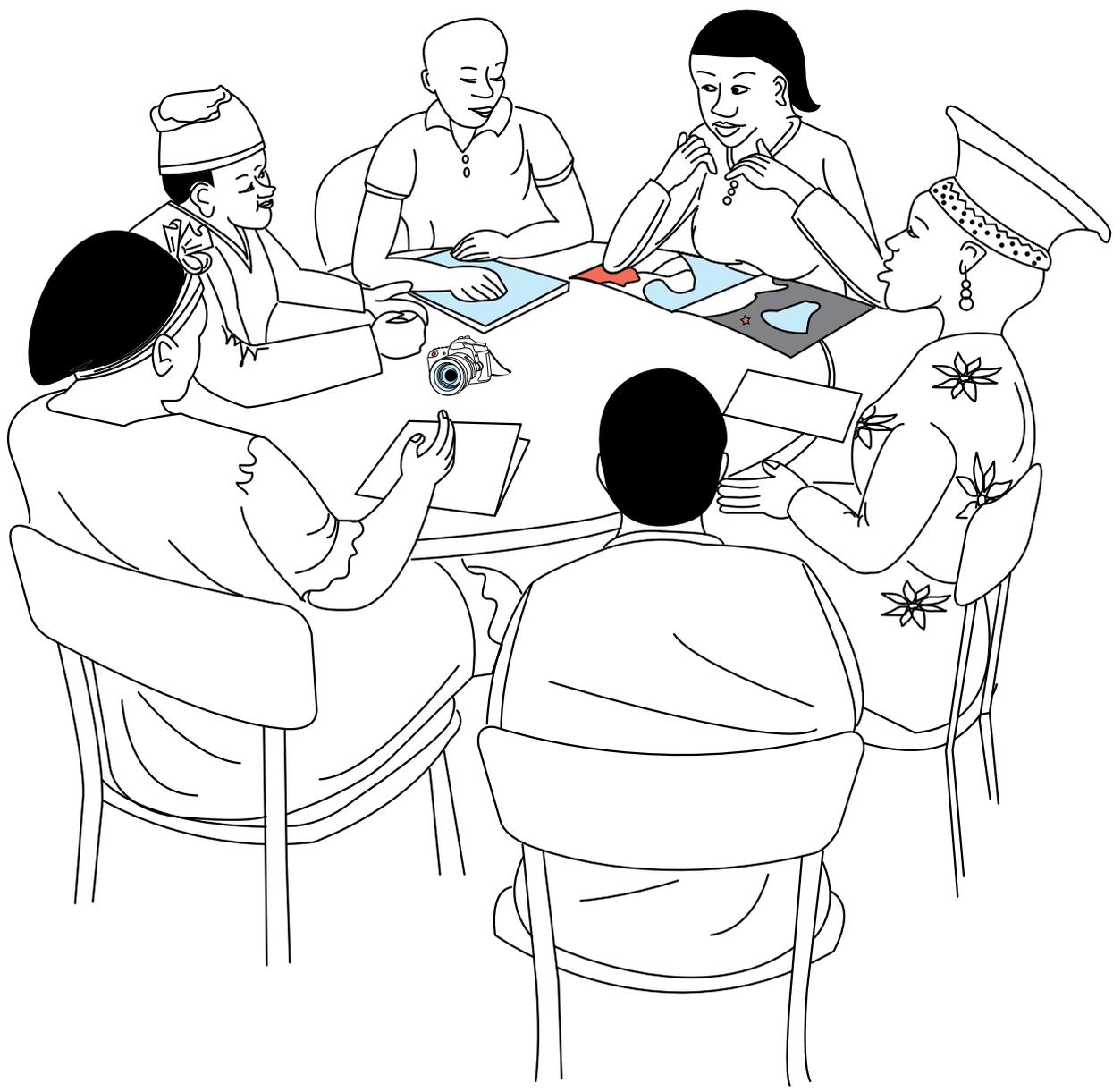
# Opportunities and Strategies for Advancing M&E Systems

Where is there room for improvement in your M&E system based on insights that you may have gained in the past week?

<i>Areas of Potential Opportunity</i>	<i>Briefly describe the opportunity for change</i>
Improving your analytic framework, or theory of change, regarding your hypothesized pathway to realizing desired outcomes from your SLM project and program interventions	
Setting landscape outcome goals (conservation, production, livelihoods, institutions)	
Specifying landscape performance criteria	
Engaging multiple partners from diverse sectors	
Choosing cost effective (integrative and leverage) indicators and means of measure	

<i>Areas of Potential Opportunity</i>	<i>Briefly describe the opportunity for change</i>
Capturing data effectively by using strong tools	
Organizing, presenting and communicating data to tell robust and compelling stories of change	
Improving leadership in the M&E system among multiple partners	
Improving opportunities for harmonization at country, regional, continental and global levels	
Improving linkages between costs and benefits of doing M&E (financing M&E)	
Improving opportunities for networking and exchange	

Now briefly describe the the actions you would take to realize the opportunities you described above.



## Unit 6

# Shared Learning About Monitoring & Evaluation For Sustainable Land Management .....

# Module 1

## Sharing Good Experiences of Monitoring & Evaluation Practices with Learning Networks

### Overview

*This module wraps up the course and links participants to tools and platforms for information and support in improving monitoring & evaluation (M&E) to better achieve sustainable land management (SLM) outcomes. Participants learn how to use the materials from this course and other TerraAfrica resources in their own M&E for SLM trainings. They also discover existing learning platforms for the exchange of good practices on SLM M&E and landscape perspectives, and how to share these experiences online.*

### Time

**Total - 2 hours 50 minutes**

**Lesson 1 - 1 hour 20 minutes**

**Lesson 2 - 45 minutes**

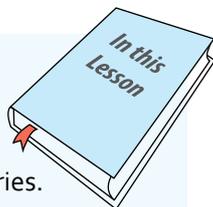
**Lesson 3 - 45 minutes**

# Lesson 1 • Developing a Cadre of M&E Facilitators (Training of Trainers)

## Learning Objectives

Compile M&E training and capacity needs from a TerrAfrica country or countries.

Appraise the possibilities for further use of the course materials.



## Preparation

- ✓ Review [Unit 6, Module 3, Lesson 2](#) and results from [Unit 5, Module 2, Lesson 2](#).
- ✓ Review any existing training capacity needs assessments that are available.

## Procedure

- **Activity 1:** Present the next steps for turning course materials into a training of trainers (TOT) course. (20 minutes)
- **Activity 2:** Break into small group discussions about training and capacity needs. (30 minutes)
- **Activity 3:** Report on small group and large group discussions. (30 minutes)

## Total Time

1 hour 20 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Exercise 1:** Group Work to Identify Further Capacity Needs

## Activity 1

Begin the session by recapping the course and what has been learned in the previous week. Then discuss possible next steps for using the course training materials, including future applications or trainings.

Invite participants to share their thoughts on how they might use these materials in their own country or project to create a cadre of M&E for SLM facilitators during the exercise.

One application of this training may be as a TOT course at the country level. Another possible application may be to take specific tools for means of measure, such as the ground-based photo-monitoring, and create a country-based training manual or a project specific course to train project staff in using these tools.

Remind participants of the plans developed in [Unit 5, Module 2, Lesson 2](#) on the opportunities for advancing M&E practices in their respective countries or projects.

- ✓ How can we implement these plans?
- ✓ What do we need to overcome in order to plan/ implement these changes?

Here, it may be helpful to refer back to some of the key learning points from [Unit 3, Module 2](#) on the creative thinking process.

- ✓ How might this process help improve opportunities for multiple partners and leaders within the SLM platform to contribute to M&E processes?
- ✓ What would be required to incorporate some of these skills in SLM leadership teams in this project or country?

## Activity 2

Divide participants into small groups (5-6 people per group) and ask the participants to discuss training and capacity needs, focusing on these two guiding questions:

- ✓ What capacities or trainings are required to implement the plans developed in [Unit 5, Module 2, Lesson 2](#)?
- ✓ What capacities or training are required to train others to use these materials?

## Activity 3

Have one representative from each small group report on the second question, “What capacities or training are required to train others to use these materials?”

Use these responses to guide a large group discussion on the training and capacity needs and using the course materials for training purposes.

### Trainer's Notes

Depending on whether there is a need for follow-up or further application of the course, and whether training needs of the project or country have already been identified, it may be desirable to modify or skip this lesson. One modification may be to focus only on the question of what capacities or training are required to implement participant's follow-up plans if there will be no other immediate follow-up.

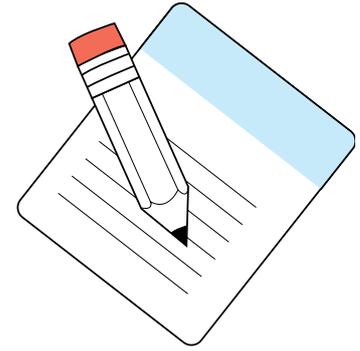


### Summary of Main Learning Points

1. Describe key capacities needed to implement the next steps (as identified by participants).
2. Summarize options for further applications of the course (as identified by participants).

## Exercise 1

# Group Work to Identify Further Capacity Needs



### Guiding Questions for Group Discussion

- ✓ What capacities or training are required to implement follow-up plans?
- ✓ What capacities or training are required to train others to use these materials?

# Lesson 2 • Learning Platforms for Sharing M&E Experiences and Best Practices

## Learning Objectives

Describe the aims of potential learning platforms for sharing M&E experiences and best practices.

Analyze opportunities for online learning events on M&E for SLM.

Verify the use of the course website page for further follow-up and learning after the course.

## Preparation

- ✓ Review handout and slides.
- ✓ Visit [www.peoplefoodandnature.org](http://www.peoplefoodandnature.org) and [www.terrafrica.org/knowledge-management/knowledge-base/](http://www.terrafrica.org/knowledge-management/knowledge-base/) and learn these knowledge platforms and potential opportunities for sharing experiences to relay to participants.

## Procedure

- **Activity 1:** Present potential learning platforms including the Landscapes for People, Food and Nature (LPFN) Learning Landscape Network. (15 minutes)
- **Activity 2:** Discuss as a large group. (30 minutes)

## Total Time

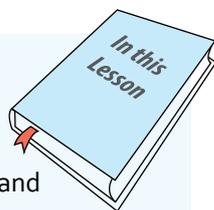
45 minutes

## Materials

- ✓ Laptop
- ✓ Projector
- ✓ Screen
- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** LPFN Learning Landscape Network



## Activity 1

Distribute handouts and present various relevant learning networks, including options such as the LPFN Learning Landscape Network or the Terrafrica knowledge platform.

*An example presentation about the LPFN Learning Landscape Network is available at <http://ecoagriculture.org/wp-content/uploads/sites/3/2015/10/LPFN-Learning-Landscape-Network-PPT.pdf>.*

Wrap up the presentation by describing one possible low cost option for sharing experiences across countries or projects, such as an online learning event for M&E.

## Activity 2

Lead a discussion about relevant learning networks and why they are useful platforms for sharing experiences and supporting the exchange of innovations that improve SLM projects and programs.

If participants are interested in organizing an M&E for SLM online event, invite them to brainstorm possible topics for the event such as a discussion of the changes they are implementing in their M&E systems as a result of this course. Other discussion questions may include:

- ✓ Which learning networks in your country or region do you take part in or would like to take part in?
- ✓ What are the top three lessons or experiences from your landscape that you want to share with such learning networks? What are the top three things you want to learn from such networks?
- ✓ What cross-landscape learning activities would be most beneficial or interesting to your landscape if you were to participate in the LPFN online learning network?
- ✓ Are you interested in online events and knowledge sharing? Are you able to participate (i.e. have internet connection)?

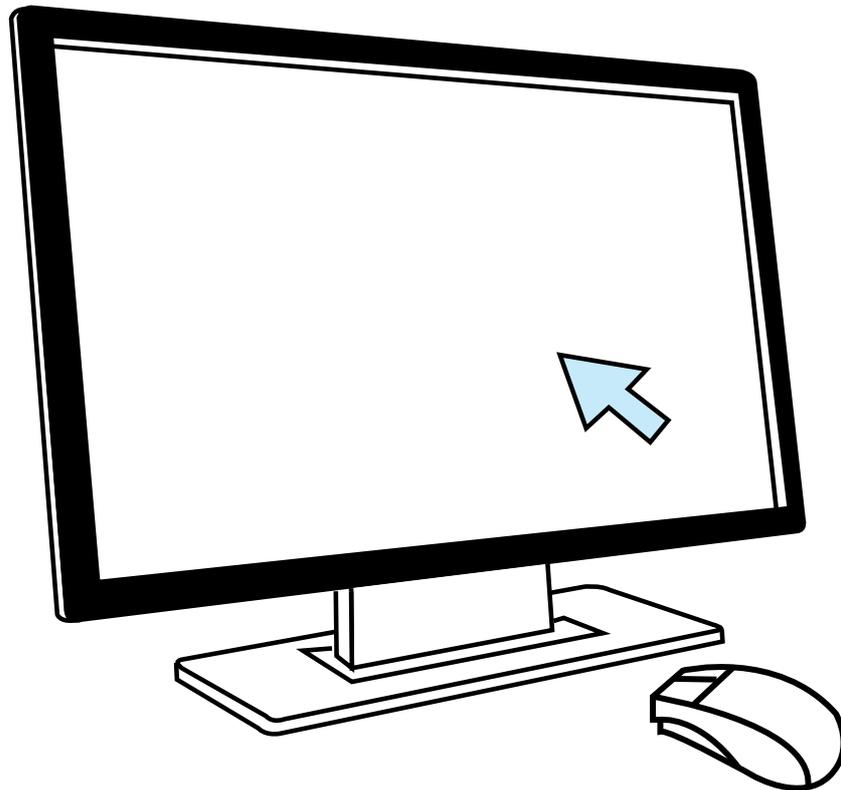
### Trainer's Notes

There is a wide scope for adaptation in this lesson. Local or regional learning networks or the regional TerrAfrica knowledge platform, as well as global options such as the LPFN learning landscape network, can be selected. If the team has a platform for organizing an online learning event through the SLM country or regional platform, then this lesson can be adapted to help plan for such an event.



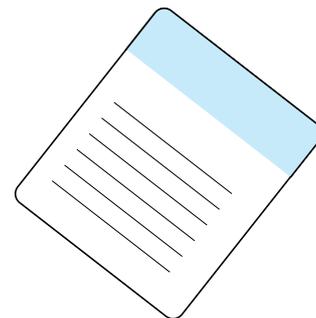
### Summary of Main Learning Points

1. Learning networks can be valuable platforms in which to share new M&E innovations and good practices that can help SLM programs improve management through more effective M&E systems.
2. Online learning events can be good opportunities to share experiences across projects and programs at a low cost, while offering opportunities to document good experiences and share them with wider learning networks.



# Handout 1

## LPFN Learning Landscape Network



### Online Learning and Knowledge Sharing

**Online knowledge sharing includes the following:**

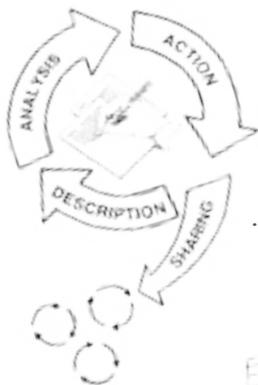
- ✓ Online landscape profiles – share the experiences of leaders
- ✓ Online learning events – connect landscape leaders internationally to discuss a specific theme or topic
- ✓ Online landscape tools – provide access to tested tools for planning, managing and monitoring work

The Landscapes for People, Food and Nature Initiative (LPFN) is an international collaborative initiative that seeks to foster dialogue, learning and action across sectors to support integrated landscape approaches. One of the LPFN's intended outcomes is to support the strengthening of ongoing multi-stakeholder landscapes through the sharing of landscape experiences and cross-landscape collaborative learning.

Access these materials and submit your own at [peoplefoodandnature.org/learning-network/](http://peoplefoodandnature.org/learning-network/).

### 5 Types of Learning Interactions

**Collaborative development of knowledge products**



**Leadership courses**



**Regional knowledge events and networking**



**Documentation of experiences of integrated landscape initiatives**



**Online knowledge-sharing portal**



# Lesson 3 • Wrap-Up and Evaluation

## Learning Objectives

Evaluate how well course learning goal and objectives were met.



## Preparation

- ✓ Review evaluation form and adapt themes to the current training course.

## Procedure

- **Activity 1:** Introduce and conduct evaluation. (25 minutes)
- **Activity 2:** End with a closing discussion. (20 minutes)

Explain the evaluation process and purpose. After completing the forms, allow participants discussion time to share their perspectives and analysis of the course in terms of meeting course goals and objectives. Finalize next steps and depart with a positive outlook.

## Total Time

45 minutes

## Materials

- ✓ Flipchart
- ✓ Markers

## Handouts & Exercises

- **Handout 1:** Example Evaluation Form

## Activity 1

Introduce the evaluation by explaining the process and purpose of the evaluation. Explain that participants will have 25 minutes to fill out the evaluation form, and that there will be a 20 minute discussion period to follow. Tell participants that a synthesis of their evaluations will be circulated with the workshop report. Distribute evaluation forms.

## Activity 2

Invite participants to share their perspectives and analysis of the course, particularly in relation to meeting the course goals and objectives. Finalize the discussion by reminding participants of agreed upon next steps and depart with a positive outlook.

## Trainer's Notes

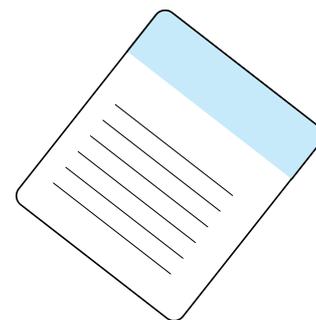
It is important to design the evaluation in such a way that will bring forth both analysis and discussion by participants. A good way to do so is to combine both quantitative scoring methods with qualitative open questions. An example of such an evaluation form is provided as a handout to this lesson.



## Summary of Main Learning Points

1. Summarize any conclusions the group brings forward from their responses to the evaluation forms.

# Handout 1



## Example Evaluation Form

### Workshop Evaluation

*The purpose of this evaluation is to gather information about your workshop experience. All responses will be reviewed and used to improve future workshops, and we will communicate the findings to you. Please answer all of the questions. Your responses are confidential. Thank you very much for your time!*

#### Unit 1, Module 1: M&E for SLM: The Landscapes Measures Approach

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

#### Unit 1, Module 2: Challenges & Strategies for harmonizing M&E systems for SLM

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

# Evaluation Form



## Unit 2, Module 1: SLWM management practices: what practices are we monitoring?

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

## Unit 2, Module 2: What does the landscape scale perspective offer to SLM M&E?

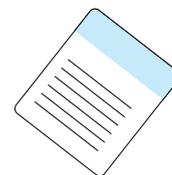
Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

# Evaluation Form



## **Unit 2, Module 3: How are we monitoring SLWM management practices?**

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

## **Unit 3, Module 1: A leadership model for SLWM in Africa**

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

# Evaluation Form



## Unit 3, Module 2: Fostering Innovative Leaders for SLWM

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

## Unit 3, Module 3: Core Skills for SLM Innovation Leaders

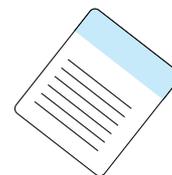
Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

## Evaluation Form




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**Unit 4, Module 1: Integrated Field Trip Module**


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Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

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**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

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**Unit 5, Module 1: Drawing on Multiple Sources of Data to tell a Story of Change for SLWM**


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Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

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**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)

# Evaluation Form



## Unit 6, Module 1: Sharing Good Experiences on M&E Practice with Learning Networks

Rate your level of agreement with the following statements.

(1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

The module met my expectations.	1	2	3	4	5
The material covered in the module was appropriate.	1	2	3	4	5
The module's content was easy to understand.	1	2	3	4	5
The lessons in the module were well facilitated.	1	2	3	4	5

**What went well in this module? What could be improved?** (Please feel free to write on additional sheets if needed.)





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