



Food and Agriculture
Organization of the
United Nations



FAO eLearning
ACADEMY



National Forest Inventory

Online facilitated course

Information Note



11 September – 21 October 2024

on FAO eLearning Academy collaborative platform

Scan the QR code to register or visit the following link:

<https://bit.ly/NFIregistrationform>

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This course is the result of a collaboration effort involving the following experts:

CORE TEAM

Overall course coordination: Rocío Dánica Córdor Golec, Forestry Division, FAO

Overall FAO elearning Academy coordination: Cristina Petracchi, FAO elearning Academy

Moodle learning management system coordination and storyboard reviewer: Sara Ferrante, FAO elearning Academy

E-learning content development and instructional design: Reshma Sanyal, FAO elearning Academy

Outreach and knowledge management coordination: Vanessa Vertiz Larrea, Forestry Division, FAO

AUTHORING OF SELF-PACED COURSES

Rocio Condor, Forestry Division, FAO

David Morales, Forestry Division, FAO

Marco Piazza, Forestry Division, FAO

Rebecca Tavani, Forestry Division, FAO

Elisee Tchana, Forestry Division, FAO

Lauri Vesa, Forestry Division, FAO

Dr Lutz Fehrmann, University of Göttingen

Dr Christoph Kleinn, University of Göttingen

SUPPORT

Outreach: Madison Ziegler and Maria Pilar Valbuena Perez, Forestry Division, FAO

Moodle: Luca Pepi, Giampaolo Rugo, FAO elearning Academy

Graphic design and illustrations: Lorenzo Catena, FAO elearning Academy

English proofreading: Madison Ziegler, Forestry Division, FAO

French translator: Sophia Gazza, FAO

Spanish translator: Alicia Garcia, FAO

CONTRIBUTORS

Strategic guidance: Julian Fox, Team Leader Forest Monitoring and Data Platforms, Forestry Division, FAO

Course subject-matter experts (in alphabetical order): Javier Garcia-Perez, Gael Sola, Rebecca Tavani and Lauri Vesa, Forestry Division, FAO

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Overview

Hosted by the FAO elearning Academy, the national forest inventory (NFI) online facilitated course offers comprehensive guidance on all stages of preparing and implementing NFIs. From planning and designing to data collecting and reporting, this course equips participants with the necessary knowledge and skills to conduct effective NFIs.

This course reflects the broader support that FAO provides to countries on developing and implementing NFIs, providing capacity building through planning, data collection, analysis, integration with remote sensing, quality assurance and quality control (QA/QC), data archival and documentation, dissemination and reporting.

The NFI online facilitated course represents a significant step in consolidating practical experience on conducting an NFI. It provides comprehensive, collaborative and user-friendly education, and aims to equip participants with knowledge to improve decision-making and policymaking for forestry-positive climate and development actions. It also aligns with FAO's commitment to continuous improvement and relevance in the ever-evolving fields of forestry and environmental monitoring.

This online facilitated course is based on the existing NFI e-learning series (a total of eight self-paced courses offered on the FAO elearning Academy) and has the advantage to be enriched with many extra resources and activities, i.e. live sessions, discussion forums, videos, quizzes and more. The course will be delivered in English, French and Spanish – participants will be able to choose the desired language through the registration form.

Target audience

The target audience of this online facilitated course includes anyone interested in the subject, yet it is specifically relevant for:

- forestry technicians;
- national forest monitoring teams;
- foresters and forestry students;
- decision-makers planning investments for implementing NFIs;
- academics;
- donors; and
- natural resource project managers.

Overall goal

This online facilitated course explains the key phases of a national forest inventory (NFI): from planning to implementation, and from data gathering to reporting.




Course structure and activities

Participants begin with a common introductory "Basic knowledge" module and then choose the preferred "Learning Path" according to one's learning needs and professional requirements. These are:

1. Field data collection
2. Sampling and data analysis
3. Data managing and reporting

Each path includes a number of modules taken directly from the [NFI self-paced e-learning series](#). As an estimate, each path has an expected daily minimum workload of one hour, depending on previous knowledge on the topic. Participants are free to complete the modules at their desired pace.

Table 1. Learning path modules

| | Learning Path | Modules | Digital Badge |
|-------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Basic knowledge: Why a national forest inventory? | 1. Field data collection | <ul style="list-style-type: none"> • Preparing for a national forest inventory • Introduction to fieldwork • Quality assurance and quality control in a national forest inventory |  |
| | 2. Sampling and data analysis | <ul style="list-style-type: none"> • Introduction to sampling • Elements in data analysis |  |
| | 3. Data management and reporting | <ul style="list-style-type: none"> • Data management in a national forest inventory • National forest inventory results: Reporting and dissemination |  |

The learning activities in each module include:

- videos, including transcripts and presentations;
- discussion forums on predetermined topics;
- reading materials;
- self-assessment quizzes;
- webinar recordings; and
- live sessions.

Most of the material is downloadable in PDF format, which offers the advantage of being printed and studied offline. Live sessions are meant to enrich the learning experience by covering the highlights of the specific "Learning Path" and allowing for country participation in questions and answers; however, they do

not replace the provided learning material and activities. The live sessions will be recorded, and the recording link will be shared on the platform for all who are not able to participate live or who wish to watch the recording later.

The “Learning Paths” open at the same time, each with its own estimated duration. Participants will be able to complete the paths at their own pace with the additional opportunity to attend the live sessions on the established dates. Although the paths are kept open until the permanent closure of the course, facilitation will be available only during the established official duration.

The length of the whole online facilitated course allows participants to freely decide how many “Learning Paths” they want to take.

Learning objectives

The objectives of each “Learning Path” are organized below (see Table 2), along with the unique job-related competencies that participants will be able to achieve after completing each path.

Table 2. Learning objectives and competencies

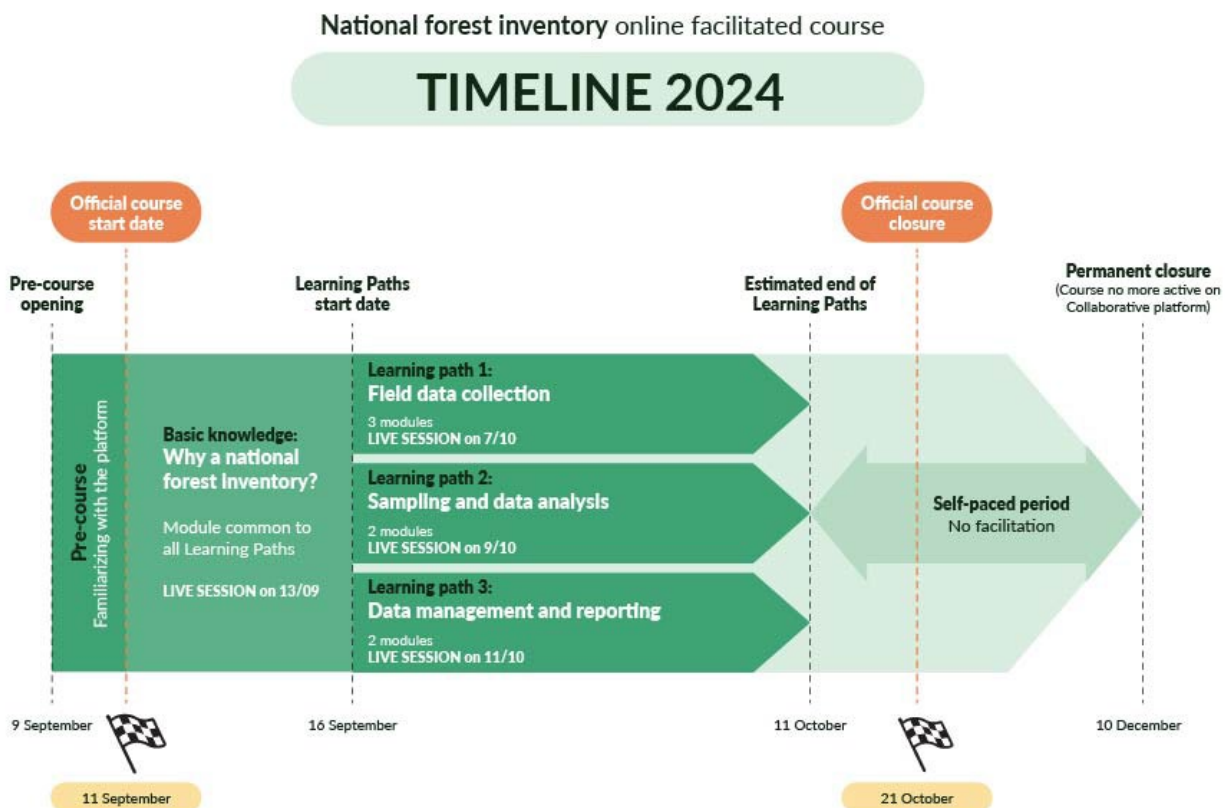
| Learning Path | Participants will be able to... | Competency acquired |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Field data collection | <ul style="list-style-type: none"> • discuss the institutionalization of a national forest monitoring system (NFMS), enabling environment and legal basis; • enumerate the design elements that are common to many NFIs; • acknowledge the relevance of a detailed protocol for data collection; • examine the composition of field teams and address issues of available capacity and safety; • describe the basic measurement principles of some of the tree-related core variables of an NFI; • explain the importance of setting and documenting quality standards; and • appreciate the role of QA/QC in the planning and analysing phase of an NFI. | <p>Participants will appreciate the importance of an enabling environment in an NFI and will apply established design principles, sound planning techniques, and quality control mechanisms to carry out field work successfully.</p> |
| Sampling and data analysis | <ul style="list-style-type: none"> • describe the importance of sampling in forest inventories; • explain the basic concepts and terminology associated with sampling; • discuss the three technical design elements of a sampling study; • describe the importance of data analysis in various phases of a forest inventory; • describe the role of statistical models in forest monitoring; • demonstrate how to build a biomass model; and • understand the types and roles of errors in forest monitoring. | <p>Participants will apply general principles of sampling in forest inventories and be aware of the typical approaches and calculations used in forest data analyses.</p> |
| Data management and reporting | <ul style="list-style-type: none"> • explain the key requirements for an information system on national forest monitoring; • describe how field data is collected, stored and managed; • explain how to build a working database for hosting forest inventory data; • describe the role of data dashboard technology in reporting forest inventory information; • evaluate the importance of reporting in the NFI process; • discuss the purpose and structure of an NFI final report; • describe the measurement, reporting and verification (MRV) processes for REDD+ under the UNFCCC; and • appraise the public nature of NFIs and the need for compromises in open data policies. | <p>Participants will understand the role of information gathering and data management for NFIs, as well as cleansing, storing and preparing field data for reporting. They will also understand the importance of reporting in the context of REDD+ actions.</p> |

Certification

Each path will have a competency-based final test which, if passed, will enable participants to obtain a digital badge that attests to the acquisition of the related competencies. Participants can choose if to take one, two or all three paths, depending on interest and personal time availability, and will earn the related digital badge(s).

Timeline

The official timeframe of the course is set from 11 September to 21 October 2024. However, to give maximum flexibility for participants to start familiarizing themselves with the platform beforehand, the course will also be available from a few days before the official start date. The same flexibility is given after the official closure date to allow participants to have extra time to complete the Learning Path(s) and earn the related digital badges. Beyond the determined end date, facilitation of the course will no longer be available on the collaborative platform – after a transfer period, the course is intended to be available solely in the self-paced mode.



Near to the date of permanent course closure, 10 December 2024, participants will be alerted that the course will be migrated to the FAO elearning Academy website (<https://elearning.fao.org/>), where it will be available in self-paced mode after a transfer period in 2025.

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