

Landscape Monitoring Framework of the socio-economic dimension



© Fairtrade / Nyokabi, Kenya coffee producers, Nandi Hills

Guidance Document

Author:
FLOCERT in collaboration with Fairtrade Max Havelaar Switzerland

Valid from: 15/07/2022

This project was possible thanks to a grant from the ISEAL Innovations Fund, which is supported by the Swiss State Secretariat for Economic Affairs SECO. The views expressed in this publication are those of the author(s) and do not necessarily represent those of the ISEAL Secretariat, ISEAL members or donor entities to the ISEAL Innovations Fund. This project was realised in collaboration with the Sustainable Cocoa Sourcing Landscape Project in Peru, facilitated by Helvetas and supported by the Swiss Platform for Sustainable Cocoa and SECO.



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

Executive summary

The Landscape Monitoring Framework of the socio-economic dimension (LMS) is a tool that provides practical guidance to assess the socio-economic status of a landscape to monitor progress and facilitates action for development. The LMS targets the stakeholders of the landscape initiative, and in particular the initiators of the initiative, as the main user group. It was developed to meet the growing needs for landscape assessments to look deeper into socio-economic matters in a structural manner and give the socio-economic dimension the same attention as environmental and economic dimensions.

The LMS consists of the two following documents:

- 1) **The LMS Library of Indicators** provides a set of widely used and widely accepted socio-economic indicators, linked to 9 SDGs and 36 socio-economic topics. For each indicator, further information is provided, e.g. whether it is assessed as a core or complementary indicator, what the data source is (for global country-level data), type of indicator (output, outcome, impact), its responsiveness to change, how practical it is to collect at the landscape level, and whether new innovative assessment tools are emerging. Overall, the LMS Library of Indicators offers the flexibility to choose the topics and indicators that are most relevant in the local context. Doing this together with partners and local stakeholders ensures local relevance and inclusivity of the initiative.

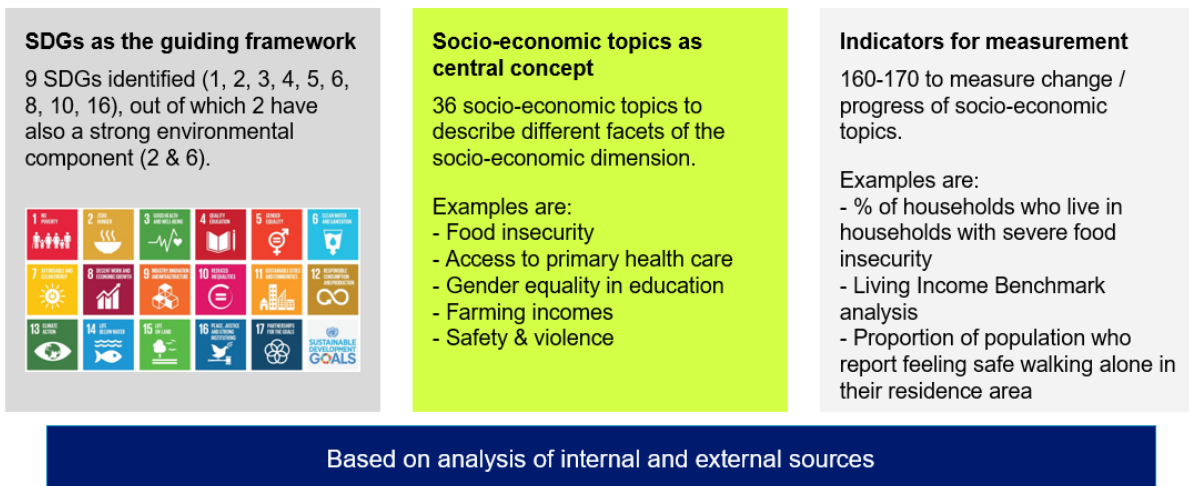


Figure 1: Structure of the Library of Indicators

- 2) **The LMS Guidance Document** guides through an inclusive and stepwise approach to assessing and monitoring landscape interventions along three application areas:
 1. **Initial assessment of the landscape:** The LMS provides resources and guidance to conduct a systematic analysis of the landscape. This includes gathering relevant data and information for learning, for further decision-making such as collaborative planning, as well as reporting for accountability.
 2. **Prioritisation of socio-economic topics to focus on:** The LMS facilitates a process of identifying the most relevant socio-economic topics and helps identifying overall goals for the landscape initiative for these topics. This is done by providing both a list of relevant socio-economic topics and practical guidance on how to select the relevant ones based on specific criteria.

Customisation of Monitoring, Evaluation and Learning (MEL) system: The LMS provides support for the design of a customized MEL system, which can include a Theory of Change, the definition of relevant indicators and data sources as well as a baseline assessment.

The overall process of applying the LMS is represented in the visual below, including its more detailed process steps:



Figure 2: Visualization of the overall LMS process

Step 1-3: Design of the landscape initiative

The LMS supports an initial landscape assessment and the engagement with key stakeholders, which provides a first picture of the socio-economic conditions in which a landscape initiative is embedded in. The subsequent prioritization of socio-economic goals allows clarity on goals and internal alignment amongst stakeholders how these goals will be achieved, and how each stakeholder will contribute.

Step 4-9: Customisation and implementation of the MEL system

The Library of Indicators presents a variety of socioeconomic topics and corresponding indicators for the customisation of the MEL system (steps 4-7) that allow monitoring of the stated goals. The Guidance Document includes instructions for selecting methods and tools for data collection and conducting a baseline assessment Further guidance on continuous landscape monitoring and learning, and truthful communication is outlined in the Guidance Document (steps 8-9).

Ultimately, the Guidance Document provides support for deriving truthful claims at landscape-level that report on efforts and progress made or results achieved.

- 1. Commitment claims: Aspirational statement of what the initiative aims to achieve
- 2. Performance claims: Factual statement of specific performance levels, based on baseline data
- 3. Improvement claims: Progress statement about the change that has resulted

Table of Content

Executive summary	2
Figures & Tables	5
Abbreviations	5
Terminology – Definitions of key terms	7
1. Introduction	9
1.1 Introduction to the LMS	9
1.2 Introduction to the Library of Indicators	13
2 Designing your landscape programme	15
2.1 Initial assessment (step 1).....	15
2.2 Prioritisation of socio-economic topics (step 2).....	16
2.3 Define your Theory of Change (step 3).....	18
3. Designing a customized MEL system	19
3.1 From Theory of Change to MEL system (step 4)	19
3.2 Choosing your indicators (step 5)	19
3.3 Choosing methods and Tools (step 6)	22
3.5 Set baseline & targets (step 7)	24
4. Continuous monitoring (step 8)	24
4.1 Methods for data collection.....	24
4.2 Benchmarking your data	24
4.3 Interpreting data - understanding contribution	26
5. Using your MEL data (step 9)	27
5.1 Learning and internal decision-making.....	27
5.2 Reporting and knowledge sharing.....	28
5.3 Communication & Claims	28
6. Annexes	31
Annex 1: Illustrative roadmap for the use of the Library of Indicators	31
Annex 2: Example of an initial assessment.....	32

Annex 3: Example of collective goal setting and an agreement on claims	33
Annex 4: Key elements of a Theory of Change.....	34
Annex 5: Types of indicators & examples	35
Annex 6: Data collection: Using external statistics and data sources	36
Annex 7: Quantitative data collection: Surveys.....	37
Annex 8: Qualitative data collection	40
Annex 9: Innovative data collection options	41
Annex 10: Benchmarking scenarios	45
Annex 11: Requirements for meaningful data.....	46
Annex 12: Management, measurement and implementation	47
7. References	49

Figures & Tables

Figures:

- Figure 1: Structure of the Library of Indicators
- Figure 2: Visualization of the overall LMS process
- Figure 3: Visualization of the overall LMS process
- Figure 4: Structure of the Library of Indicators
- Figure 5: Initial Landscape assessment process
- Figure 6: From data to information
- Figure 7: Comparing data on geographical scales
- Figure 8: Coordinated interventions contributing to Landscape level outcomes and impact

Tables:

- Table 1: Uses of the LMS
- Table 2: Prioritizing social topics
- Table 3: Choosing indicators
- Table 4: Guiding questions for building a data infrastructure
- Table 5: Assessing data availability on geographical scales
- Table 6: Examples of different types of claims
- Table 7: When to use the Library of Indicators
- Table 8: Example of initial assessment
- Table 9: Example table with goals and indicators
- Table 10: Examples of different types of indicators
- Table 11: Examples of reliable secondary data sources
- Table 12: Different type of surveys
- Table 13: Examples of digital tools to collect survey data
- Table 14: Examples of standardized assessment tools
- Table 15: Interesting resources on using satellite images and remote sensing
- Table 16: Examples of benchmarking, with different data availability scenarios
- Table 17: Linking the LMS to the ISEAL framework

Abbreviations

HRDD = Human Rights Due Diligence
ISEAL = International Social and Environmental Accreditation and Labelling Alliance
LMS = Landscape Monitoring Framework of the socio-economic dimension
MEL = Monitoring, Evaluation and Learning
MSP = Multi-stakeholder Platform
NGO = Non-governmental Organisation
SDGs = Sustainable Development Goals
VSS = Voluntary Sustainability Standard

Terminology – Definitions of key terms

Term	Definition
Baseline	A baseline is a comparator in space and/or time against which to measure performance. ISEAL distinguishes between internal baselines (i.e., data collected repeatedly from a specific cite, or from selected comparison populations in the same area) and external baselines (i.e., external data that provides a broader contextual comparison for a metric).
Baseline assessment	The main intention of a baseline assessment is to establish baselines for all relevant indicators against which progress can be compared. This usually happens in the beginning (“year zero”) of monitoring activities.
Benchmark	A benchmark is a reference required to convert data into a metric e.g., net household income data only becomes a poverty metric when compared to a benchmark such as the Living Wage/Income Benchmark.
Claim	Truthful statements of an initiative about the progress being made and/or the results achieved. Differentiation between three different types of claims: (1) Commitment claims: Aspirational statement of what the initiative aims to achieve (2) Absolute performance claims: Factual statement of specific performance levels, based on baseline data (3) Improvement claims: Progress statement about the change that has resulted. (ISEAL Alliance, 2019 A)
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure change over time or to help assess the performance of an organisation, project, or intervention. (adjusted from ISEAL Alliance, 2014)
Initial assessment	Process of identifying most relevant socio-economic topics and defining overall goals for landscape initiative within these topics. The initial assessment is usually done in the very beginning of a landscape project to understand the current situation.
Input, Output, Outcome, Impact	Input - The financial, human, and material resources used for the intervention. Output - The products, capital goods and services which directly result from an intervention. Outcome - The short-term and medium-term effects of an intervention on the sustainability issue in question. Change at the level of actors / stakeholders, improved performance. Impact – Long-term effects (direct or indirect, intended or unintended) on the sustainability issue produced as the result of an intervention. Change at the level of end users, beneficiaries.
Landscape	A landscape is a socio-ecological system (natural resources, topography, land uses, human settlements, biodiversity, etc..) embracing an area delineated by a person or organisation for a specific set of objectives. One landscape may cut across jurisdictional boundaries (villages, municipalities, provinces, regions, or countries).
Landscape approach	There is no universal definition (yet). In general, the term is used to cover a diversity of strategies (either by means of programmes, projects, interventions, etc...) aiming to manage multiple land uses or sustainability development objectives for a landscape in an integrated manner addressing social, ecological, economic and commercial interests in a balanced way. To provide a definition, Minang et al. (2015, 8) describe the Landscape Approach as a set of «concepts, tools, methods and approaches deployed in landscapes in a bid to achieve multiple economic, social, environmental objectives through processes that recognize, reconcile and synergize interests, attitudes and actions of multiple actors».

Term	Definition
Landscape initiative	A group of stakeholders that initiates and coordinates a landscape or jurisdictional approach to development. (own definition)
Monitoring Evaluation and Learning (MEL) System	An ongoing process through which an organisation draws conclusions about its contribution to intended outcomes and impacts. A monitoring and evaluation system consists of a set of interconnected functions, processes, and activities, including systematic collection of monitoring data on specified indicators and the implementation of outcome and impact evaluations. (ISEAL Alliance, 2014)
Multi-stakeholder Platform (MSP)	<p>A multi-stakeholder platform is a central element in the overall landscape approach with its focus on integrated landscape management through a multistakeholder process. (own definition)</p> <p>The term multi-stakeholder platform “may refer to stakeholders coming together for dialogue and negotiations in an ad hoc manner, or it may refer to the setting up of a more formal structure with designated stakeholder representatives and agreed processes for decision-making”. (Global Canope, 2015: page 58)</p> <p>As decision-making bodies, MSPs are commonly used for conflict resolution (e.g. conflicts over access to resources), democratisation (e.g. to give stronger voices to minority groups), or to develop pre-competitive strategies to address landscape-wide problems or opportunities. (Global Canope, 2015: page 63)</p>
Region	<p>The term region usually refers to a subspace of a larger geographically described area defined according to certain criteria. Regions can be based on various criteria (historical, cultural, social, natural, economic, legal, political, or administrative). (University Oldenburg, 2021)</p> <p>In this Guidance Document, the term region refers mainly to political administrative boundaries and is oftentimes used synonymously with district or regional district.</p>
SDGs (Sustainable Development Goals)	<p>The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. (United Nations: https://sdgs.un.org/goals)</p> <p>The SDGs have been used to structure the topics and indicators of the Library of Indicators. 10 of the 17 SDGs were chosen as they apply to the socio-economic dimension.</p>
Socio-economic dimension	The LMS focuses on the social and socio-economic dimension of sustainability. It refers to the following 9 SDGs: 1, 2, 3, 4, 5, 6, 8, 10, 16.
Socio-economic topic	Each SDG is broken down further into socio-economic topics (usually between 5 to 9, depending on the complexity of the SDG). Topics therefore refer to more specific socio-economic aspects that might be relevant for a landscape project.
Theory of Change	A ‘Theory of Change’ describes the change (especially intended outcomes and impact) that an initiative wishes to see in the world and its understanding of how it will contribute to that change. (Fairtrade International, 2016). A ‘Theory of Change’ is also referred to as change logic, intervention logic, or impact pathways.

1. Introduction

1.1 Introduction to the LMS

The Landscape Monitoring Framework of the socio-economic dimension (abbreviated in this document as “LMS”) was developed to meet the growing needs for landscape assessments to look deeper into socio-economic matters in a structural manner and give the socio-economic dimension the same attention as environmental, and economic dimensions. The main purpose of the LMS is to enable users to assess the current socio-economic status of a landscape and monitor socio-economic change on landscape level over time. This chapter will describe the objectives of the LMS, the intended uses and users, and the overall stepwise approach.

1.1.1 What is the LMS?

Main objectives

The Landscape Monitoring Framework of the socio-economic dimension is a framework that aims to support the definition of relevant goals to address socio-economic issues in a landscape and to monitor progress towards these goals. More specifically, the LMS has two main overall objectives:

- (1) provide the basis for more effective and comprehensive goal setting, monitoring, steering and reporting on socio-economic aspects, such as livelihoods or gender equality, in a more comprehensive manner than existing landscape monitoring frameworks, which mainly focus on environmental aspects - and
- (2) facilitate action for development on relevant socio-economic topics.

The LMS is therefore conceptualised as being complementary to already existing frameworks and resources for landscape initiatives and projects as referred to further down in this document.

Central documents:

The central documents of the Landscape Monitoring Framework of the socio-economic dimension (LMS) are:

- **The Library of Socio-economic Indicators:** An Excel file that shows an overview of socio-economic topics (structured around the Sustainable Development Goals) and a wide array of related indicators. Its overall purpose is to make it possible to assess the current status and track changes within the socio-economic dimension in a landscape.
- **This Guidance Document:** it provides background information on how to assess the status of socio-economic issues in a landscape, how to define goals, and measure socio-economic change in a landscape, using the Library of Indicators, and reporting on progress of socio-economic topics and claims of landscape initiatives.

Uses of the LMS:

1. **Initial assessment of the landscape:** Providing resources and guidance to conduct a systematic analysis of the landscape. This includes gathering relevant data and information for learning, for further decision-making such as collaborative planning, as well as reporting for accountability.
2. **Prioritisation of socio-economic topics to focus on:** Facilitating a process of identifying most relevant socio-economic topics and defining overall goals for the landscape initiative for these topics. This is done by providing both a list of relevant socio-economic topics and practical guidance on how to select the relevant ones based on specific criteria.
3. **Customisation of own MEL systems:** (i) when choosing methods and tools for data collection (ii) by providing support for a baseline assessment and (iii) by providing input on how to set up a continuous monitoring process that can enable truthful claims. This is the most extensive application of the LMS for socio-economic topics and is further broken down into dedicated chapters such as creating a Theory of Change, benchmarking and working with data across geographical scales, and providing a methodology for claims.

In a nutshell:

	Initial assessment of the landscape (step 1)	Prioritisation of socio-economic topics (step 2 & 3)	Customisation of own MEL systems (step 4-9)
Library of Indicators	Use section “0 Basic data” as orientation for relevant data and information to collect.	Use the List / overview with 36 identified socio-economic topics that might be relevant on landscape-level.	Use the database with indicators for each socio-economic topic and further “indicator metadata”. ¹
Guidance document	Explains the process for conducting the initial assessment and how to use the results.	Explains the process and criteria for prioritisation of socio-economic topics and participatory goal setting.	Guidance on process and relevant methods, concepts and software solutions.

Table 1: Uses of the LMS

1.1.2 How does the LMS support your landscape initiative?

1) Global relevance & alignment: A landscape approach is globally aligned and contributes to the SDGs

The LMS Library of Socio-economic Indicators (short: Library of indicators) uses the Sustainable Development Goals (SDGs) as an overarching framework. The SDGs are the most widely accepted framework for setting sustainable goals. This global framework with 17 overarching goals was co-developed by governments, NGOs and many other actors. Using the LMS Library of indicators as a reference for selecting socio-economic topics will ensure that your landscape initiative is linked to and contributes to the SDGs.

After relevant socio-economic topics were defined along the SDGs, suitable indicators were selected from widely accepted frameworks, with a focus on commonly used indicators. Widely accepted frameworks are the standards developed by the International Labour Organisation, International Human Rights frameworks² and frameworks developed by the World Benchmarking Alliance³, to name just a few. The LMS Library of indicators also draws on research and resources defined by communities of practice, such as the Living Income Community of Practice (LICO) and Global Living Wage Coalition. This means that the LMS Library of Indicators enables you to select indicators which are widely accepted and aligned with commonly used frameworks, which allows you to collect comparable data.

2) Effectiveness & efficiency: The LMS helps you⁴ deal with complexity and changing contexts The LMS guides you to develop a monitoring system that is linked to a theory of change. Linking your monitoring system to a Theory of Change provides insight into where you are in your journey towards impact. Also, a Theory of Change is meant to be used as a flexible planning tool and allows you to steer towards impact, and adapt your strategies, in a complex and changing reality. Secondly, the LMS supports you to build an efficient monitoring system. The LMS Library of indicators helps to prioritize what data to collect and aims to make the best use of existing data as opposed to collection of new data. Thirdly, the LMS guides you on how to deal with the challenge of monitoring on a landscape level. Understanding progress at landscape level requires putting your data into a wider context, meaning monitoring important developments in the landscape’s context and comparing your data with the

¹ The term “indicator metadata” refers to additional information for each indicator such as its “practicability to be collected on landscape-level”. The Library of Indicators also specifies the expected availability of each indicator on country, regional district and landscape-level and provides further details that are supportive to create your own MEL system. Detailed explanations are provided in the chapter “The Library of Indicators”.

² Such as United Nations, “Guiding Principles on Business and Human Rights: Implementing the United Nations ‘Protect, Respect and Remedy’ Framework.”

³ World Benchmarking Alliance-WBA, “Social Transformation Framework to Measure and Incentivize Companies to Leave No One Behind.”, “Methodology for the Food and Agriculture Benchmark” or “Corporate Human Rights Benchmark Methodology 2020 For the Agricultural Products, Apparel and Extractives Industries.”

⁴ The LAF can benefit many different actors starting a landscape approach, beyond landscape initiatives. The user groups we are targeting with this guidance are described in the chapter 1.1.3. Therefore the more general term “user” is used across the document and we use the term “you” to address you directly as a potential user of this guidance.

region or district and the country. It also requires linking different levels of intervention, i.e. linking individual interventions to the landscape level.

3) Local relevance & inclusivity: The LMS supports partnership building and collective goal setting

The LMS is not prescriptive and can be adapted to context and integrated into your own MEL system. This flexibility creates the opportunity to co-create your landscape initiative with key stakeholders, including beneficiaries. The LMS is intended to guide the design of the initiative co-created and inclusive process, rather than being prescriptive in the issues to address or monitor. It recommends identifying the issues to address, defining the goals and intervention strategies through engagement with stakeholders. Involving socially excluded groups (such as women, youth, disabled persons, ethnic / religious / racial minorities, LGBTQ+ persons) in the design of an intervention, in the monitoring and the interpretation of data, ensures that their needs are addressed, and they benefit from the intervention. Following a co-creation process will enable you to create a shared vision, a shared sense of responsibility, and a collaborative effort. Including local actors and policy makers will support sustainability and scaling of the initiative.

4) The LMS supports partners in a landscape initiative to fulfil their HRDD obligations

The LMS provides practical guidance on how to identify which socio-economic issues to address and how to track the effectiveness of actions taken. As such, following the LMS guidelines supports the members of a landscape initiative to fulfil their Human Rights due diligence obligations, by identifying and assessing their human rights risks, to track effectiveness of their actions and to report about the actions taken.

The LMS way of working is in line with practices recommended by the UN working group on Business and Human Rights for Human Rights Due Diligence⁵, such as 1) using a systemic approach (first zooming out), 2) prioritising areas where the risk of adverse human rights impacts is most significant, 3) be informed by meaningful stakeholder engagement, 4) transparency and meaningful reporting. Finally, the LMS process is in line with HRDD guidelines, stating that identifying priority risks should be an ongoing process, as human rights risks might change over time.

5) Credibility & Transparency: The LMS framework support the members of a landscape initiative to communicate how they contribute to impact

In a landscape initiative, it is particularly challenging to link (own) interventions to observed changes. The LMS provides guidance for designing your MEL system based on a Theory of Change⁶: linking interventions (concrete activities) to output (immediate results), to outcomes (short- to mid-term results) and impact (long-term systemic changes). The Theory of Change can be seen as a road map towards desired change. Linking your indicators to your Theory of Change will allow you to better explain why your results are important. It allows you to explain how immediate, and mid-term results are (plausibly) linked to your interventions and how they are expected to contribute to long-term change for beneficiaries in the landscape. The LMS also provides guidance on how to engage proactively with claims. A key resource on that topic is ISEAL'S report "Aligning and combining" (see reference list at the end of this document).

⁵ Report to the 2018 UN General Assembly

⁶ Further links and resources on the topic can be accessed here:

- Hivos Guide to Developing Theories of Change
- Fairtrade International's earlier organisational Theory of Change: 2016_FairtradeTheoryOfChange.pdf
- The chapter on "Landscape Measures Framework" (page 94ff) in Global Canopy's 2015 report: GCP_LSLB_EN.pdf (globalcanopy.org)

1.1.3 Who is it for?

The LMS is designed to mainly support landscape initiatives, which includes the following user groups:

- **Organisations initiating a landscape initiative:** Usually, one organisation conceptualises the idea of a landscape project and convenes different (international and local) actors to start with the implementation. In an early stage of such a landscape project, this organisation can use the LMS as orientation (e.g. which socio-economic topics and potential focus areas for the project there might be, how to conduct the initial assessment).
- **Multi-stakeholder platforms (MSPs):** A key step of any landscape initiative is to form a MSP that brings the key actors together. Here, the LMS can be used to guide strategic decision making, clarify roles (e.g. for data collection, processing and management) and set up the monitoring and evaluation system for continuous learning and improvement.
- **Partners implementing a landscape initiative:** Usually, within the MSP, there is a distribution of tasks based on the expertise and agenda of the involved actors. An (individual) organisation responsible for collecting and analysing data on the socio-economic dimension can therefore use the LMS to guide the internal process of decision-making (e.g. which topics to focus on), set up the specific methods and instruments (surveys etc.) and manage the MEL system with reporting and claims.
- **Funders / donors:** Also funding institution(s) have a strong interest in the success of a landscape project. The LMS helps to both identify critical socio-economic topics and, more importantly, enables the implementing actors to set up processes, an MEL system and a methodology for claims.
- **Supply chain actors / traders:** The LMS can be a powerful framework to not only understand one's specific supply chain, but how it is embedded in a socio-economic context and how it impacts the life of people in this context. Furthermore, the LMS can be used to formulate truthful claims.

1.1.4 LMS Methodology - nine steps

This chapter explains the recommended process steps for designing and monitoring a landscape approach and in which steps the Library of Indicators can be used. The following chart provides an overview of steps & stages for assessing and monitoring the socio-economic dimension of a landscape:



Figure 3: The recommended process includes nine steps and two stages/cycles

Step 1-3, can be summarized as designing the landscape initiative. This stage is meant to create clarity on goals and internal alignment amongst stakeholders how these goals will be achieved, and how each stakeholder will contribute. The steps for designing a landscape initiative are described in more detail in chapter 3 (step 1-3).

Landscape cycle: In line with good practice for Human Rights Due Diligence, it is recommended to regularly (e.g. every 5 years) go back to step 1 and re-do the initial assessment of the landscape. Identifying priority risks should be an ongoing process, as human rights risks are interrelated and might change over time. It is well possible that the situation on the issue that the landscape initiative addresses has improved, while another issue urgently needs attention.

Step 4-9 can be summarised as “customising and implementing your own MEL system”. The steps for customizing your own system (step 4-7), are described in chapter 3 of this document, the guidelines for ‘implementing the MEL system (step 8) are described in chapter 4 and guidelines for using the MEL system (step 9), are described in chapter 5.

MEL cycle: It is important to point out that step 3 to step 9 presents the annual MEL cycle, meaning that the information from the monitoring system is used for continuous learning and improvement within the landscape initiative. Monitoring information is used for refining the programme impact strategy (Theory of Change) - step 3 - and informing decisions for annual planning, to steer towards the intended impact. We recommend also including regular reviews and evaluations in this process, to make sure that the mechanisms of ‘how change happens’ are well understood and validated with evidence. For example, an annual internal review, an internal evaluation in year 3 and an external evaluation in year 5.

1.2 Introduction to the Library of Indicators

This subchapter explains how and when to use the Library of Indicators. The term “Library of Indicators” refers to the Excel file that jointly with this Guidance Document forms the LMS. It provides an overview of relevant and suggested indicators structured around the SDGs. The main intention is to enable landscape initiatives, as well as other users of the LMS, to work with well-established and easy to measure metrics and indices, and to complement these with own surveys and data.

The Library of Indicators provides detailed aspects for each indicator, such as the expected geographical level, the data source with weblink (if available) or the level within a Theory of Change (output, outcome, impact). The full list of indicators can be overwhelming. The first step is when using the Library of Indicators is therefore excluding what is not relevant. To prioritise what to focus on:

- Assess what topics are relevant for key stakeholders of the landscape initiative. Here, the overview of socio-economic topics can help; and conducting an initial assessment that includes all relevant stakeholder groups (details below).
- Measure what matters: Focus rather on fewer indicators. Use the Theory of Change to identify critical steps for achieving your impact. Engage with the users of the data, to help you prioritise which indicators should be monitored.
- Be realistic and practical. It’s crucial to think about the details of data collection, storage and processing from the very beginning; and assess available capacities. Collecting less data reduces the time needed for data cleaning and analysis and allows you to focus on information that really matters.

1.2.1 Overall structure

The central structural elements are the 36 socio-economic topics. A user of the LMS can decide to work with a different guiding framework than the SDGs and cluster the socio-economic topics differently, but it's not recommended to change the socio-economic topics themselves. This is because each indicator is linked to one specific socio-economic topic. The following figure shows the structure of the Library of Indicators:

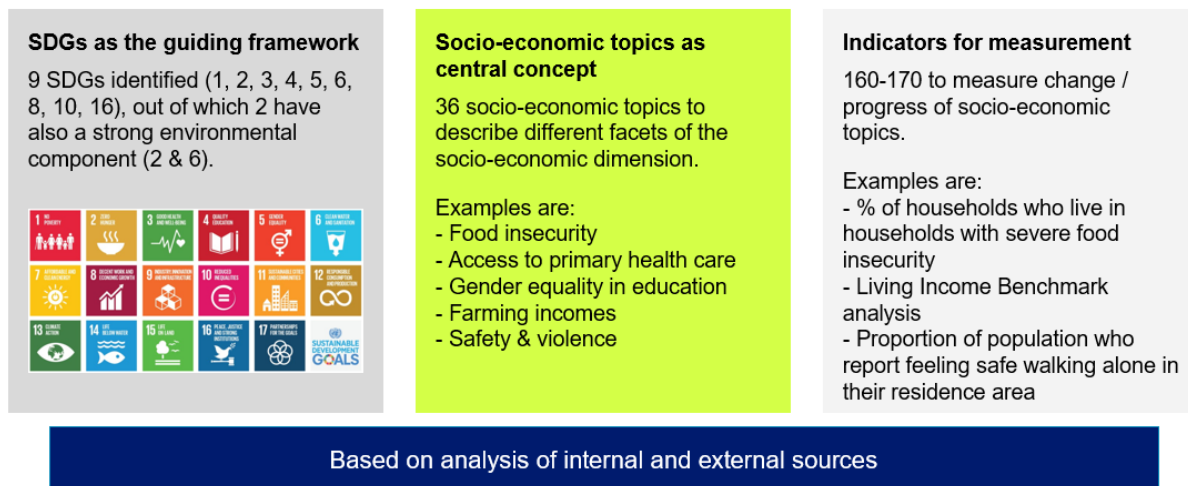


Figure 4: Structure of the Library of Indicators

The core part of the Library of Indicators is the tab “Indicator List”, which provides a list of usually around 3-5 indicators per socio-economic topic. Additional information for each indicator is:

- The type & level of data availability: Is the indicator part of an official dataset and it can be expected that it’s available on a country level? Or is the indicator rather survey-based and no external data is likely to be available?
- Category (of indicator): Specifying if an indicator is “core” or “complementary”; and if an indicator is for the initial assessment or for monitoring and claims.
- Data source: If available, a weblink to access the data is given.
- Additional information to help with selection and implementation: Type of indicator (output, outcome, impact), responsiveness to change, extent to which the indicator is widely used, practicability to collect indicator on landscape level and if new tools are emerging.

Additionally, the tab “Indicator List” contains one section called “basic data”. This is cross-cutting or fundamental data that is crucial to have, e.g. as a reference point for many indicators. Examples for such basic data are the scope of the landscape itself (how many people live there, their age structure etc.), the most important industries or relevant laws that are in place (e.g. about minimum wages).

1.2.2 How to use and navigate the Library of Indicators?

The Library of Indicators is not set in stone. It is a tool to help you choose meaningful and relevant indicators that are aligned with global and widely accepted indicator frameworks. You can use it as a blueprint to create your data collection protocol or just as a source of inspiration for your own data collection protocol. You can adjust and tailor it to your needs, by adding or deleting columns or rows or using colour codes. It is primarily intended to be used as input for a landscape initiative to define your own focus areas (prioritised socio-economic topics) and indicators to measure. The way the Library of Indicators is setup should enable you to create your own MEL system.

Some practical recommendations for using the Library of Indicators:

- **First think about how you intend to use the Library of Indicators.** This can be to familiarise yourself with the socio-economic topics, identify which indicators to use for a specific topic or for planning the initial assessment. Usually you will start with familiarizing yourself with the socio-economic topics, as inspiration for doing the context analysis.
- **Use the filter options, specifically in the tab “Indicator List”.** You can e.g. select only relevant socio-economic topics or only indicators with a certain characteristic (e.g. “very likely available on country level) or combine multiple filters. This helps to reduce the number of indicators that are displayed.
- **Use the Library of Indicators to create your own system for identifying which socio-economic topics, indicators or key concepts are relevant for you.** Some tips:
→ You can add your own columns or colour codes for internal assessments.

- Use the column “Internal remarks” for prioritising indicators of relevance.
- Hide the first rows (1-11) with title and colour code to be able to view more indicators at once glance.

1.2.3 When to use the Library of Indicators?

The Library of Indicators is used in step 1, 2 and 5 of the process. During step 1, it can be used as a landscape-specific assessment tool. In step 2, it is used to prioritise socio-economic issues to address with the landscape and in step 5 as a practical guidance for how to monitor change within the landscape. The table in Annex 1 provides an illustrative roadmap for the three major uses of the LMS Library of Indicators.

2 Designing your landscape programme

2.1 Initial assessment (step 1)

The first step in the design of a landscape initiative is an initial assessment. As explained in the introduction, the LMS Library of Indicators can be used to guide an initial assessment and gain a snapshot of the current state of socio-economic aspects in a landscape. The initial assessment therefore can be understood as a systematic approach to zoom out and gather relevant data and information about the landscape for further decision-making and collaborative planning. The data and information gathered in the initial assessment can be used to identify and prioritise topics of high risk or relevance and supports further decision making about what the Landscape Initiative aims to achieve (the intended outcomes and impact), and who needs to do what to make that happen (the activities). To make an informed decision about which socio-economic issues to address and monitor, the initial assessment is a crucial input for programme design and developing a monitoring and evaluation system.

We suggest conducting the following steps in an initial assessment:

1. Have a look at the section on “0 Basic Data” in the Library of Indicators (tab: “Indicator List”) as an orientation on what kind of data and information is important to take an informed decision about which socio-economic issues to prioritise.
2. Identify actors who are working in the landscape (government, certification bodies, NGOs). Reach out to these actors to understand their objectives, activities, data sources and monitoring capacity. Ask about existing programmes on socio-economic topics and about available data sources and information.
3. Collect and review the information and other publicly available documents (e.g. government data or academic papers on specific issues).
4. Where needed, collect additional data and information to gain deeper insights into the socio-economic dimension and relevant socio-economic topics. This usually includes the use of qualitative methods such as interviews and focus group discussions.
5. Compile it in a way that allows you to use it for prioritisation. The results of the previous steps should be presented to key stakeholders as a basis for the next step, the prioritisation of relevant socio-economic topics.

The initial assessment is usually conducted in the very beginning of a landscape approach. This means that the multi-stakeholder platform might not yet be in place. For this reason, the initial assessment is important not only to understand the situation on the ground, but also to identify key stakeholders to consult, coordinate and collaborate with and who should be invited to join the MSP. However, when a landscape initiative (e.g. the members of an MSP) have collectively undertaken an initial assessment, they will have gained a shared understanding of the current situation in the landscape, with its challenges and opportunities for improvement, and existing socio-economic dynamics between actors. This will help to create alignment from the start. A practical example of how to do an initial assessment can be found in Annex 2.

It’s important to mention that the initial assessment has to be seen as an iterative process. This means that data and information is collected and analysed continuously, which might lead to additional stakeholders and data sources being discovered and topics identified. This specifically refers to steps 1-3 stated above: Consultation of

the Library of Indicators, identification of stakeholders and existing programmes and data, and the collecting and reviewing existing information. Hence, the overall process for the initial assessment can be visualised as follows:

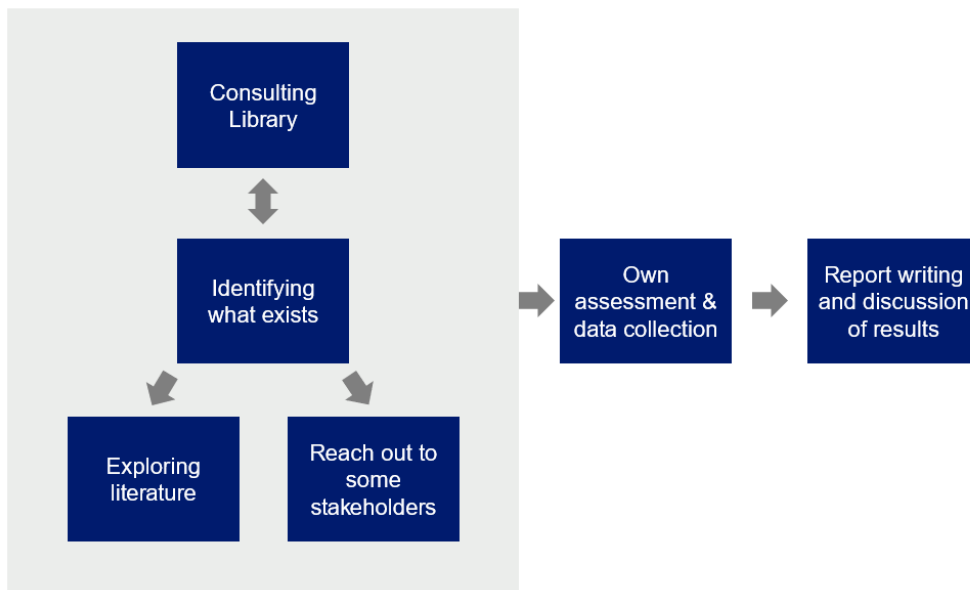


Figure 5: Initial landscape assessment process

The initial assessment should be included in the overall project planning, being specific about the time and resources needed. Main criteria to consider are:

- **Time and capacities needed for each process step and the initial assessment as a whole.** Here, the most relevant part to clarify is the extent of own data collection.
- **Division of roles and responsibilities.** It is very important to assign clear responsibilities and roles for the different tasks of the initial assessment. One person could for example take up the overall coordination and stakeholder engagement, whereas others focus more on the research and stakeholder analysis (identifying what exists & secondary literature review) or the own data collection. This level of clarity can help to plan capacities.
- **Seeking data collection synergies.** Zooming out to other actors is key. Other actors might have access to relevant knowledge, people, or are planning a field visit on their own – and might be open towards including a few additional questions into their data collection efforts.

2.2 Prioritisation of socio-economic topics (step 2)

After the initial assessment is done, it is time to prioritize which socio-economic topics are most important to be addressed. The prioritisation of topics should consider both the data and information from the initial assessment and the perspectives of key stakeholders. It is important to zoom out before going into goal setting.

2.2.1 Prioritising the socio-economic topics of relevance, in consultation with stakeholders

Prioritisation of socio-economic topics should consider the perspectives of key stakeholders. It is important to make use of the available knowledge and expertise of stakeholders, while at the same time be aware of the different needs and interests. It can be assumed that different stakeholders have different interests, needs and priorities (e.g. small-scale farmers in the case of many certification schemes). It's important to acknowledge these different needs and priorities and make sure that all voices are taken into account. It is important to be prepared that viewpoints of stakeholders might be different from the initial assessment results. If this happens, it is important to have an open discussion and re-assess the evidence.

The table below shows how to make a list of socio-economic topics to compare (1) any relevant findings from the initial assessment and (2) the perspectives of key stakeholders who work on that topic or have an interest in the topic. For practical reasons the following table only shows 4 of the 36 socio-economic topics. It might be worth doing it for all topics.

Socio-economic topic	Relevant results from initial assessment – Hypothetical example	Relevance of topic for key stakeholders
Poverty	Significant progress made in the past 30 years. The majority of people state that their economic situation improved. Data shows, however, that 15% of the people in the regional district (and, hence, most likely in the landscape) live below the national poverty line.	Trader X, standard setter Y and NGO Z are working to reduce poverty in the landscape. The government has a programme to do ABC. Stakeholders D, E and F are indirectly working on the topic, e.g. by wanting to create market access and improved conditions for specific commodities.
Primary education	Overall, most children attend and finish primary education. There seems to be, however, a generally lower rate among disadvantaged groups (indigenous, rural households, girls).	Stakeholder X is working on the topic as the main focus. The local government is also interested in the topic and just launched a new programme to improve access to primary education.
Farming incomes	More than 60% of households depend on farming activities – either for subsistence or as one of the major income sources. Farmers are rarely organised in cooperatives (less than 10%) and have difficulties to access both required inputs and credits.	Multiple organisations, named XYZ, are working on the topic, among them one certification body named X.
Land Rights, conflicts and disputes	Only 23% of interviewed farmers had an official land title, with the majority owning their land based on traditional land use rights (55%). The history of the region shows that land rights has been a contested and sensitive subject.	No key stakeholder working on the topic directly. The local government prefers to focus on other topics.

Table 2: Prioritizing socio-economic topics

At the end, there should be a shortened list of relevant socio-economic topics and clarity how each stakeholder’s activities link to these topics, and the level of priority to work on the topic. The level of priority should be based on both the initial assessment and stakeholder consultation:

- how relevant the issue is in the context of the landscape (from initial assessment),
- how relevant the issue is for the beneficiaries (from the stakeholder consultation),
- how relevant the issue is for the partners in the landscape initiative.

2.2.2 Participatory goal setting

It’s crucial to not stop at the point of having a shortened list of socio-economic topics, but to then go deeper into each topic and define specific goals for each topic. Doing this together with partners in the landscape initiative will allow you to create collective ownership and strategic alignment. Be as specific as possible regarding the intended impact on the level of the beneficiaries. Alignment on specific goals needs to take into consideration the sustainability claims and commitments of the different partners in the initiative. The LMS is intended to be used to report on progress towards sustainability claims and commitments. It is important to check upfront what kind of commitments or claims the partners have made or intend to make, and what type of data is needed to report on these claims. Consequently, this might require additional monitoring efforts to collect sufficient data to make truthful claims about the progress regarding that topic. An example of how such an agreement can look like can be found in Annex 3. Further details about claims are specified in chapter 5.

2.2.3 Set up an effective management system

Lastly, it is important to specify who is contributing to each specific goal, how they are contributing, where are possible synergies and if there is potentially a stakeholder who leads on the topic. As can be seen in the following chapter, the LMS process can support partners to align on how these goals will be achieved, and how each partner will contribute, by defining clear impact pathways.

The ISEAL paper on “Credible Assurance at A Landscape Scale” describes a common set of characteristics for the effective management of landscape initiatives. These include:

- For jurisdictional initiatives specifically, an engaged government actor that is driving or supporting the change process
- An inclusive agreement by producers, local communities, sourcing companies, NGOs and government to work together on an action plan with progress indicators and long-term targets (10-15 years)
- The ability of participating stakeholders to institutionalise that commitment within a long-term policy or regulatory framework
- A legal entity (e.g. government body, multi-stakeholder platform, NGO) that is responsible for coordinating implementation
- Broadly agreed performance metrics with locally adapted targets
- Repercussions or remediation processes for lack of progress or poor performance

2.3 Define your Theory of Change (step 3)

After the stakeholders have identified which key socio-economic topic(s) to focus their landscape initiative on, which of the long-term goals the initiative aims to contribute to (“intended impact”) and which stakeholders to work with, it is important to align on a roadmap on how the impact will be achieved. Such a roadmap is also referred to as impact strategy or Theory of Change. A Theory of Change “describes the change that an initiative (organisation, network, project, etc.) wishes to see in the world and its understanding of how it will contribute to that change.” (Fairtrade International, 2016). A Theory of Change is a strategic planning approach, a participatory process to design interventions based on a shared understanding of the context. It visualises the pathways of how interventions influence outcomes and how these outcomes are expected to contribute to impact. An explanation of key elements of a Theory of Change can be found in Annex 4.

Theories of Change are particularly useful for the planning, monitoring, learning and steering of multi-stakeholder interventions in complex, unpredictable contexts. Unlike Logical Frameworks, Theories of Change clearly indicate the steps towards impact (cause-effect relations) and how they are interlinked. They are meant to be used as a flexible planning tool. If monitoring data shows that progress is not being made as expected, partners can discuss if strategies should be adapted, and collectively decide if the Theory of Change should be adjusted.

A collectively developed Theory of Change with concrete intended results at outcome level, aimed at contributing to impact in one or more socio-economic topics, will provide orientation and focus for the partners of a landscape initiative. They will know what they need to do to make the intended changes happen, in an aligned and complimentary way, because they feel co-ownership of the Theory of Change.

Theories of Change have been used in international development for over a decade, and it is worth highlighting two lessons learnt here:

1. **Focus on change (outcomes), not on activities and outputs.** Ensure that most of the space in a Theory of Change diagram is given to the intended outcomes, usually the most challenging to describe concretely. When much space is taken up by outputs (which are of course much more straightforward to describe), there is a risk that clarity at outcome level is reduced because of a lack of space, or resources to describe them well. Starting the discussion with identifying key actors (who needs to change) and key factors (what needs to change) as suggested above, will help to reduce the risk of getting stuck in activities and outputs.
2. **Prioritize which steps are critical for achieving your impact.** A Theory of Change contains clear pathways of concrete and interconnected intended outcomes. Still, not all of these steps need to be monitored. A selection can be made depending on necessity to learn and to take decisions, and on reporting requirements. It is important to monitor key steps in each pathway. Linking activities, outputs

and changes at outcome level is key to show how an intervention has contributed to impact-level changes in a landscape.

3. Designing a customized MEL system

After clear goals have been set and the Theory of Change has been developed, the MEL system can be designed. It's important to be aware that the steps of designing your Theory of Change and monitoring system are not as linear as they might seem. Based on new insights during programme design, you might decide to use different strategies, include other actors or lower your level of ambition. Also, a crucial aspect of continuous monitoring is learning and improvement. This, again, might lead to adjustments. It's important to find a good balance between flexibility and openness towards adjustments on the one side, and consistency on the other. Any changes in the methods, tools, indicators or Theory of Change might make it more difficult to analyse trends over time and therefore report on progress. When this happens, it is good practice to report on why you changed your Theory of Change.

The following sections will explain each step of designing your MEL system more in detail and highlight how you can use the LMS with its Library of Indicators as support. Due to its importance, the topics of setting up a data infrastructure and clarifying internal roles will have a dedicated section as well.

3.1 From Theory of Change to MEL system (step 4)

Once the Theory of Change has been developed collectively, it is time to select which intended outcomes should be monitored. The selection of outcomes should be guided by purpose and users: how will the monitoring data be used, and who will use it? Which outcomes need to be reported on? Which are important for communication? Which are important for steering / internal decision making? Which need to be monitored for learning about what works and what not, and why?

- **Identifying the users:** Stakeholders in the landscape initiative are users of the monitoring findings. Users include managers who need the findings to take decisions on resource allocation including planning activities; MEL officers who need to prepare reports be accountable to the donor; Communication staff who are responsible to produce stories for external parties. But also, local partners and even beneficiaries might be users of the monitoring findings. It is important to involve users in prioritising which outcomes will be monitored, which questions need to be answered, and which indicators will be used to collect data. It is important to ensure that the monitoring framework will be relevant, realistic, useful, and will be co-owned by all involved.

- **Selecting the outcomes:** For steering, often only the most important steps (critical for impact) or most debatable steps in the Theory of Change (high risks) are monitored. The selected outcomes are placed in an MEL system (for example, putting the list of outcomes in an excel file). It is recommended to formulate monitoring questions for each outcome (questions to be answered with the monitoring data). The indicators are then chosen based on the monitoring questions to be answered. In this way, it is ensured that the MEL system with its indicators provides useful insights and is clearly linked to the intended outcomes and impact.

3.2 Choosing your indicators (step 5)

With a Theory of Change, it is possible to explain how interventions contributed to changes at outcome level. Linking your indicators to activities, outputs and outcomes in a Theory of Change will support you to explain how your initiative contributed to a certain impact. In addition, it is important to validate your contribution, through qualitative methods, such as interviews with different stakeholders, including beneficiaries. Qualitative methods also play a central role in validating quantitative indicator scores and the assumed cause - effect relation between the intervention, outputs, outcomes and impact. This is further highlighted in the chapter on claims.

For each impact pathway, both long-term outcomes, and short-term outcomes (that are close to the initiative’s sphere of influence) need to be monitored. For this, indicators need to be chosen for critical steps in each impact pathway. Especially for indicators at long term outcome and impact level, the Library of Indicators has a large selection to choose from. Output and short-term outcome indicators are often more tailored to your specific intervention. The following table shows both an example of changes at the different result levels in a primary education intervention and suggests how validation of the quantitative indicator scores can be done:

	Intervention activities	Output	Outcome	Impact
General goal or description	<p>Work on and complete relevant primary education infrastructure (school buildings, sanitation facilities) together with local education authorities</p> <p>Train local education authorities on planning and budgeting for maintenance of infrastructure</p> <p>Develop teacher training on improved curriculum jointly with local education authorities</p>	<p>School building with toilets and handwashing stations, accessible for disabled persons, for girls and boys completed</p> <p>Local education authorities know how to plan and budget for maintenance of infrastructure</p> <p>Local education authorities know how to develop and implement teacher training</p>	<p>Local education authorities are ensuring infrastructure maintenance: buildings and sanitation facilities continue to function as planned</p> <p>Local education authorities are training teachers with improved curriculum</p> <p>Teachers are putting improved curriculum into practise</p>	<p>Girls and boys attend school daily</p> <p>Girls’ dropout from school has been reduced</p> <p>Girls and boys complete their primary education</p>
Measurement through indicators – as per Library of Indicators	<p>Library of Indicators: Project-specific interventions & programmes, for example:</p> <p>Budget invested in primary education infrastructure projects</p> <p>Budget invested in training on planning and budgeting for maintenance of infrastructure</p> <p>Budget investment in teacher training development</p>	<p>Number of school buildings built which are accessible to disabled persons</p> <p>Number of sanitation facilities (toilet, handwashing station) built, which are accessible for disabled persons, disaggregated for girls and boys</p> <p>Number of local education authorities who are trained in infrastructure maintenance planning and budgeting</p> <p>Number of local education authorities who are trained in</p>	<p>State of maintenance of school buildings on a scale of 1 - 10</p> <p>State of maintenance of school sanitation facilities on a scale of 1 - 10</p> <p>Number of teachers trained by local education authorities</p> <p>Number of teachers putting in to practise the improved curriculum</p>	<p>Indicators from the Library: Number of children enrolled in primary education, per school year, disaggregated by sex</p> <p>Primary school completion rate, disaggregated by sex</p> <p>% of children in surveyed households who have completed primary education, disaggregated by sex</p>

	Intervention activities	Output	Outcome	Impact
		teacher training development		
Validation through consultation process	Guiding question: are the activities implemented according to plan? Have debriefs internally and with involved stakeholders.	Observation of the school infrastructure with local education authorities, teachers, parents and school children Interviews with local education authorities.	Focus group discussions with students, parents, teachers, and interviews with representatives from local government.	Focus group discussions with students, parents, and interviews with teachers and local education authorities

Table 3: Choosing indicators

Combine qualitative and quantitative indicators

When choosing your indicators, it is important to combine quantitative and qualitative indicators. Quantitative indicators are useful to measure the reach of your intervention and how much change can be measured. Qualitative indicators are needed to describe and understand who or what changed. The starting point is: when monitoring numbers (how much/how many) also always ask for a description of the change. According to ISEAL, an indicator can be defined as “quantitative or qualitative factor or variable that provides a simple and reliable means to measure change over time or to help assess the performance of an organisation, project or intervention.” (ISEAL Alliance, 2014).

The Library of Indicators mainly contains quantitative indicators. This allows easier tracking and analysis over time. Yet there is a high value in qualitative indicators and information as well, especially to complement the interpretation of quantitative indicators. Qualitative methods and indicators are important to create insight in how and why change has happened and can also be used to explain and validate your numeric results. Given the complexity of assessing socio-economic aspects, all relevant qualitative and quantitative information is potentially useful and should be used in a complementary manner. A further description of types of indicators and examples can be found in Annex 5.

Combining indicators to create insights about a socio-economic topic

It is important to be aware that indicators often consist of multiple data points. Also, in order to create meaningful insights out of data, indicators often need to be combined. Multiple indicators can be used to inform about the current situation or trends for certain socio-economic topics. The following chart shows the relationship between data, indicators and socio-economic topics:

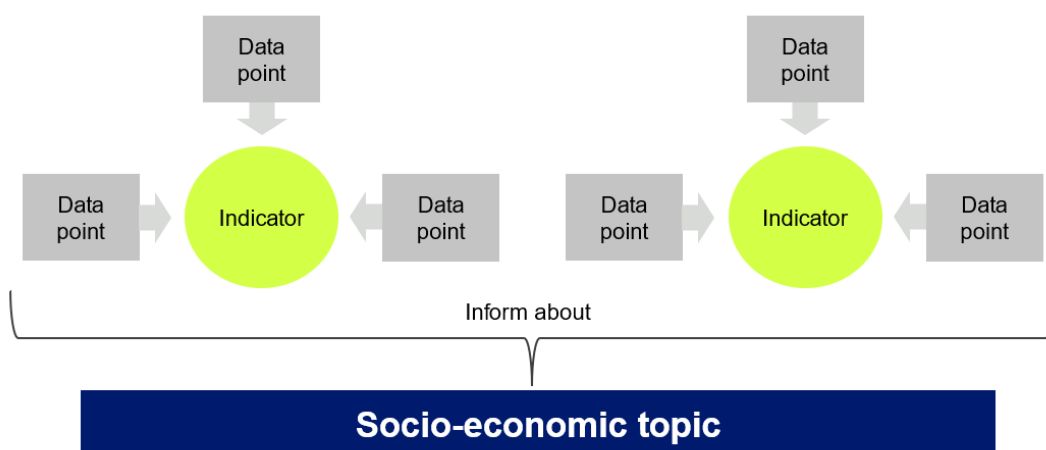


Figure 6: From data to information

This visual also highlights that reporting on outputs, outcomes and impacts related to socio-economic topics might require multiple indicators – as one indicator can most likely not provide a full picture about a socio-economic topic such as child labour or poverty.

Please also be aware that to turn data into information about progress towards impact, the indicators should be linked to the Theory of Change for that socio-economic topic. This will allow you to check if you are making the expected progress and identify bottlenecks and where action needs to be taken.

Annex 11 contains further details on requirements for meaningful data based on ISEAL's 7 data quality parameters.

Think about disaggregation before collecting your data

To get meaningful insights out of data, it is crucial to disaggregate data. It is important to think about types of disaggregation per indicator before collecting your data, to ensure that the necessary data is collected. And to see it as a chance to derive nuanced information that is relevant for the landscape initiative, such as gender or age differences. Especially if gender equality is a focus area, all surveys and data collection efforts should enable a disaggregation by gender. Disaggregation of data is important to check if all stakeholder groups are equally able to benefit or participate in the initiative. The most common categories for disaggregation are gender (male, female, other) and age (in age groups). In certain cases, it might be worth considering including other categories such as vulnerable groups (e.g. ethnic minority), position / role (e.g. within an institution or farmer cooperative).

There are, however, also challenges and potential risks that come with disaggregation, namely:

- Putting certain social groups at risk if their responses become public. If, for example, there are only a few women in a community, their responses might be traced back to them individually.
- Misleading interpretations, especially if the absolute number for certain sub-categories is small. The results might then, for example, indicate a stark difference between social groups (e.g. men and women) which might not hold when increasing the sample size.
- Categories for disaggregation are not aligned: It is crucial to have identical categories across (all) data collection efforts. If, for example, the age groups differ between surveys, it is difficult to combine the results.

3.3 Choosing methods and Tools (step 6)

Once it has been decided which intended outcomes and impact in the Theory of Change will be monitored, for which purposes and users, and relevant indicators have been chosen, it is time to decide on the data collection methods, tools and frequency. Often this is captured in a data collection plan. For each indicator, it is indicated how data will be collected, who will collect the data and how often it will be collected. There is no "one-size-fits-all" solution for this process. In general, the following aspects should be considered:

- Agreeing with all stakeholders on the MEL cycle.
 - How often will data be collected? This will depend on the indicator, when change can realistically be expected and how often the data is needed (depending on use).
 - Who will collect which data? What are the internal roles and how is data stored and analysed? Responsibilities need to be agreed on at the start.
 - When is the best time to do monitoring, before annual planning so that findings can be used for steering, or before annual reporting? How often will internal and external reporting happen?
- Which indicators can be grouped and collected jointly, e.g. through one landscape survey? Which indicators require additional investment (e.g. extended field visit due to focus group discussions)?
- Always consider integrating context indicators and external data sources in the data collection plan, for example for benchmarking purposes or monitoring important contextual developments.

3.3.1 Data infrastructure, and internal MEL and data roles

Part of building an MEL system is designing systems and processes. Having a reliable and easy-to-use data infrastructure and clarity of internal roles regarding MEL and data are among the most frequent challenges of MEL systems. A data infrastructure refers to the processes and tools used to collect, store, manipulate and analyse data. Internal roles refer to the responsibilities of involved stakeholders to implement these processes and use these tools.

Process	Data infrastructure - questions to answer	Internal roles and working processes – Aspects to consider
Primary data collection	Is it required to design your own data collection tools? How is the data going to be collected? On paper or supported with digital devices? Who will own the data? Who will have access to the data? How will data be kept secure?	Integrating efforts with what stakeholders plan to do anyway (either as part of their own data collection efforts or as part of the environmental dimension) Training enumerators well (especially with the long-term perspective)
Digitization of primary data	If analogue data was collected: How is it going to be digitised? Which tool is being used? Who will do it?	Digitising qualitative data can take a lot of time and might be affected by the quality of documentation and handwriting.
Integration of secondary / external data	What's the format that's available? Can it be easily integrated with own data, or is significant effort (e.g. copy-pasting) needed?	The Library of Indicators should serve as a good entry point to identify relevant and reliable data sources.
Data cleaning and validation	Which digital environment is used for storing – and therefore cleaning and validating – data? What are the options of that environment to make the process efficient?	The time effort for data cleaning is usually significantly underestimated. This process step might require going back to interviewees for clarifications, just to give one example.
Data analysis and visualisation	Is the same digital environment used as for data cleaning and validation – or not? Which questions need to be answered with the data? Can we combine quantitative and qualitative data for meaningful insights about how/why change happened? How can we validate the data and insights?	This step oftentimes takes more time than expected as trends might not be that clear or counterintuitive – and require checks and feedback loops. It is very important that the analysis is responding to the questions that should be answered with the data, to make sure insights are useful for steering and decision making. Appealing visualisation is very important for general communication of results.
Report writing and reporting	Which tool is being used for the report writing? Who will write the report? Can people work on it simultaneously or not? Will the report be used internally or also externally? How can we share the results with different stakeholder groups?	For the sake of coherence, it can be helpful if one person leads that process or there are clear guidelines for writing. It is helpful to structure the report along the Theory of Change and use the Theory of Change to build your story (this result is important because) Feedback loops with (internal) stakeholders can take more time than expected. It's important to communicate time-windows for commenting early on.

Table 4: Guiding questions for building a data infrastructure

As can be seen, deciding on the platforms and technology used to collect, store, process and potentially visualise the data is crucial, and so is it to establish clear roles and processes. The latter includes monitoring cycles of gathering, analysing, validating, and reporting. Certain indicators might only be relevant every two or three years

(e.g. in-depth household surveys), whereas others might be relevant annually (e.g. for planning or reporting). For this, it's important to assess the required resources (human/financial) for the MEL system.

3.5 Set baseline & targets (step 7)

Finally, setting a baseline is important for any MEL system. A baseline is defined as – “a comparator in space and/or time against which to measure performance” (ISEAL). A baseline is usually done at the beginning of an intervention, as it is the first measurement on the indicators. It enables the user to understand progress, trends, and developments. Collecting baseline data is usually more time-intensive than a regular year of data collection because:

- Tools for data collection (e.g. surveys) need to be developed first.
- Data collectors and staff need to be trained.
- Field visits need to be planned, which requires to reach out to local actors and build trust.
- Time should be factored in afterwards to consolidate the experiences and learnings – for further improvements.

4. Continuous monitoring (step 8)

4.1 Methods for data collection

This sub-chapter provides an overview of different methods for data collection that are relevant on landscape level. These are:

- External statistics, data and research (Annex 6)
- Surveys and tools for conducting (own) surveys (Annex 7)
- Focus groups, expert interviews and panel surveys (Annex 8)
- Innovative data collection options (Annex 15)

Each of these is explained in more details in the Annexes. The methods that are most suitable can be different for each outcome and indicator and depend on the insights you are trying to get out of the data. Often a mixed method approach (using both quantitative and qualitative methods) is useful to understand what has changed, for whom, how much it has changed and how the change happened. Additional information on certain aspects – e.g. software solutions or an in-depth analysis of innovative data collection options is also provided in the annex to this document.

4.2 Benchmarking your data

A benchmark is “a reference required to convert data into a metric” (ISEAL). Benchmarking in our case refers to the process of comparing data across spatial scales and/or across points in time. It enables the landscape initiative to understand “where they stand” with certain socio-economic topics, e.g. compared to national data.

The landscape itself is usually a smaller geographical area than the region or district of the country. Yet in certain cases, the landscape can also cross boundaries of different regions or districts, or even countries. Benchmarking your landscape level data with similar data on the level of the region, district or country can help to better understand and interpret your data. Developments in the landscape context, such as new policies, can have a strong influence on the landscape and can help explain certain changes and trends. Also, if you see that the trends in your landscape are very different (better or worse) from the trends in the region or country it is worth finding out why this is happening.

The LMS, and especially the Library of Indicators, facilitates collecting comparable data by providing insight in which indicators are commonly used. If the landscape-level indicators are aligned with indicators on other levels (e.g. the country), data and trends can be compared. This significantly enriches the insights from monitoring and reporting capacities of the landscape initiative and substantiates claims. The Library of Indicators includes

information for each indicator on which geographical scale data is likely to be available. This enables a quick overview and comparison.

The following chart shows the relationship between the different spatial scales and how the LMS enables benchmarking and integrating data from these different levels:

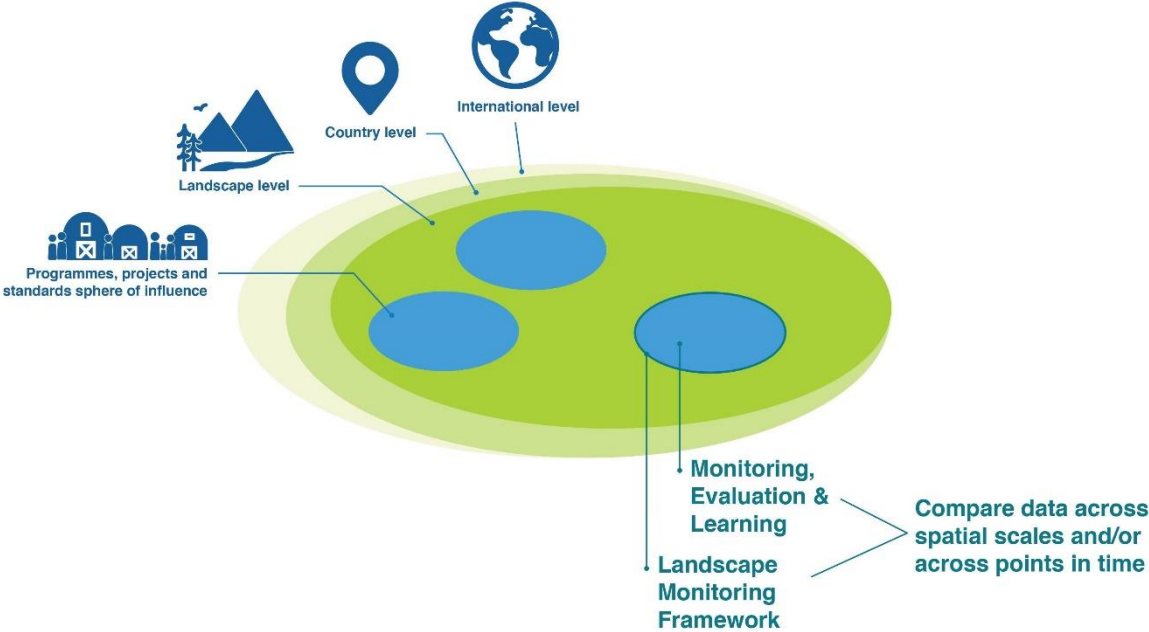


Figure 7: comparing data on geographical scales

One key challenge is that comparisons do require consistent data. Meaningful insights can only be derived if the data points that are compared against each other are close enough conceptually and refer to similar timelines. Certain indicators such as multi-dimensional poverty are complicated to measure and are usually not available on landscape level (and not feasible to collect additionally). In other cases, there might be data gaps (e.g. certain periods not available) or inconsistencies in how the data was collected across years. Different scenarios are included in Annex 10.

A suggestion is to work with the Library of Indicators and its given filters to create an overview table (e.g. as Excel file) that can be structured as follows:

Indicator	Available on country level?	Available on region / district level?	Collected on landscape level?	Further comments
Inequality Adjusted Human Development Index (IHDI)	Yes	Partly: HDI yes, but not “Inequality Adjusted” and only grouped for multiple regions.	No. Potentially benchmark with Poverty Probability Index.	Consider taking “normal” HDI on country level to be consistent across spatial scales.
Child labour (% ages 5-17)	Yes	Yes	No: Difficult to assess directly.	Use country and regional data as contextual information
...

Table 5: Assessing data availability on geographical scales

4.3 Interpreting data - understanding contribution

The landscape initiative's sphere of influence

A landscape initiative consists of coordinated individual and collaborative initiatives, such as programmes, projects and standards, that have a shared vision and goals and together strive to create impact with a landscape. Still, even when they are coordinated, these interventions have a limited scope. In order to understand (and communicate about) the contribution of a landscape initiative to changes in the landscape, it is important to be transparent about the reach of the initiative, within the landscape.

The reach of a landscape initiative is referred to as a sphere of influence within the landscape. It can be different in size, thematic focus and the degree of stakeholder engagement. First, the sphere of influence depends on the number of stakeholders involved in the initiative, available budget, level of collaboration with local governments, and the level of motivation, commitment and alignment between the partners in the initiative. Second, it is also important to be aware of the fact that a landscape initiative usually has a certain thematic focus. Hence, its direct reach is limited to the socio-economic issues that are addressed within the landscape. Third, it is important to be aware that a landscape initiative usually is able to benefit only a certain number of key stakeholders or stakeholder groups within the landscape. This means that not all actors or user groups or all geographical areas of the landscape might be influenced by and benefitting from the initiative.

However, together, the coordinated initiatives are expected to contribute to landscape level outcomes and impact. Therefore, it is important to monitor changes on different levels: the level of individual projects, programmes and standards working in the landscape, the landscape level, and the wider country and global context. This is visualised in figure 6:

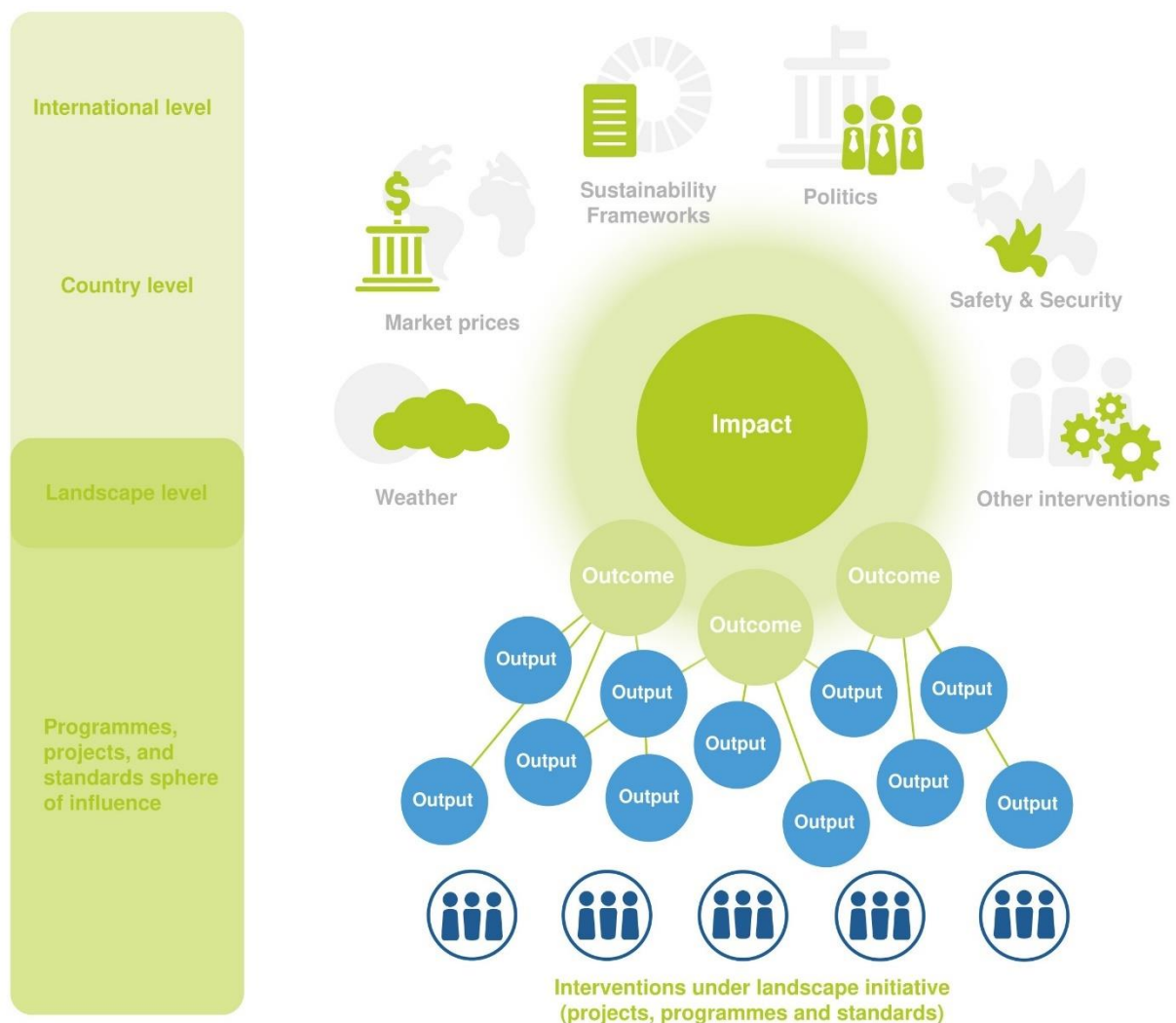


Figure 8: Coordinated interventions contributing to Landscape level outcomes and impact

Linking project level results to landscape level outcomes

A 'nested Theory of Change approach' will help to understand and communicate about how individual interventions contribute to landscape level changes. A nested Theory of Change approach means that the Theories of Changes of the individual interventions are linked to the landscape level Theory of Change. The Theory of Change will make clear how the individual interventions contribute to landscape level outcomes. Linking your Theory of Changes will also allow you to link your monitoring system and to identify common indicators. Monitoring data can be aggregated from individual programmes to a higher (landscape) level, especially by using higher level 'container' indicators. It enables the members of the landscape initiative to communicate about individual efforts and results as well as higher (landscape level) level changes and how the individual (coordinated) interventions are contributing to this.

It is important to be aware that the monitoring on landscape level might require some different indicators and methods than monitoring of the different interventions under the landscape initiative. The individual interventions might require their own more detailed Theory of Change, MEL system and specific indicators for meaningful monitoring and steering.

Monitoring changes in your context

Next to linking the Theories of Change and monitoring on different levels, it is important to monitor changes in context a) given the large amount of other external (contextual) factors that influence the success of your initiative, and b) to be able to quickly respond to new opportunities and challenges in a changing environment. The LMS strongly recommends not only monitoring changes with regards to the outputs, outcomes, and impacts that you influence, but also to monitor other important actors and factors that are influencing (helping or hindering) your outcomes and impact. A regular (e.g. annual) qualitative assessment of new actors and factors that influence your Initiative's success, and how to respond to them, is sufficient. The context analysis that was done during the Theory of Change development process can serve as a basis. It is recommended to do this in a workshop setting, together with partners and other stakeholders (e.g. during a Theory of Change reflection workshop).

5. Using your MEL data (step 9)

5.1 Learning and internal decision-making

A continuous monitoring process can be used for both internal learning and decision-making. Next to public reporting (see the following chapter on claims), these are crucial aspects of an MEL system as they turn data into meaningful action.

Internal learning:

Internal learning refers to a process of continuous improvement, whereby the activities carried out by organisations active in the landscape are being adjusted according to the findings. Such learnings can for example be to:

- Assess the relevance of provided services (from a beneficiary perspective) and adjust content / topics or other factors such as logistics (e.g. to decrease travel time for participants).
- Improve the data collection process, e.g. by adjusting the timing or providing required training to enumerators.
- Deepen the understanding of how, when and where certain interventions work. It might be that contextual factors (previous experience with support programmes, cultural factors etc.) influence the uptake of a certain programme.

Internal decision making:

When comparing your monitoring data with your Theory of Change, it can be used to guide internal decision-making. It is recommended to reflect on your progress right before annual planning, e.g. for deciding on:

- Comparing the monitoring data with the Theory of Change for strategic reflection: Are we seeing the results we were hoping to see? It might be that new insights or important developments in your context require you to change your plans or allocate resources differently.
- Pooling resources or finding synergies.
- Bringing in further actors. For example: If the need of beneficiaries in the landscape was raised to provide support for a topic that the current actors of the landscape initiative cannot provide, the decision can be made to reach out to an actor with that expertise.
- Substantially adjust the Theory of Change and/or monitoring system, e.g. by including another socio-economic topic or change certain indicators. This should only be done with careful consideration of the consequences.

The actions and decisions taken based on the data are ideally coordinated with the local population, e.g. through consultations that are integrated into the multi-stakeholder platform.

5.2 Reporting and knowledge sharing

It is important to consider how the data, information and insights will be shared with the general public and people within the landscape. Transparency and data sharing are central when doing reporting. First, transparency is especially important for trust building. Second, the LMS discourages one-sided data extraction where beneficiaries give their data for free and initiatives use it as they see fit. Therefore, the data, information, learnings and insights should both be shared actively with local communities and stakeholders, and any adjustments in the Theory of Change should not only be based on the “hard numbers” of the monitoring activities themselves, but also on qualitative feedback from beneficiaries. This can for example be done in focus group discussions where the results of the monitoring activities are presented, validated, reflected on and interpreted, and their relevance is discussed.

5.3 Communication & Claims

This chapter focuses on using monitoring data for communication.

Claims are “truthful statements of an initiative about the progress being made and/or the results achieved” (ISEAL, 2019 A). ISEAL differentiates between three different kinds of claims that can be made on a landscape level, namely:

- 3 Commitment claims: Aspirational statement of what the initiative aims to achieve
- 4 Absolute performance claims: Factual statement of specific performance levels, based on baseline data
- 5 Improvement claims: Progress statement about the change that has resulted.

This section mainly focuses on improvement claims. The reason for that is that commitment claims are not depending on monitoring data. Similarly, absolute performance claims can be done based on one-time measurements (e.g. through the initial assessment), as they are only about the overall situation in the landscape and do not intend to link the performance to the intervention. Improvement claims on the other hand are more challenging to prove, back up with evidence and link to the interventions done by the stakeholders of the landscape initiative. With a theory-based evaluation, it is possible to establish if the landscape initiative made a significant contribution to the observed changes. It is not possible to say that the landscape initiative has solely caused the change.

The table below shows examples for the three types of claims for primary education:

Type of claim	Example	Indicators to validate claim
Commitment claim	The landscape initiative commits to strengthening primary education through: <ul style="list-style-type: none"> - Infrastructure investments (roads & school buildings) - Provision of teachers’ training - Awareness campaigns. 	It should be specified which actor of the landscape initiative / MSP is responsible for each intervention, how much is being invested and how many people are expected to be reached.

Type of claim	Example	Indicators to validate claim
Absolute performance claim	<p>Overall, most children attend (91%) and finish primary education (85%). There is, however, a generally lower rate among disadvantaged groups (indigenous, rural households, girls) with only 72% completing primary education.</p> <p>This means that primary education is a topic of concern for the landscape that we aim to address through our commitments.</p>	<p>School enrolment primary: male/female (gross %) OR if available net enrolment rate – primary.</p> <p>Primary school completion rate (children enrolled in last grade of primary divided by population at entrance age for that grade)</p>
Improvement claim	<p>“Access to primary education has been improved, especially for disadvantaged groups. This is an important step towards educational justice within the landscape”.</p> <p>Based on the following analysis: Primary school enrolment has increased by 8% to now 98% overall. This increase is mainly due to significantly more girls attending primary school. Similarly, primary school completion rate increased by 7% to now 92%.</p> <p>Both trends are possibly due to disadvantaged groups increasing both attendance and completion rates.</p> <p>On a national level, both enrolment and completion rates have remained stable across the time period with 97% and 89% respectively. This indicates that the upward trend is specific to the landscape. The landscape initiative has worked intensively in the past years to support that positive development.</p>	<p>School enrolment primary: male/female (gross %) OR if available net enrolment rate – primary.</p> <p>Primary school completion rate (children enrolled in last grade of primary divided by population at entrance age for that grade)</p> <p>Both trends were checked against the country average, which showed a significantly lower increase of both attendance and completion rate.</p> <p>The results have been presented to different communities in 5 different focus group discussions. The majority of participants found the results to be positive and relevant. And confirmed that the landscape initiative made a significant contribution.</p>

Table 6: examples of different types of claims

The attribution challenge is well known in the field of monitoring and evaluation. The question basically is: How can we not only measure change, but be confident that the change is related to our activities? The more complex a given project or initiative is, the more difficult it is to create that link between own interventions and overall changes. And landscape initiatives can be seen as one of the most complex endeavours in the developmental sector. By definition, the geographical scope goes beyond single communities or (producer) organisations, oftentimes encompassing an entire region. Furthermore, the multi-stakeholder setup implies that multiple actors are present in the landscape, all of them with their own Theory of Change, carrying out different activities and having their own historical background and developmental agenda.

Important requirements for truthful improvement claims on landscape level are:

- **Theory of Change and MEL system:** The member of a landscape initiative can conceptually link progress to their own interventions. A Theory of Change and own MEL system will help explain how the intervention has plausibly contributed to the result.

- **Theory-based evaluation:** Truthful improvement claims (contribution claims) can only be made if there is credible evidence that the programme has contributed, using credible methods for theory-based evaluation such as contribution analysis.
- **Clear scope:** The claim can be linked to a specific topic in the Library of Indicators and either refers to the topic as such (“primary education improved”) or a certain aspect within it (“access to primary education improved”).
- **Validated data:** The progress is measured through clear indicators and based on a reliable process to gather, manage and analyse the data.
- **Contextualization through benchmarking:** Comparing the findings with data on other spatial scales, e.g. the country-level. And comparing findings with baseline data.
- **Contextualization with qualitative data:** Describing clearly which other actors and factors have plausibly contributed to this change.
- **Validation with beneficiaries:** The progress is considered to be relevant / significant among key stakeholders and people living in the landscape. This can e.g. be done through focus group discussions where the results are presented.

These criteria are all covered in the previous chapter on “Customising your own MEL system”. This means that truthful claims can be seen as an extension of a robust MEL system. Or to put it another way: If the MEL system for a landscape project is set up similar to how it is described above, the findings can be turned into contribution claims if there is sufficient evidence that the intervention contributed.

6. Annexes

Annex 1: Illustrative roadmap for the use of the Library of Indicators

	Step 1: Initial assessment	Step 2: Prioritisation of socio-economic topics	Step 5: Choosing your monitoring indicators
Short description	Systematic approach to gathering relevant data and information for further decision-making and collaborative planning	Process of identifying most relevant socio-economic topics and defining overall goals for landscape initiative within these topics	Choose relevant indicators for which to collect data systematically across time in order to monitor changes in a landscape
How & when is it done? (for integrated landscape management)	Usually prior to establishing the multi-stakeholder initiative.	Together with key stakeholders for a shared understanding and collaborative planning	After setting your goals and designing the Theory of Change, for effective monitoring of activities and results
Estimated timelines Note: Depends heavily on specific set-up of the landscape approach	2-4 months for secondary literature review and consolidating existing data 2-4 months for preparing, conducting and analysing assessment(s) in the field, to gather complementary data	If MSP is already in place: 1-2 months to disseminate and explain available data (from initial assessment) 1-2 months to discuss desired priorities (socio-economic topics) and reach agreement	2-3 months for creating / adjusting the Theory of Change and define the specific indicators 1-2 months for deciding and developing methods for own data collection and integration of external data 2-4 months for planning and conducting baseline assessment In parallel: Clarification of internal roles and setting up data infrastructure

Table 7: When to use the Library of Indicators

Annex 2: Example of an initial assessment

An example to work with the LMS is to create an overview table based on the above-mentioned basic data:

Socio-economic topic	Indicator	Relevance for our initial assessment	Data sources
Landscape Basic data	Basic data on landscape: administrative districts & municipalities; total population (male/female)	High	Already available in project plan
	Top 5 sectors/industries of employment; top 5 crops as per official statistics	Medium	official government data, relevant research publications.
	History and relevant contextual information of the landscape, e.g. on: - Conflicts and tensions - Migration and change in economic opportunities	High	official governmental sources. relevant documents of NGOs and civil society actors. Ideally ask people of different communities, e.g. in focus group discussions.
...
Education Child labour	Education: General level of achieved education among population and access to primary education.	Medium	Official government data and reports of identified NGOs on the topic.
	Child Labour	High	

Table 8: Example of initial assessment

The section on “basic data” in the Library of Indicators contains further aspects such as “basic farm and household data” or “Sustainability certification schemes and programmes active in the landscape”. In this hypothetical case, the responsible person(s) for the initial assessment decided to include topics such as education and child labour. Here, the entire list of 36 socio-economic topics can serve as orientation to include additional topics. Potentially interesting indicators from the indicator list to include in the initial assessment are:

- Social safety net programme coverage for rural population/ farmers in the landscape (socio-economic topic: Social protection floor).
- Access to basic health services
- Primary school completion rate and / or secondary school completion rate

Annex 3: Example of collective goal setting and an agreement on claims

The outcome of participatory goal setting could be a table as follows:

Socio-economic topic	Main goals and concepts	Do the users of the LMS intend to make a Claim?	Indicators that could be used
Farming income	Farmers can achieve living income through farming activities. To specify goal (e.g. % of farmers to achieve living income) a living income benchmark is required.	No	From the Library of Indicators: Farm household income by sources Additional (e.g. qualitative): Focus groups to understand current challenges of farmers.
Primary education	Girls and boys attend and finish primary education – independently of gender, cultural or ethnic background, or socio-economic status of their families.	Yes	From the Library of Indicators: Primary school completion rate Additional (e.g. qualitative): Expert interviews with teachers and community leaders to understand educational situation and challenges.
...

Table 9: Example table with goals and indicators

Annex 4: Key elements of a Theory of Change

The elements in a Theory of Change are:

- **Interventions, or strategies:** main components of an initiative, for example capacity development of local actors; policy influencing; or stimulating an enabling environment. Interventions are made up of specific activities of an actor (e.g. stakeholders within the landscape) such as trainings, workshops or provision of materials. Every intervention, or strategy, will have its own impact pathway in the Theory of Change. Interventions require inputs - The financial, human, and material resources used for the intervention.
- **Outputs:** The direct results of activities of the intervention. For example: people trained, material provided, event organised. Outputs are in the sphere of control of the intervention.
- **Outcomes:** The short-term and medium-term effects of an intervention on the socio-economic topic in question. Intended outcomes describe which stakeholder or local actor will be doing what differently, because of the intervention. The intervention does not have control over these behavioural changes (e.g. use of products and services delivered, improved practices), but they are important intermediate steps for achieving the impact. For example, local government is implementing a more inclusive policy, or local businesses are offering more environmentally friendly products. Outcomes are in the sphere of influence of the intervention.
- **Impact:** Long-term effects on the socio-economic topic, which the intervention is aiming at. The impact in a Theory of Change is the intended positive change at the level of beneficiaries or end-users. For example, women and men farmers are benefitting from improved government services: they are producing more sustainably, and their families are more food secure. Changes at impact level are the type of changes intended by the SDGs, interventions can only contribute to impact. Changes at impact level are in the sphere of interest of the intervention.

Annex 5: Types of indicators & examples

Indicators can be quantitative (numeric) or qualitative (descriptive) in nature. Qualitative indicators can be in narrative or in a “categorical” form. This leaves us with the following three types of indicators:

Type	Example(s) from Library of Indicators	Further notes
Quantitative	Household income (measured in USD or local currency) Primary school completion rate	The results of the questions are directly available in a quantitative unit such as a currency or percentages.
Qualitative categorical	- Poverty Probability Index (PPI)	The PPI provides a numerical score (probability of a household living under a certain poverty line), but is based on ten interview questions with categorical answer options (e.g. does the household own a blender or refrigerator / freezer?).
Qualitative narrative	- Top 5 socio-economic challenges according to the population.	This information is usually collected through interviews or focus group discussions; and works with open-ended questions. This leads to narrative results that need to be further processed.

Table 10: Examples of different types of indicators

Annex 6: Data collection: Using external statistics and data sources

A main challenge of landscape projects is that there are many topics to cover on landscape level, yet only limited resources for monitoring and own data collection and the burden of data collection can also be high for respondents. Therefore it's important to always check which internal and external data is already available and collect extra data only where it's not available but important to have.

Researching and validating existing data and information requires time. To provide orientation and make the process as efficient as possible, our suggestions for working with and including external data are:

- Include official statistics into your research, either as starting point or to compare findings of studies. A table with the most important data sources can be found below in table #...
- Use sector or crop programme specific data, e.g. from reports, research or impact programmes. Examples are the Swiss Cocoa Platform, World Cocoa Foundation (WCF), the International Cocoa Organisation (ICCO), International Coffee Organisation (ICO), International Cocoa Initiative (ICI), Ethical Tea Partnership, timber industry reports for the country (if relevant), etc. These statistics can serve to triangulate your data (what are realistic values), set targets (what are optimum or minimal values in the sector) and to benchmark with sector averages. Note: this crop-specific global data always needs to be compared with country and regional level crop data (more accurate for within the context) and may need to be complemented by data on other crops or sectors of relevance in the landscape.
- Use of certification programme data (certified operations in landscape & number of producers included statistics in annual reports, impact studies) and, if possible, ask for data directly from other key stakeholders operating in the landscape (and that might be part of the multi-stakeholder platform).

The following table provides an overview with the most relevant and reliable public data sources, which provide data on country level and are also included in the Library of Indicators:

Data source & socio-economic topics covered	Weblink	Guidance for accessing country-level data
World Bank Open Data: a compilation of relevant, high-quality, and internationally comparable statistics about global development and the fight against poverty.	World Bank Open Data Data	Use the search function to find data on a certain topic. Alternatively: Scroll down and access different data sources under "more resources", such as the World Development Indicators (WDI).
ILOSTAT: Datasets of the International Labour Organisation	https://ilostat ilo.org/	The ILO provides guidance on the site's navigation: Get started - ILOSTAT Country profiles can be found here: Country profiles - ILOSTAT
SDG Index: Annual review of countries' performance on the 17 Sustainable Development Goals	Sustainable Development Report 2021 (sdgindex.org)	Select your country of interest from the list. You then receive a high-level overview of the country's performance. Click on a specific SDG to receive further information on specific indicators.
Census data and other national statistics	N/A	Requires own research and most likely a solid understanding of the country's main language.

Table 11: Examples of reliable secondary data sources

The most prominent and important data source is the World Bank Open Data. This repository pulls together many different data sources, harmonises them across countries and is reliably managed and updated. Census data and other official national statistics are also a solid data source and usually provide additional insights. A more extensive overview of data sources can be found in the tab "Data sources for indicators" in the Library of Indicators.

Annex 7: Quantitative data collection: Surveys

Any landscape initiative will also need to collect own data. May it be to test assumptions or validate findings in external data, or as part of an own MEL system, to assess changes at the level of intended outcomes and possibly impact. Hereby, it's important to differentiate between (1) an initial assessment and data collected to understand which socio-economic topics are relevant for people and stakeholders of the landscape and (2) continuous monitoring; data collected to generate information on specific indicators linked to the intended outcomes and impact.

There is a range of different surveys that can be used, depending on the kind of data and information to collect and the target group to cover. The most relevant types of surveys specifically for landscape initiatives/MSPs are:

- Household survey: questionnaires that ask for information on household level and are usually given to a sample of households in a population.
- Individual farmer survey and interviews: questionnaires that ask for information on personal / individual level.
- Individual worker survey and interviews
- Assessments: A more check-list based approach to gathering relevant information, oftentimes about compliance with certain criteria.

It is important to consider the time investment of the respondent when choosing a method or designing a survey. Test the survey before rolling it out for wider data collection, to check the length of the survey (time needed) and if questions are clear enough to collect credible data. Keep it short, only include questions to collect data that will be used. Also consider asking the respondents consent for using the data, and for which purposes it can be used.

The following table provides an overview of these survey types with their strengths, disadvantages and use cases (examples):

Survey type	Strengths	Disadvantages	Example(s)
Household survey	Provide considerable discretion to the interviewer about the information requested of respondents. Data on household level usually more relevant to measure aspects such as poverty.	Information provided by the respondent is based on subjective knowledge and perceptions and can be inaccurate (response error)	The Multiple Indicator Cluster Surveys (MICS) Poverty Probability Index (PPI) - which is based on 10 household-level questions.
Individual surveys or interviews	Can provide more nuanced insights, e.g. about perceptions of individuals regarding certain matters.	Require trust. And if that's not given, then respondents might not answer or provide wrong information. Time-intensive to collect.	Individual farmers or workers within the landscape interviewed
Farm Assessments or audits	Usually quick to collect Data collected and available in a standardised way	Might not capture relevant aspects as they focus mainly on what's clearly visible in the moment.	Audits conducted by certification schemes. Agronomist assessments

Table 12: different types of surveys

As can be seen, the different survey types have different strengths and disadvantages. Therefore, they are usually combined in an MEL system.

Digital tools for data collection and storage

A central question then is how to collect and store any data and information gathered through these surveys. Choosing a fitting digital tool is a crucial decision any project with an MEL system has to make; and it depends on different factors such as:

- Desired functionalities: Should the digital tool just be for storage, or should it also be used in the field for data collection itself? If the latter, the tool should work without internet connection.
- Familiarity among persons within the MSP / landscape initiative that are responsible for data collection and processing. The available digital tools are a good starting point, especially if more than one stakeholder is responsible for data collection and processing.
- Budget (mainly for licence costs) and capacities required to establish and maintain the digital tool. In certain cases, it might be worth investing initially if the mid- and long-term result is reduced time-effort to manage data and information.

Recommended digital tools

The following table provides an overview of the most relevant and reliable tools used for data collection and storage, including further details and weblinks:

Table below offers an overview of relevant digital tools to collect survey data

Tool	Further details	Weblinks and further resources
Kobo Toolbox	An online platform with the features to create surveys, collect, analyse and manage data. It's free, open source and tailored to be used in challenging environments. Hence, an offline version is available.	Website: KoBoToolbox Data Collection Tools for Challenging Environments
LimeSurvey	Reliable online survey tool that is also used in academic contexts. Enables a broad range of question and survey types, but also requires some customization and familiarisation. Main functionality is data collection and storage of individual surveys. No offline version available, which makes it mainly valuable for digitising data that was formerly collected on paper. Can be self-hosted for free, which requires technical expertise. Otherwise, the paid version costs around 20 USD per month.	Website: Home page - LimeSurvey - Easy online survey tool Also available in Spanish, French, Portuguese and German.
Google Forms	Relatively easy feature of Google Suite to create and conduct surveys. Allows multiple users to work on and access forms. Main focus is on data collection and storage of individual surveys. The results of multiple surveys, however, can easily be linked to the same google sheet. Does not have an offline functionality. Is less reliable than LimeSurvey as questions and response options can always be changed – even after responses came in.	Website: Google Forms – create and analyse surveys, for free.

Table 13: Examples of digital tools to collect survey data

Recommended standardised assessment tools and calculation methods

The following table provides an overview of relevant methodologies to assess different socio-economic aspects. They are all included in the Library of Indicators.

Common indicators and methodologies to draw on / standardised data collection tools and methodologies that may help a landscape initiative to collect data in a professional way.

Methodology	Further details	Weblinks and further resources
<p>Poverty Probability Index (PPI)</p> <p>-</p> <p>Included in the Library of Indicators as indicator to assess poverty.</p>	<p>Short country specific and standardised scorecard questionnaire. Measures the probability of a household to live below certain poverty lines; based on ten survey questions.</p> <p>Templates and user guidance available.</p>	<p>www.povertyindex.org</p>
<p>UNICEF MICS programme (Multiple Indicator Cluster Surveys programme)</p> <p>-</p> <p>Covers various socio-economic topics ranging from maternal and child health, education and child mortality to child protection, HIV/AIDS and water and sanitation. Therefore, integrated in various indicators of the Library of Indicators.</p>	<p>offers a ready set of survey tools in five languages, including data collection guidance and a programme for data collection (by tablet) and data processing. The system allows for project/user specific adaptations.</p> <p>The MICS programme also provides full access to existing MICS data for many countries, which may provide adequate baseline data and details even on a landscape level.</p>	<p>https://mics.unicef.org/tools.</p>
<p>Child Labour Risk Calculator</p> <p>-</p> <p>Included in the Library of Indicators as indicator to assess child labour.</p>	<p>The tool was developed by the International Cocoa Initiative (ICI) and uses 12 questions to estimate the risk of child labour in a cocoa-growing community. It can be used to quickly identify communities at higher risk of child labour and prioritise them for support.</p> <p>The questions and approach used could also be adopted to other commodities.</p>	<p>https://cocoainitiative.org/child-labour-risk-calculator/</p>

Table 14: Examples of standardized assessment tools

Annex 8: Qualitative data collection

The difference of focus groups and expert interviews to the above-mentioned surveys is their qualitative nature. Focus group discussions bring together a small group of representative people and are led by trained facilitators. The main intention usually is to understand certain issues deeper and gain contextual information.

Expert interviews are similar in their set-up, just that they are usually conducted with one person only. In the case of landscape initiatives, such experts could be representatives of trade unions, certification schemes or governmental programmes active in landscape, as well as teachers or community leaders.

Both focus group discussions and expert interviews are especially relevant to gather diverse voices and contextualise findings of other data sources and can therefore play a crucial role in understanding links between interventions and change. An example of how Fairtrade used focus group discussions and interviews with young farmers can be found here: <https://www.fairtrade.net/news/from-child-labor-to-the-future-of-food-the-voices-of-young-people-change-agriculture-for-the-better>.

The panel survey follows a slightly different logic as it combines quantitative and qualitative data collection. The main idea of panel surveys is to select a significant and representative number of people that are then interviewed regularly over a longer period of time. In the case of landscape initiatives, this could for example include 100 people from different communities and sectors. Further characteristics such as gender or indigenous background can be included as well. The more nuanced the conclusions should be, the more people have to be included in the panel.

Outcome Harvesting⁷ Outcome Harvesting collects (“harvests”) evidence of what has changed (“outcomes”) and, then, working backwards, determines whether and how an intervention has contributed to these changes. Instead of monitoring a fixed set of indicators, Outcome Harvesting uses an open view to assess ‘what has changed’. It is well able to capture unexpected or unintended positive and negative results. Therefore, outcome Harvesting is well-suited for monitoring and evaluation in dynamic, uncertain (i.e., complex) situations.

⁷ https://www.betterevaluation.org/en/plan/approach/outcome_harvesting
<https://www.civicus.org/monitoring-toolkits/toolkit/outcome-harvesting/>

Annex 9: Innovative data collection options

New technologies such as satellite imagery or blockchain are becoming increasingly relevant for the development sector. Based on our research, the recommendation, however, is to use new technologies wisely and not for the sake of being innovative. Many technologies require high initial investments (both time and money) to set up, and run the risk of excluding certain groups of people (e.g. people without smart phone and internet access if the new technology depends on that).

Still, there are promising developments that should be at least considered to include in a landscape-specific MEL system, namely:

- Satellite images and working with geospatial / remote sensing data (including mobile data); for example, to plot beneficiaries on a map and assess their distance to infrastructure
- Crowd Reporting & Stakeholder Watch platforms
- Use of professional risk or supply chain transparency providers to link your initiatives to your supply chain e.g. for HRDD or communication purposes
- Social media or network analysis

A more detailed analysis of these innovative data collection options including example projects and service providers can be found in the annex to this Guidance Document.

Satellite images and working with geospatial / remote sensing data (including mobile data):

High resolution satellite data and volunteered geographic data is already commonly used for monitoring many environmental topics, esp. deforestation, biodiversity and land use. Especially geo-spatial data on land use and changes of land use can provide useful baseline data and information for landscape projects. Concrete examples are:

- Trends: Earth (<http://trends.earth/docs/en>): monitors land productivity (biomass), land covers and soil organic carbon (SDG 15.3).
- The “urban mapper tool” (<https://geflanddegradation.users.earthengine.app/view/trendsearth-urban-mapper>): provides a satellite map analysis of urban areas that have been newly built in 5-year periods since 2000.

Since there is a change that your landscape project uses at least some remote sensing data analysis tools to monitor some of the environmental indicators, there may be synergies to explore to monitor socio-economic topics by image analysis. This synergy could reduce the cost of data collection and provide more detailed/localised and real-time data on the developments in the landscape.

For socio-economic topics in general, alternatives to (time-intensive) data collection by surveys, e.g. through remote sensing analysis, is only starting to be researched and trialled. It appears to be promising to scale up monitoring efforts, especially in rural areas.

Key challenges with the application of these new methods in landscape projects, however, is that any such analysis may require significant initial investment and research by the landscape initiative (or its development partner organisation) as the project team will need to be familiar with new tools and methods, how to access data and conduct significant baseline research to produce locally adapted benchmarks for later monitoring of remote sensing data over time. An example for such an analysis is image characteristics based on multi-level analysis to roughly predict poverty levels based on satellite images of a rural household.

Also, the scope of relevant research found so far is mostly focused on poverty (including decent housing) as well as farm cropping & productivity analysis for income predictions. Thus, any satellite image analysis will not cover a wider range of socio-economic topics which may be potentially relevant in the landscape (e.g. gender equality, education, child labour, etc.).

This is why we expect best results through combining, at least initially, household survey data (e.g. PPI) or other data sources with the satellite images of the respective household.

Particularly interesting publications for projects willing to start developing their own remote sensing analysis research (for application in sub-Saharan Africa) with focus on poverty are:

Study (title)	Short description	Weblink (if available)
UN Working group on use of Geospatial data for SDG Monitoring (2016)	Introductory overview, including list of freely available high resolution data sets	https://ggim.un.org/documents/Report_Global_and_Complementary_Geospatial_Data_for_SDGs.pdf
Socioecological informed use of remote sensing data to predict rural household poverty in Kenya (2019)	Explaining that a multilevel approach linking satellite and household data (e.g. on household wealth and access to resources) allows improved mapping of homestead characteristics, local land uses, and agricultural productivity can achieve good level of poverty predictions.	https://www.pnas.org/content/pnas/116/4/1213.full.pdf
Poverty Estimation with Satellite Imagery at Neighbourhood Levels (Focus on Ghana & Uganda)	The study uses machine learning algorithms that were trained to predict poverty - based on imagery captured by satellites and from call detail records, which document mobile phone usage. The study compared various statistical poverty estimation methods and settled on the Poverty Probability Index (PPI; included in the LMS Library of Indicators of indicators) to create better results with satellite imagery.	https://www.ifc.org/wps/wcm/connect/2cae89ee-dea3-4a7e-ba79-77c9011cbd0f/IFC_2019_Poverty+Estimation+with+Satellite+Imagery+at+Neighborhood+Levels.pdf?MOD=AJPERES&CVID=mHZhcxB

Table 15: Interesting resources on using satellite images and remote sensing

A key finding of the study on “Poverty Estimation with Satellite Imagery” is that poverty estimations with remote sensing models can reduce the sample size for surveys, yet it still requires a broad spectrum of representative survey data for developing and training well performing poverty estimation models in the first place. In this respect, the research finds that remote sensing and geospatial approaches can be used to improve efficiency and optimization for traditional household survey methods over time. However, the study concludes that significant work remains before remote sensing models can fully replace ground-based surveys (Heitmann and Buri, 2019).

Crowd Reporting & Stakeholder Watch platforms:

Many social audit or certification schemes operate with some sort of publicly accessible grievance mechanism, in which (usually selected stakeholders) can raise grievances or allegations on standard issues, e.g. labour right violations in a certified/audited site. One example of this is the [WFTO Fairtrade Accountability Watch](#).

In principle, such platforms use simple forms that also a landscape project could set up (e.g. as a google form) to encourage all or specific groups within a landscape to raise issues or topics of concern, which could be problems regarding freedom of association, health & safety at work, discrimination or violence in the community. However, the challenge would be to promote the use of such a platform and to create any incentives for stakeholders to provide this feedback to the project, given that the landscape project itself would have no direct leverage to address the issues raised unless it concerns producers covered by a sustainability certification scheme.

One interesting example of an existing Crowd reporting platform is [Ushahidi](#), an open-source platform set up by a non-profit that enables collection of reports from the crowd with the “intent of strengthening communities and improving lives, empowering users to rapidly and purposefully gather, analyse, respond and act on data and information”. The platform needs to be adapted to the local context & topics and can be combined with other tools, but this may involve significant reprogramming efforts. The Syria tracker, for example, uses Ushahidi for mapping and to crawl google news for reports of violence that have been reported in specific environments. However, set up and promotion of the platform may involve significant investments and time, and its use for tracking progress in the landscape on socio-economic topics would still need to be complemented with other data sources. Tracking reported cases of violence, however, can provide valuable information. It might serve to track higher incidence of violence in (almost) real-time and give additional information that cannot be obtained from surveys alone.

Use of professional risk or supply chain transparency providers

There are numerous paid providers for supply chain mapping and risk analysis, whose algorithms combine a range of data collection methods from news crawling to compiling up-to-date data sources from hundreds of data repositories, combining them with supplier compliance reporting and regulatory data. Some services also include inputs from e.g. workers grievance hotlines (ELEVATE) or are fine tuned for sustainability topics in specific commodities (e.g. Supplyshift) or codes (e.g. SEDEX Analytics), often requiring memberships to access the valuable tools.

Some approaches used by verification or certification schemes include specific algorithms to analyse satellite images for specific characteristics. For example, Enveritas’ AI models will find coffee farms smaller than one hectare by analysing spectral signatures and recognizing typical coffee farm structures. Once located, farms will be visited by surveyors to perform the free sustainability assessment.

However, any such sophisticated and customised “Artificial Intelligence” algorithms constitute a significant investment and are fine tuned for a specific (large) client base (e.g. in case of reprisk.com for financial service and credit providers) or for brands and manufacturers’ need for transparency & legal compliance in their complex supply chains. Since costs for use of these services tend to be considerable and won’t allow own customization to the landscape’s specific needs and local focus, such services are not explored in more detail here. Instead, we focus is on freely available tools and data sources.

Social Media or Network Analysis

Social media data seems to be available at our fingertips. Yet tracking and using that data strategically on a landscape level proves to be very complicated. In fact, only minimal information was found how socio-economic topics could be monitored through means of social media analysis in a systematic way. A pilot project in Columbia seems to have aimed to “strengthen the analysis of subjective poverty, taking advantage of the widespread use of social networks, which offer the opportunity to analyse user’s self-recognitions that allow users to freely express their perceptions according to their environment and social context” (from: Report on Geospatial Data for SDGs, 2016), but no further details or findings of relevance were identified.

This might be different for initial assessments and getting a better understanding of relevant topics in the landscape. Here, market research methods to analyse social media usage (e.g. Google Analytics) can certainly help to identify important topics and concerns in a landscape, especially for the baseline data collection and setting priorities. Such data may, however, be harder to use in systemic way for tracking and reporting progress on socio-economic topics in a landscape project. Still, it can complement other methods of data collection in a qualitative way, e.g. to identify new topics that appear to gain higher importance in the landscape.

Producers' stories and story dashboards can be helpful for giving the landscape projects and its people a face. Professional programmes like [Sensemaker](#) from Cognitive Edge can help to collect and share experiences on the ground by means of narrative reporting. But as stated above for other tools, the use incurs significant costs, so it

depends on the project focus and theory of change to determine whether the benefits of the use of such a tool is worth its cost.

If the landscape has some key market partners who are willing to invest in innovative tools for supply chain transparency, there are further providers offering an interesting range of services that allow to combine producer storytelling with block chain technologies, which permits to share producer stories on pack with consumers e.g. Examples are PROVENANCE Sustainability Communication ([Provenance: Sustainability Communications Software](#)) or SIM Powerchain ([About - SIM Supply Chain](#)).

Such tools can help to provide visibility to the landscape and its efforts, but their main purpose is marketing and communication, not monitoring progress. They can add interesting traceability links though.

Annex 10: Benchmarking scenarios

There are different scenarios for benchmarking:

1. The ideal scenario: The identical indicator is available across geographical scales and / or time. The identical indicator is, for example, collected on landscape level through an own survey and is available on country level. This scenario, however, is very unlikely.
2. The pragmatic scenario: Very similar indicators are available across spatial scales and / or time. Comparison is possible and conclusions can be drawn from the findings, but the conclusions would need to be validated ideally with other indicators and should therefore not be used for factual claims.
3. The speculative scenario: Indicators for the same socio-economic topic available across spatial scales and / or time, but with different logic and / or gaps. The comparison might yield interesting insights, but conclusions are rather speculative and should therefore not be used for factual claims.

Examples for the pragmatic and speculative scenarios:

Type of scenario	Indicator on landscape level	Indicator on regional or country level	Possible conclusions and further remarks
Pragmatic	Probability of Poverty Index (PPI): 10 country-specific questions on household level. Results translated into a score that indicates likelihood of poverty.	Multidimensional Poverty Index (MPI): 10 questions across 3 dimensions (health, education, standard of living) on household level. Each household then to be categorised as poor or not.	Both indicators measure similar aspects in a similar way. This allows to compare trend on one level (e.g. increased multidimensional poverty on country level) with trends of another level (e.g. stagnant or decreased likelihood of poverty on landscape level). Further conclusions depend on the results of other indicators and further information at hand (e.g. qualitative data from focus group discussions).
Speculative	Child Labour Risk Calculator (ICI) - at community level: 10 questions to assess general risk children are exposed to in terms of child labour	Realisation of Children’s Rights Index (RCRI): country level score to indicate child rights implementation.	Both indicators are contextual, describing the general situation in which children grow up in. The detailed metrics differ between the two, which makes it difficult to compare them directly. Insights can be drawn from comparing trends and developments over time.

Table 16: Examples of benchmarking, with different data availability scenarios

The pragmatic and speculative Scenarios work with proxy indicators, meaning that different indicators are close enough - in terms of what they measure and how they measure it - to be compared in a meaningful way. The central resource to identify potential proxy indicators is the Library of Indicators. Here, indicators for the same socio-economic topic and with a similar logic can be considered as proxies.

Annex 11: Requirements for meaningful data

The previous chapters introduced a range of data collection methods. A common statement was to complement different data sources, e.g. externally available and internal ones. A crucial aspect is to not collect as much data as possible, but to think through for which purpose(s) the data is being used.

ISEAL presents 7 data quality parameters to consider in their paper on assurance on landscape scale (ISEAL Alliance, 2019 A). These 7 parameters are:

1. Relevance: Data collected is a good measure of the issue and is applied at the appropriate scale.
2. Consistency: Data is collected consistently in the required formats. Definitions and methodologies are the same when doing repeated measurements over time.
3. Integrity: Data is protected from deliberate bias or manipulation for political or personal reasons. The source of the data has a high degree of veracity.
4. Completeness: Data is complete (i.e. no missing data attributes or elements).
5. Precision: Data has sufficient detail to measure what is intended.
6. Timeliness: Data is representative of current conditions, up-to-date, and available when needed.
7. Availability: Data is accessible, so it can be validated and used for other purposes.

For further details, please consult the report: Credible Assurance at a Landscape Scale. A discussion paper on landscape and jurisdictional assurance and claims. URL: [Credible-Landscape-Assurance-Discussion-Paper_WWF_ISEAL_03_2019_0.pdf \(isealalliance.org\)](https://www.isealalliance.org/sites/default/files/resource/2020-02/ISEAL_Metrics%20alignment%20and%20data%20sharing%20report_V3.pdf)

Further practical aspects to consider for meaningful data are:

- the importance of harmonising (own) data collection in terms of breakdowns (e.g. per gender, age, vulnerable group) so that different data sources are comparable. Yet also to be aware that further granularity requires bigger sample sizes to be meaningful.
- Think about sample sizes, randomised selection and representation at the very beginning.
- Run baselines as basis to be able to analyse trends over time

Here, we recommend the ISEAL paper on “Aligning and Combining. What we’ve learned about metrics and data sharing” as a further read. URL: https://www.isealalliance.org/sites/default/files/resource/2020-02/ISEAL_Metrics%20alignment%20and%20data%20sharing%20report_V3.pdf

Another crucial aspect for landscape initiatives specifically is working with data across different geographical scales. This is further discussed in the following chapter on geographical scales and benchmarking.

Annex 12: Management, measurement and implementation

In their 2019 paper on “Credible Assurance at a Landscape Scale”, the ISEAL Alliance specifies three major stages of landscape initiatives in terms of their efforts to monitor progress:

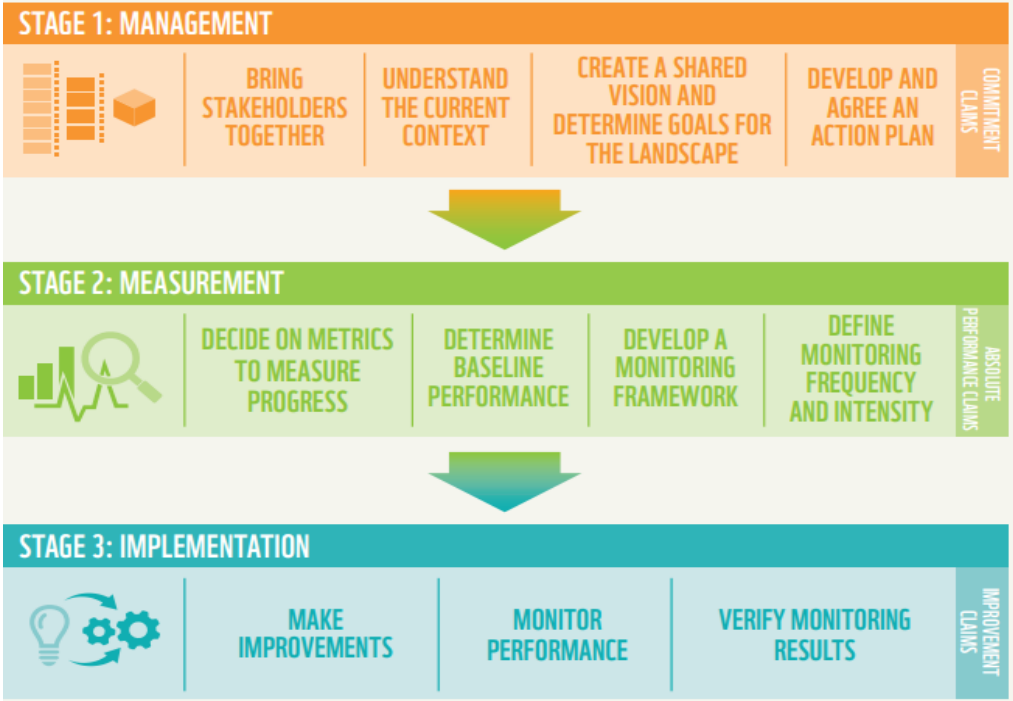


Chart: The three key stages in the development arc of a landscape initiative (ISEAL, 2019 A)

The three major applications of the LMS correspond to these stages. The initial assessment, prioritisation of socio-economic topics and participatory goal setting (chapter 2) refer to the management stage. The application of customising your MEL system (chapter 3) refers to the stage of measurement. Continuous monitoring (chapter 4) and making use of monitoring data (chapter 5) of the LMS document relate to the stage of implementation.

Table 17 below indicates to which specific step within the ISEAL framework it relates, namely (1) decide on metrics to measure change, (2) determine baseline performance, (3) develop a monitoring framework and (4) define monitoring frequency and intensity.

	decide on metrics to measure change	determine baseline performance	develop a monitoring framework	define monitoring frequency and intensity
Theory of Change: Linking own interventions to outcomes and overall changes in the landscape	Yes		Yes	
Benchmarking and baselines	Yes	Yes	Yes	Yes
Methodological suggestions for key concepts	Yes		Yes	

	decide on metrics to measure change	determine baseline performance	develop a monitoring framework	define monitoring frequency and intensity
Data infrastructure: Tips and tricks		Yes		Yes

Table 17: Linking the LMS to the ISEAL framework

7. References

ISEAL Alliance, 2019 A: Credible Assurance at A Landscape Scale. A discussion paper on landscape and jurisdictional assurance and claims. URL: [Credible-Landscape-Assurance-Discussion-Paper_WWF_ISEAL_03_2019_0.pdf \(isealalliance.org\)](https://www.isealalliance.org/sites/default/files/resource/2020-02/ISEAL_Metrics%20alignment%20and%20data%20sharing%20report_V3.pdf)

ISEAL Alliance, 2019 B: Aligning and Combining: What we've learned about metrics and data sharing. URL: https://www.isealalliance.org/sites/default/files/resource/2020-02/ISEAL_Metrics%20alignment%20and%20data%20sharing%20report_V3.pdf

ISEAL Alliance, 2020: Performance metrics for key sustainability issues. URL: <https://www.isealalliance.org/get-involved/resources/performance-metrics-key-sustainability-issues>

Global Canope, 2015: The Little Sustainable Landscapes Book. URL to download publication: [The Little Sustainable Landscapes Book – Global Canopy](#)

Fairtrade International, 2016: JOURNEYS TO CHANGE. Fairtrade Theory of Change. URL to access and download the report: [2016_FairtradeTheoryOfChange.pdf](#)

Food and Agriculture Organisation of the United Nations (FAO), 2014: FOREST AND FARM FACILITY. Working Paper 2: MULTI-SECTORAL PLATFORMS FOR PLANNING AND IMPLEMENTATION. How they might better serve forest and farm producers. URL for download: [Multi-sectoral platforms for planning and implementation: How they might better serve forest and farm producers \(fao.org\)](#)

Minang, P.A.; van Noordwijk, M.; Freeman, O.E.; Mbow, C., de Leeuw, J., Catacutan, D. (2015). Climate-Smart Landscapes: Multifunctionality In Practice, World Agroforestry Centre (ICRAF), Nairobi, Kenya, pp. 3–17.

United Nations (2021). Social Development for Sustainable Development. Online: <https://www.un.org/development/desa/dspd/2030agenda-sdgs.html> (retrieved June 1st 2021).

University Oldenburg (2021). Region. Online: <https://ome-lexikon.uni-oldenburg.de/begriffe/region> (retrieved June 10th 2021).