

# INSTRUCTIONS FOR USING THESE DOCUMENTS

One of the pillars of REDD+ is the design, operationalization and institutionalization of a functioning National Forest Monitoring System for the Measurement Reporting and Verification (MRV) of REDD+ results.

It is good practice to clearly describe processes and outcomes. This allows for consistency of processes, better understanding of the system itself, and helps to report the results.

The templates provided here are designed to define the process for sample-based area estimation. The templates are designed to be integrated in a NFMS or similar system. Users can use these templates as a basis to develop their own, specific documents by adjusting any part of the template to their specific circumstances and needs.

Different types of documents are provided here:

- Templates for Standard Operating Procedures (SOPs): These contain current best practice for the steps and methods to be used to complete a sample-based area estimation
- Forms: The form templates are designed to create a record of the application of the SOPs and to demonstrate that the process and activities have been conducted in the way described in the SOPs. Forms are the blank templates to be filled in with information that will become these records.
- Background notes: This is not a template but rather contains information that might be useful when designing your own SOPs and when applying the SOP. Users can choose to incorporate the notes into any training manuals that are part of their NFMS.

In the SOP, text in *italic grey* indicates instructions for completing the SOP to reflect your specific circumstances and needs. This should be replaced with your own specific text in the actual SOP. In the form templates, the same *italic grey* indicates instructions to the end users of the forms. **Format of text should be Calibri 10pt** so as to differentiate from the guidance text.

When following the SOPs, a set of key decisions must be taken that outline the project objective and the approach to area estimation. When taking the key decisions, it is important to bear in mind subsequent steps and limitations in resources and available data. For example, if the estimates rely on geospatial data and satellite data is only available in the area of interest from 2000, then the temporal scope should not start before this date.

## Prerequisites and preparatory work

Before starting a sample-based area estimation, there are a number of prerequisites in terms of decisions that need to be made, including consideration of:

- The objective of the project and the variables of interest (e.g. hectares of deforestation per forest type x) to be quantified through the collection of survey data.
- The geographical scope of the assessment / area of interest
- The temporal scope of the assessment
- The allowable margin of error of the variables of interest or the key variable of interest at the desired level of confidence.

Besides these general considerations, some of the SOP templates also contain prerequisites that need to be in place before the SOP can be applied

In order to develop realistic expectations a pilot survey can be undertaken that generates information on:

- Order of magnitude of variables of interest
- Order of magnitude of variance of variables of interest
- Efficiency of the stratification used/planned (e.g. change maps) and improvements that could be made to the stratification/change maps
- Best reference data to be used and time span covered by that data
- Time estimate per sample unit
- Quality Control and Quality Assurance that might be required
- Logistics for data collection including
  - Hardware
  - Software
  - Adequate time, resources and facilities for data collection and quality management

### Assigning roles and responsibilities

In the SOP templates, there is a requirement to define the responsibilities within each SOP. Typical roles and responsibilities in area estimation include the following:

Typical Role	Potential Responsibilities	Relevant SOPs
Coordinator	• oversees the completion of all steps: sampling design, response design, data collection and analyses	SOP1, 2, 3, 4
	• upholds quality management (QA/QC) practices	SOP1, 2, 3, 4
	• generates the classification scheme	SOP2
	• validates that the definitions are comprehensive and unambiguous	SOP2
	• formalizes the decision tree	SOP2
	• distributes sample units amongst interpreters	SOP3
	• determines data to be reassessed for quality management	SOP3
Logistics manager	• arranges logistics for data collection, including space for data collection, sufficient time for data collection, salary arrangements	SOP3
Trainer	• prepares material for consistent training of interpreters and delivers training to ensure best practices are followed for data collection	SOP3
Interpreter	• carries out the visual interpretation of the samples, including samples rechecked for quality management	SOP3
Statistician	• undertakes sample allocation and crosschecking plot allocation in strata	SOP1
	• estimates class areas and their uncertainties	SOP4

Multiple roles can be assigned to one person. One role can also be divided among multiple people.