

Session 3: Monitoring, Evaluation & Impact Reporting (13:45–15:15)

Objective

Learn how to track project progress and measure the outcomes of agroforestry projects using Monitoring and Evaluation (M&E) frameworks. Participants will identify key performance indicators (KPIs) for agroforestry and explore tools for data collection and analysis to report on project impact convincingly. Powerpoint slides are available.

Key Topics

Purpose of M&E

Define **Monitoring** as the ongoing tracking of project activities and outputs (are we doing what we said, on time, on budget?) and **Evaluation** as the periodic assessment of outcomes and impacts (are we achieving the desired effect? what have we learned?). Emphasize how M&E closes the project management loop – feeding back into project adaptation (learning) and accountability to stakeholders/funders. In agroforestry, this is crucial given long-term ecological changes; even short-term projects need a plan to measure later outcomes (possibly by handing over to local institutions for continued monitoring).

Key Performance Indicators (KPIs)

Suggest meaningful KPIs for agroforestry projects in three categories:

- **Environmental/Biophysical:** e.g., Tree survival rate (% of planted trees surviving after 1, 2, 5 years), Biodiversity counts (number of bird/insect species observed, pollinator counts), Soil health metrics (soil organic matter %, erosion rate, moisture retention), Carbon sequestration (tons C per ha, could be modelled over time).
- **Social/Economic:** e.g., Farmer income change (additional revenue from agroforestry products, savings from reduced inputs), Crop yields in agroforestry vs. control plots, New jobs or businesses created (like beekeeping, nursery), Participation metrics (number of farmers adopting, number of trainings held, attendance). Also stakeholder satisfaction (via surveys) or capacity built (knowledge gain assessments).
- **Project Management/Process:** e.g., Milestones achieved on schedule (yes/no for key deliverables), Budget variance (% over/under budget), Stakeholder engagement (e.g., number of meetings, feedback score). These are more internal but important for the team to self-evaluate efficiency.
- Encourage **participants to suggest indicators** from their experience. Write a list and note that indicators should be specific and measurable. Not everything can be measured easily, so pick a few that best demonstrate success. Often, funding proposals will require a logical framework or log-frame or indicators table – being prepared with these helps.

Developing an M&E Plan

Outline steps:

1. **Select Indicators:** as above, maybe 5-10 total covering key objectives.
2. **Set Targets:** if you set a baseline (e.g., current average income, current biodiversity level), set targets for each indicator if possible (e.g., “by year 3, 30% increase in income, 10% more bird species”). Targets can be tricky (don’t over-promise) but useful.
3. **Data Collection Methods:** decide how to get the data. Options:
 - i. **Field surveys & observations:** e.g., measuring tree growth, surveying farmers about yields.

- ii. **Remote sensing:** using satellite images or drones to assess tree cover or vegetation health over time (some projects use annual drone imagery to document growth).
 - iii. **Farmer record-keeping:** training farmers to log yields, labour, costs which you compile (requires literacy/trust, but participatory monitoring is powerful).
 - iv. **Interviews/Focus groups:** to capture qualitative outcomes (like how attitudes changed, or stories of success).
 - v. **Digital tools:** Introduce tools like **KoboToolbox** (a free, open-source mobile data collection app ideal for field surveys in rural areas) <https://www.kobotoolbox.org/>, or **Google Forms** for simple surveys. KoboToolbox is great because you can design a form (tree survival count, etc.), load it on a smartphone, and data uploads when there is connectivity. **Open Data Kit (ODK)** or **Survey123** are similar tools.
 - vi. For environmental data, mention open platforms like **Open Foris Collect** (by FAO) for forest data collection or even simple Excel sheets.
- 4. Assign Responsibilities:** Decide who will collect data and how often. Perhaps extension advisors do quarterly monitoring visits; farmers might do monthly logs; a student might do a before/after biodiversity study; an external evaluator might be hired for final evaluation. Also plan training if needed (e.g., teaching farmers to measure tree height).
- 5. Analyze and Report:** Plan how data will be analyzed (simple stats, GIS mapping for spatial data, etc.) and how you will report it. Reporting could include mid-term and final reports to funders, presentations to the community, academic papers if research oriented, and media releases for general public. Stress the value of **visualizing data** – graphs of growth, maps, infographics – to tell the impact story clearly.

Adaptive Management and Learning

Tie back to agile – M&E is not just for funders, it is for the team to learn and adapt. For instance, monitoring might show that one tree species is outperforming others – so the team might decide to focus on that species in the next phase. An evaluation might reveal that women in the community weren't benefiting as much – prompting a change in approach to be more inclusive in future. Establish a practice of reflective meetings (after a season or year, review data and discuss "*what should we do differently?*"). Many projects have a "Lessons Learned" write-up at the end; encourage participants to contribute to such knowledge for the broader community of practice.



CASE STUDY: Monitoring & Evaluation – the Agroforestry Knowledge Platform

See AF4EU Factsheet: <https://platform.af4eu.eu/>

In Germany and across Europe, AF4EU partners use structured monitoring approaches within Regional Agroforestry Innovation Networks to assess system performance. The Knowledge Platform collects and shares data on soil health, biodiversity, productivity, and economic outcomes. These insights are used to refine agroforestry practices and inform decision-making. The German RAIN (ZALF) also demonstrates how data and case studies support knowledge transfer and policy engagement, strengthening the evidence base for agroforestry adoption.

Project Management Aspects:

- Use of indicators (environmental, economic, social)
- Data collection through networks and digital platforms
- Knowledge sharing across regions

- Adaptive management based on results

Key Takeaway:

Monitoring and evaluation enable continuous improvement. Projects that track and share results build **credibility, improve practices, and support wider adoption.**



Activity – Designing an M&E Plan (30 min)

Have participants sketch an M&E approach for the projects they have been working on:

- 1. Select Indicators:** Each team picks 3 key indicators for their project (one environmental, one socioeconomic, one project performance, for example). Write them down.
- 2. Method & Responsibility:** For each indicator, have them decide *how* they would collect the data and *who* would do it. Encourage specificity: e.g., “*Extension officer will measure tree heights and diameters in sample plots every 6 months; use KoboToolbox to record data*” or “*Community facilitators will survey farmers yearly on income changes using a standard questionnaire.*”
- 3. Target & Use:** If time, also jot a target (if applicable) and how they will use the information (e.g., “*If tree survival < 70%, we will investigate causes and replant where needed*”).
- 4. Share One Plan:** Ask one group to volunteer and present one indicator and their plan for it. Then ask others if they chose something different – try to cover a variety (one group might share an environmental indicator, another a social one). Provide feedback or additional ideas for making data collection easier or more robust.

Tools Demo: If possible, show the interface of **KoboToolbox** or a **Google Sheet template** that automatically graphs input data. If not, perhaps display a simple example of an M&E dashboard (could be a slide with a mock-up: e.g., a table of indicators with baseline and current values, or a bar chart of “area afforested vs target”). This can inspire participants to create simple visuals when reporting.

Tips For Success: “Use tech to save time on M&E.” Tools like **KoboToolbox** streamline field data collection and reduce errors. Even WhatsApp can be used – farmers send geotagged photos of their fields to monitor growth progress informally.

Emphasize data management: decide on a system early (even if just a shared Excel file) and keep it updated. Data lost or compiled at the last minute is a common issue that weakens evaluations.

Ensure participants see M&E not as a burden but as the way to showcase their hard work. Good M&E means when someone ask “*So what did this project achieve?*”, they can answer with confidence and evidence.