

# Terms of Reference M&E data collection and management tools

## 1) Overview of WeForest

**Mission**: To conserve and restore the ecological integrity of forests and landscapes, engaging communities to implement and deliver lasting solutions for climate, nature and people.

**Programmes**: WeForest is a Belgium-based non-profit organization, which works with communities and local partners to develop scalable Forest Landscape Restoration (FLR) projects mostly in tropical regions to sustain nature's diversity, benefit our climate, and support human well-being. In recent years we have been growing fast: while we were involved in just 7 projects focussing mainly of forest restoration in 2019, we are currently working across 17, mainly more holistic forest landscape restoration projects; with several more new projects in the pipeline for coming years.

# 2) Monitoring & Evaluation of our FLR projects

For a summary on the details of WeForest's FLR approach see Annex 1. WeForest aims to have comprehensive monitoring & evaluation (M&E) protocols in place for each of our FLR projects to:

- Keep track of project progress & success within WeForest, by comparing measured data with predefined targets
- Implement quality assurance processes to reinforce the credibility of our projects
- Identify needs for adaptive management when targets and measured data do not align
- Support lessons learning and sharing across projects within WeForest
- Support transparent and informative communication of project progress to all stakeholders, including funders

To guide each project's M&E activities we construct a logframe that is hierarchically structured following the expected theory of change for each specific project, where activities lead to short-term outputs, longer-term outcomes and the eventual project goal, with SMART (specific, measurable, achievable, realistic & time-specific) indicators with pre-identified, mostly annual, targets placed at each hierarchical level. Although each logframe is project-specific, they all adopt the same basic outcome structure, based on out 3 main intervention focus areas: (forest) governance (outcome 1), trees & biodiversity (outcome 2) and people (livelihoods) (outcome 3). Details on indicator methodology, timing and responsibilities is captured in a comprehensive, detailed M&E plan that accompanies each logframe.

In the field this translates in the need for extensive quantitative and qualitative data collection covering governance structures and document status, forest and biodiversity status monitoring and socio-economic assessments with local households. Properly collecting and managing all this data can present complex logistical challenges for project staff. Currently projects use a wide range of tools (paper-based and digital collection tool-based (KOBO, GPS, GISCloud, SMART) and programs (QGIS, Excel, Word, SPSS) for this purpose. A schematic general overview of the different data types that need to be collected across most of our projects is provided in figure 1. This figure also shows the wide range of tools & programs that we are currently using to collect all of this information. Lines in the diagram furthermore highlight how data is usually interlinked, with green and red lines indicating instances where these links are automatically embedded and absent in

our data collection/management tools, respectively. The use of multiple tools within each project has also hindered automatic integration of all project data in one central database system.



Orange: entity, green: core entities, blue: data layer, red: transaction

Figure 1. Schematic overview ('mindmap') of WeForest data entities, collection methods & data dependencies.

#### 3) Identified gaps & desired features

Based on our experience in the field and the M&E mapping exercise presented in figure 1, we have identified the following gaps & challenges regarding our M&E data collection and management:

- no consistency in the tools used across projects, leading to inconsistencies in the type of data collected
- Frequent errors when tools are inappropriate (e.g. paper)
- Significant amounts of time needed for collecting, checking, summarising & analysing data
- Operational decisions not always based on project M&E data due to delays or unavailability
- Lack of updated contextual and project data, leading to delays in adaptive management
- Missed opportunities due to unavailable or delayed livelihoods data
- High risk of double counting and other errors in interpretation due to decentralised data collection & management tools
- Data collection often resulting in data format that is not conducive to efficient analysis

Moving forward, WeForest would like to identify the best tool(s) and/or program(s) to standardize M&E data collection and management across all our FLR projects, that incorporates the following features to overcomes the identified weaknesses of our current system:

## Must have:

- A limited number of digital tools and programs achieve all our 1) data collection & 2) data management (database) needs, including data matrices for vegetation & household data, geospatial point, line & polygon data, questionnaire data, among others (cf. fig 1)
- The system is based on a relational database, that allows data to be automatically linked across different data entities (fig. 1)
- Related to the previous point, the tool allows the intuitive assignment of clear identified codes for data points in certain entities, most crucially for farmers or households, to allow clear tracking of involvement of an individual household across multiple livelihood interventions
- The data collection tool can be used on any smartphone, works offline, does not drain battery power and is intuitive and easy to use
- The tool/program has capacity to hold significant amounts of data points for each individual project. For example: the number of households that need to be tracked can reach up to a few 1000 to even 13000, individual intervention polygons up to 1600, and number of livelihood interventions up to 10 for a given project
- The tool(s)/program(s) come at a realistic investment and management cost for a mid-sized NGO
- The tool is guaranteed to be continuous/ stable in the long-term and/or allows extraction and transfer of our data to another system in case WF would decide to shift

## Should have:

- The tool(s) allow(s) to tailor access to individual data entities and collection forms to specific users of the tool. This would allow community facilitation of data collection with the tool in a limited functionality mode, thus increasing ease of use
- The tool/database allows historical data to be retained as memory. For example, if a specific farmer drops out of the project, his previous involvement in the project is still retrievable, even though he is no longer part of the active farmer database
- The tool provides dashboards to summarise changes in key indicators in the database (cf. Business Intelligence)
- The tool has the capacity to integrate evolving needs in the future (e.g. increasing # projects, # data units per entity, # entities)
- clear metadata generation and/or management functionality built into the tool
- Tool is also suitable to facilitate data collection and/or management needed specifically for specific projects we aim to have carbon certified (MRV data needs).

#### Could have:

- Subsets of the database can intuitively be quarried and summarized by the tool/program
- Standard functionality to automize, or facilitate manual, initial data quality evaluation
- The tool has the option to include 'transactional' data entities. For example to track when specific inputs such as beehives are distributed to specific farmers
- Clearly defined capacity to store all database data and metadata, either cloud-based or server-based
- The tool can be co-hosted or directly managed by WeForest

# 4) Objective of the study

Perform a market evaluation to identify all potential solutions regarding M&E data collection and management that addresses as many of the identified ideal features listed in the 'general objective'. Note that identified solutions can consist of a single tool (example: <u>smallholdr app</u>) or a combination of tools (example: ODK-based data collection tool integration with Microsoft ACCESS and PowerBI).

Expected results:

- A schematic overview of up to five identified solutions, indicating which of the identified ideal features it addresses as well as the comparative advantages and disadvantages of each proposed solution.
- As short description of each presented solutions workflow, level of expertise required for implementation and expected implementation and (annual) management costs.

# 5) Deliverables and timeframe

Key findings will be compiled, analysed and clearly presented in a final, structured report, which will include the consultant's key findings, results and recommendations. All deliverables will be submitted to WeForest in English in soft copy, modifiable versions.

The consultancy will ideally start on 1<sup>st</sup> of April 2023 at the latest. The final version of the report will need to be submitted at the latest by 25<sup>th</sup> of May 2023. The consultancy should ideally not last more than 10 days of effective work.

#	Deliverable	Timeframe
1	First draft of report submitted to WeForest for	28 <sup>th</sup> of April 2023 at the latest
	comments	
2	Final, validated version submitted	25 <sup>th</sup> of May 2023 at the latest

# 6) Consultant profile specifications

#### Must have:

- Demonstrable relevant experience in data analysis/ database management.
- Experience with multiple data collection & management tools/programs.
- familiarity and understanding of multisectorial and multidisciplinary programme data needs.

# Should have:

- Experience with collection and manipulation of (FLR-related) biophysical, socio-economic and geospatial data.
- Academic background in relevant topics eg. data science, statistics, GIS, ecology, sustainable development, etc.

Could have:

• Good understanding of forest landscape restoration projects and associated M&E data needs.

# 7) Consultancy proposals

Applicants are invited to submit their offers by 17<sup>st</sup> of March 2023 at the latest at the following address: recruitment@weforest.org, indicating the reference "M&E data collection and management" in the email subject. Any clarifications or additional technical details needed for offer right-up can be requested through the same contact address (recruitment@weforestOrg). Offers must include:

- A technical offer (no more than 3 pages)
- A financial offer including daily rates
- Consultant's CV demonstrating their ability to fulfil the study
- At least two professional references
- Potentially: One study or report produced and written by the consultant for similar tasks

#### Annex 1: Our forest landscape restoration approach

By adopting a forest landscape restoration approach we aim to regain ecological functionality and enhance human well-being in deforested or degraded landscapes using an holistic, participatory approach. More specifically we focus on the full forest landscape when designing our interventions, engage all stakeholders, including local communities and restore multiple landscape functions for multiple benefits. Through this approach we aim to reverse and mitigate the drivers and effects of forest and landscape degradation through a comprehensive set of solutions addressing governance, forest management capacity, land use practices, and socio-economic drivers in the short, medium and long term. This implies that interventions and identified solutions are always context-specific. While we aim to remain active in each landscape for up to 10 years, our ultimate goal is to also ascertain long-term sustainability and resilience in each forest landscape, after our project phases out.

This approach usually translates in interventions on both forested land, to incentivize sustainable forest management and/or generate income for sustainable forest management, and on farmland, to reduce pressure on forest resources and to mitigate for loss of access to forest resources by local communities. We typically divide our FLR projects into three main components:

#### Governance:

- WF's approach to governance is context-specific and varies according to landscape context and forest status: e.g. forest reserve, private land, conservancy, community forest.
- WF reinforces governance of local structures by:
  - Ensuring balanced representation (including gender)
  - Supporting the establishment of an accountability framework
  - Providing institutional development and technical support (eg. forest management and land use planning; drafting by-laws, user rules or benefits sharing; law enforcement)
  - Building financial autonomy

# Trees & Biodiversity:

- WF aims to maximise the number of trees growing in each landscape through supporting forest conservation, forest restoration and/or agroforestry.
  - **Forest conservation**: We prioritise the protection of both intact, old-growth forest and second-growth or degraded forest in our landscapes.
  - **Forest restoration:** We prioritise restoration of forest in locations that supported forests in the past and/or that connect or expand existing forest.
  - **Agroforestry**: In the parts of the landscape that accommodate local livelihoods, we try to maximise tree cover through agroforestry interventions, such as silvopastures, live fencing and tree intercropping.
- Overall we prioritise facilitating natural ecosystem recovery processes, such as facilitating natural regeneration of trees by reducing forest disturbance (e.g. sustainable grazing practices, fire break construction to reduce late season fires) and reinstating appropriate environmental conditions.
- We only opt for active **tree planting** when the natural regeneration capacity is limited. When we conduct planting to facilitate restoration, we use an appropriately diverse mix of native species grown in local tree nurseries.
- We carefully follow-up restoration sites for several years and implement **aftercare** (e.g. weeding, pruning) **and remediation activities** (e.g. replanting) to ensure proper forest (cover) development.
- For agroforestry we promote the use of **native tree and shrub species** where possible, and **avoid** the use of species known to be **invasive** in the broader project region.

Multi-use agroforestry tree species with potential to improve soil properties are prioritised.

• When appropriate, our tree-based interventions aim to strengthen habitat provisioning or connectivity of **selected animal species** within the landscape.

#### People:

- Agroforestry is the preferred land use practice in the farmlands, since it is often able to directly address top drivers of forest degradation such as agricultural expansion, fuelwood and timber extraction and livestock grazing. It is defined as a land-use system in which woody perennials (trees/shrubs) and agricultural crops and/or livestock are used in the most effective spatial and temporal arrangement for optimum production.
- Forest-based value chains, or ones that have tangible links with sustainable forest management outcomes, are preferred. In some landscapes, livelihood diversification can be essential to reverse the drivers of deforestation; value chains are carefully selected to facilitate high quality interventions with sustainable income generation opportunities for local communities.
- **Target groups, individuals and organisations:** Each project should define its own target group and provide a strong justification for doing so. Experience has shown that:
  - Activities may target specific groups if this is well justified in an FLR context (e.g. women, youth, landless, entrepreneurs...). Some interventions may target individuals with entrepreneurial drive to reach their objectives, others may be designed to support those most dependent on the forests, while others may aim to reach those most in need.
  - In some cases, it may be justified (and more sustainable) to directly collaborate with one single market player to help them develop innovative business models that benefit our ultimate target group (e.g. supplier, processor, buyer...)
  - Where possible our projects should aim to work with existing organisations and groups, rather than creating new ones, which would require more time and resources to be effective.
- **Gender:** integrated at various extents in projects, most commonly through combinations of (a) women-specific activities (livelihoods, nurseries..) and (b) quantitative participation/representation in project-supported organisations and activities.
- Most commonly supported value chains and land use practices relate to the following sectors:
  - Energy production and consumption (eg energy-efficient cookstoves, woodlots)
  - Beekeeping (farm and forest based)
  - Food production (livestock, vegetables, cash crops, fruit)