



Food and Agriculture Organization  
of the United Nations

# National GHG Inventory Preparation and Reporting under the ETF, considering fundamental principles, methodologies and reporting requirements outlined in IPCC 2006 guidelines for the FOLU sector



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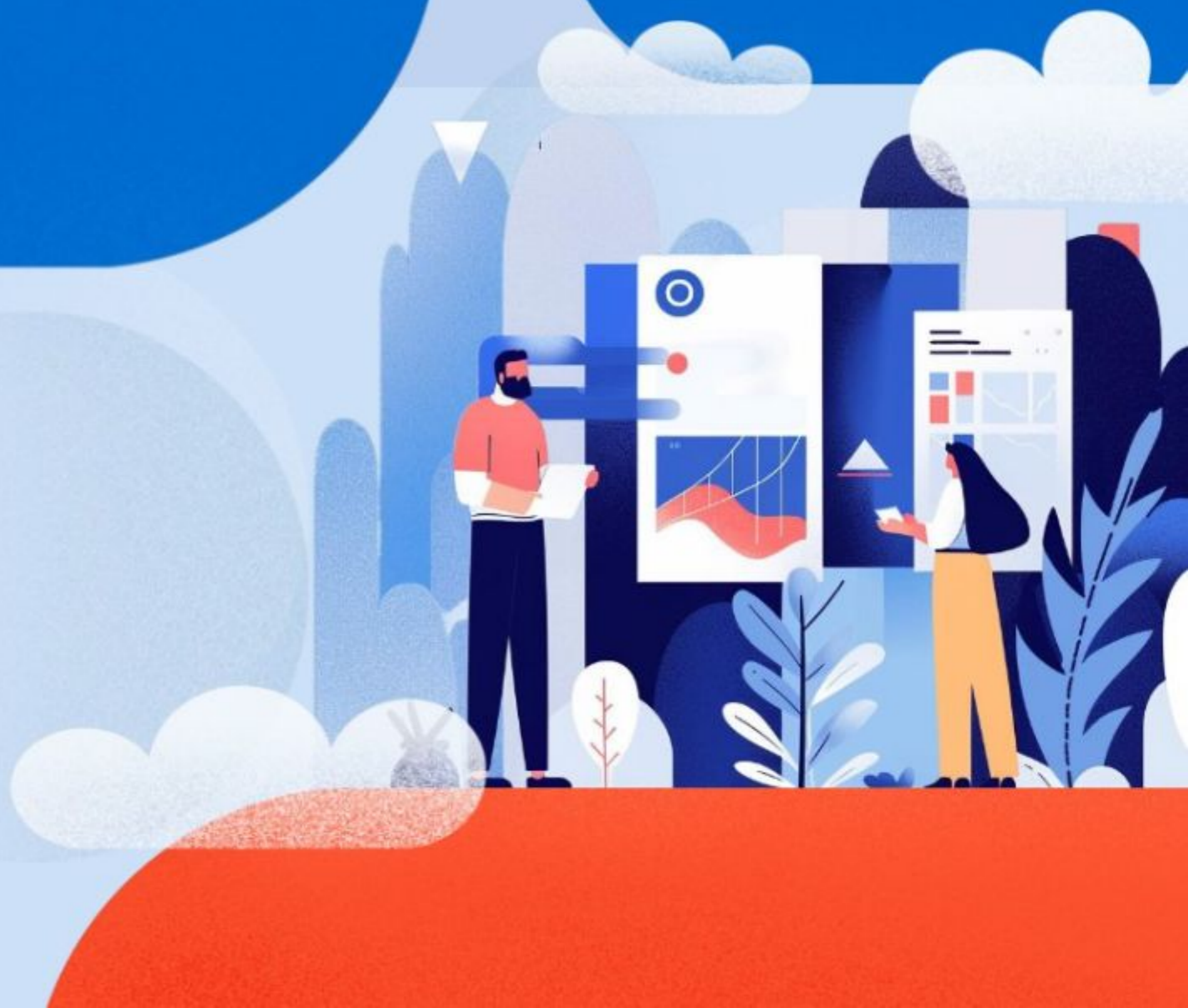
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Food and Agriculture Organization  
of the United Nations

## Outline

- Overview of the Modalities, Procedures, and Guidelines
- How FAO support the FOLU sector to comply with Enhanced Transparency Framework
- Courses and Tools available
- Communication and partners



# MPGs

## Transparency, accuracy, completeness, consistency, and comparability



a) Building on and enhancing the transparency arrangements under the Convention, recognizing the special circumstances of the least developed countries (LDCs) and small island developing States (SIDS), and implementing the transparency framework in a facilitative, non-intrusive, non-punitive manner, respecting national sovereignty and avoiding placing undue burden on Parties



b) Facilitating improved reporting and transparency over time



c) Providing flexibility to those developing country Parties that need it in the light of their capacities



d) Promoting transparency, accuracy, completeness, consistency and comparability



e) Avoiding duplication of work and undue burden on Parties and the secretariat



f) Ensuring that Parties maintain at least the frequency and quality of reporting in accordance with their respective obligations under the Convention



g) Ensuring that double counting is avoided



18/CMA.1 AS.11 National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases (stand alone or as part of BTR)

Definitions

National Circumstances and institutional arrangements

Methods

Metrics

Reporting guidance

### Biennial transparency report (BTR):

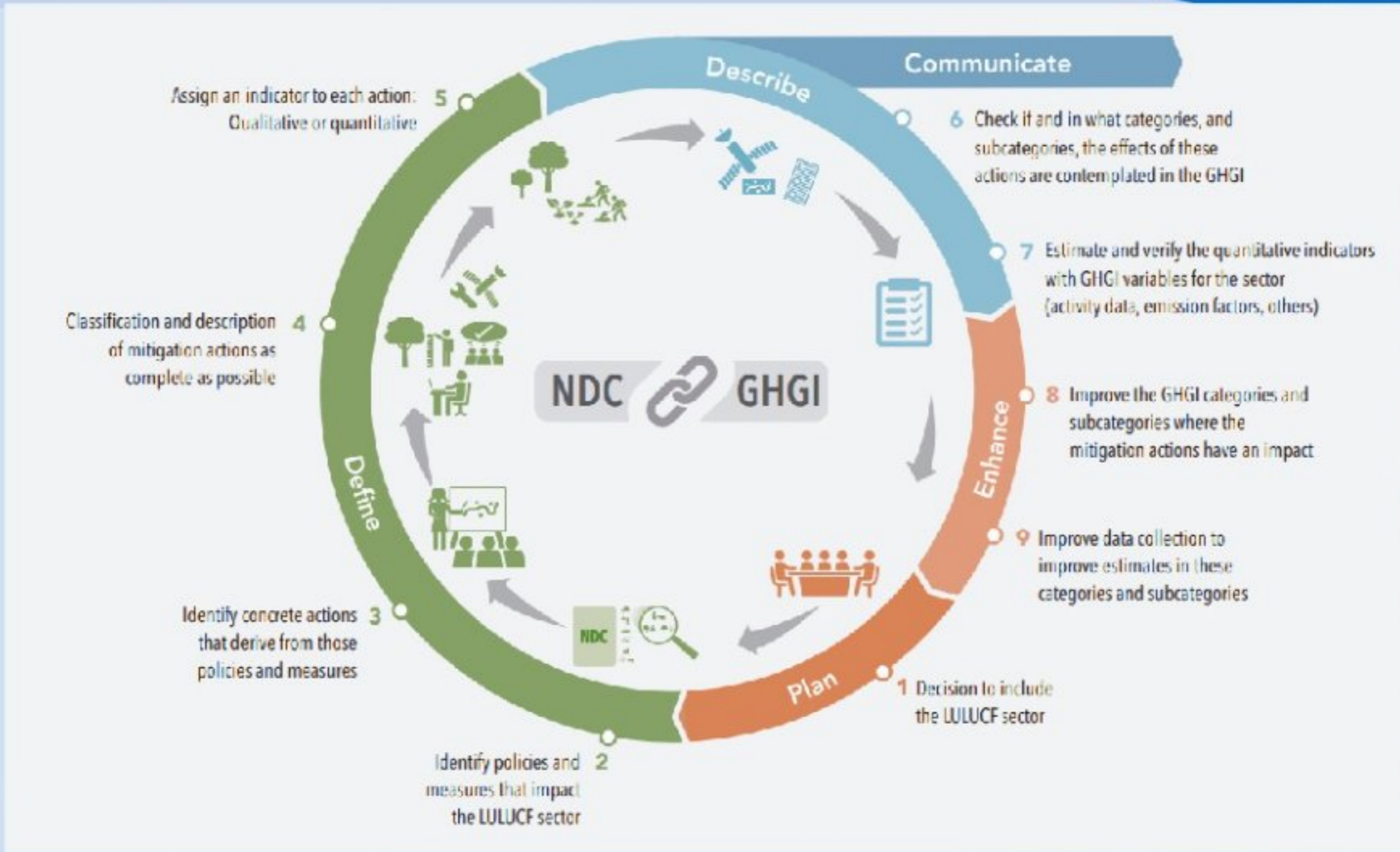
Main changes consist in ensuring **completeness and accuracy** of the information reported in the GHG inventory, and in tracking progress and reporting on the implementation and achievement of the NDC.

### The ETF builds on the existing MRV

**framework and enhances it.** Any institutional arrangements, processes and capacities – e.g. establishing a transparency system for the implementation of the MPGs requirements at national level.

# MPGs

## Requirements of the FOLU sector for the ETF



## Why/how

# Support on the ETF and the FOLU sector

### Building capacities on forest data transparency to foster:

- **Stakeholder engagement:** Transparent forest data empowers governments, academia, NGOs, private sector, local communities, international organizations, ensuring their participation in decision-making and protecting their interests.
- **Climate action:** Accessible forest monitoring data will support climate change mitigation and adaptation efforts.
- **Attracting investments:** Transparency attracts sustainable investors, stimulating economic growth in forest-dependent regions.
- **Research and innovation advancement:** Open data fosters scientific innovation in ecology and biodiversity conservation.
- **Effective policy:** Transparent forest data enhances policymaking, ensuring decisions are evidence-based and targeted for maximum impact.
- **International collaboration:** Transparency promotes global cooperation on issues like forest management and biodiversity conservation.



### Self-paced course



'Forest and transparency under the Paris Agreement' available in [English](#), [Spanish](#), [French](#), [Chinese](#), [Russian](#), and [Arabic](#) with digital badge certification!

**Promotional [video!](#)**

National forest inventory eLearning series, with digital badge available [here](#)

### Case studies



Six case studies available in English, Spanish and French. They detailed successful transparency-related activities in Bangladesh, Chile, Costa Rica, the Democratic Republic of the Congo, Ghana and Papua New Guinea.

Check [here](#)

### MOOC experience



Three editions of the massive open online course (MOOC) available as self-paced course 'Sharing the Experience of the multilingual MOOC on Forests and Transparency under the Paris Agreement' in English, French and Spanish (with digital badge certification).

Learn more [here](#)

### Forest monitoring and data dissemination

**Global:** [FRA platform](#) and [FAM catalogue](#)

**Regional:** NFI LAC book ([EN](#), [ES](#))

**National:** pilot countries; [NFMS assessment tool](#)

(excel, info brief, quick guidance)



### Webinar series

Sharing knowledge related to open and transparent forest data



### Blog posts

[Improving women's access to forest monitoring](#)

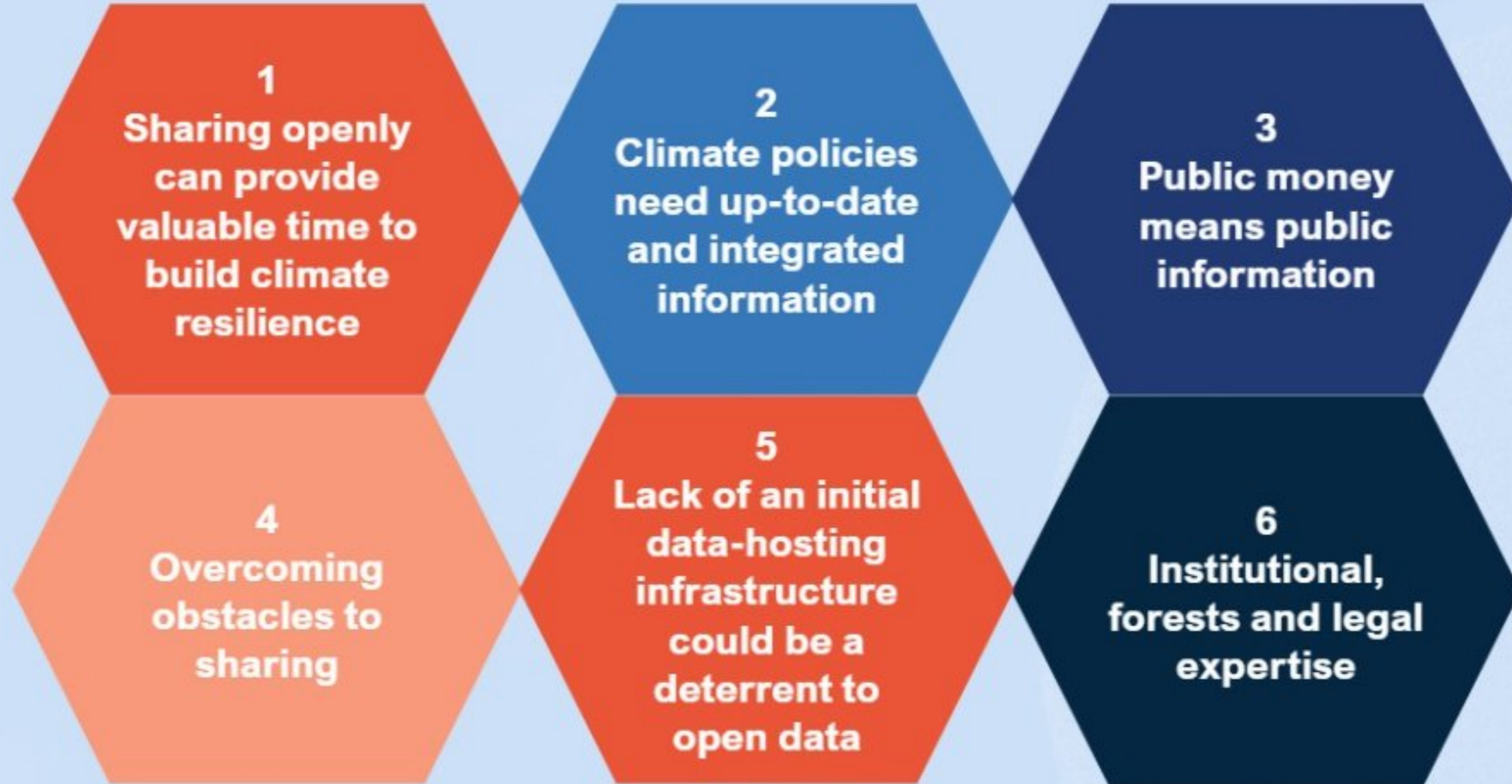
[Sharing knowledge to empower women and youth on forest climate transparency](#)

Are you interested?

Follow our [News](#)



# What lessons can forest monitoring practitioners learn from open data?



# CBIT-Forest 2

CBIT-Forest

Phase 2

Building on successes of the first phase of CBIT-Forest, we are in the second phase

EN: <https://www.fao.org/documents/card/en/c/cc9092en>

ES: <https://www.fao.org/documents/card/es/c/cc9092es>

FR: <https://www.fao.org/documents/card/fr/c/cc9092fr>





## TARGET GROUPS

**Objective:** Developing countries have enhanced capacity, knowledge and awareness on forest-related data collection, analysis and dissemination to meet the enhanced transparency requirements of the Paris Agreement.

The main components include:



**Boosting institutional capacity**



**Increasing technical capacity**



**Sharing knowledge**

The project directly benefited at least **20 targeted countries** and more broadly some **236 countries and territories** that are part of the global network of National Correspondents for the **Global Forest Resources Assessment (FRA)**.



**236 countries and territories**



**Global scope**



**3 years (2024-2026)**



**GEF (USD 2.0 million); FAO (USD 5.2 million)**

# Activities

## Levels

1



### GLOBAL

Open data platforms  
and virtual knowledge

2



### REGIONAL

Connecting regional  
forest actors

3



### NATIONAL

Open and transparent  
forest data

## Global Forest Resources Assessment 2020

The screenshot shows the top section of the website. At the top left is the FAO logo and the text "Food and Agriculture Organization of the United Nations". To the right is the page title "Global Forest Resources Assessment 2020". Below this is a navigation bar with a hamburger menu icon and a dropdown menu labeled "- Select geographical area -". The main content area features a background image of a person in a green jacket walking through a forest. Overlaid on this image is the heading "Global Forest Resources Assessment" followed by a paragraph of text: "FAO has been monitoring the world's forests at 5 to 10 year intervals since 1946. The Global Forest Resources Assessments (FRA) are now produced every five years in an attempt to provide a consistent approach to describing the world's forests and how they are changing. The Assessment is based on two primary sources of data: Country Reports prepared by National Correspondents and remote sensing that is conducted by FAO together with national focal points and regional partners. The scope of the FRA has changed regularly since the first assessment published in 1948. These assessments make an interesting history of global forest interests, both in terms of their substantive content, but also in their changing scope." Below the text is a link: "> Read more about the FRA process". At the bottom of the screenshot, there is a section titled "Select an area below to access FRA data" with three dropdown menus: "Global", "Regions - Select -", and "Countries - Select -".

# Activities

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forest data

## National Forest inventories in Latin America



ES: <https://doi.org/10.4060/cb7791es>

EN: <https://www.fao.org/3/cb7791en/cb7791en.pdf>

# Activities

## Levels

1



### GLOBAL

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Open and transparent  
forest data



## Courses

Course series: The 'Forest monitoring for climate action' curriculum aims to strengthen institutional and technical capacities, to meet the MRV requirements, and the ETF requisites



Forests and transparency under the Paris Agreement

1 h 30 m



Institutionalization of forest data

1 h 30 m



Measurement, reporting and verification for environmental integrity: Introduction

1 h



Sharing the "Forests and Transparency under the Paris Agreement" MOOC multilingual experience

3 h



Sharing the experience on "Forest and land monitoring for climate action - SEPAL" facilitated course

1 d 1 h



Enlace a las series:

<https://elearning.fao.org/course/view.php?id=1000>



Throughout the courses, which can be followed independently, references are made to specific courses or lessons where certain topics are covered more extensively. Each course takes the learner step-by-step through realistic scenarios, and it is supplemented by exercises and links to additional material and websites for further reading.

Courses with certificates with digital badges

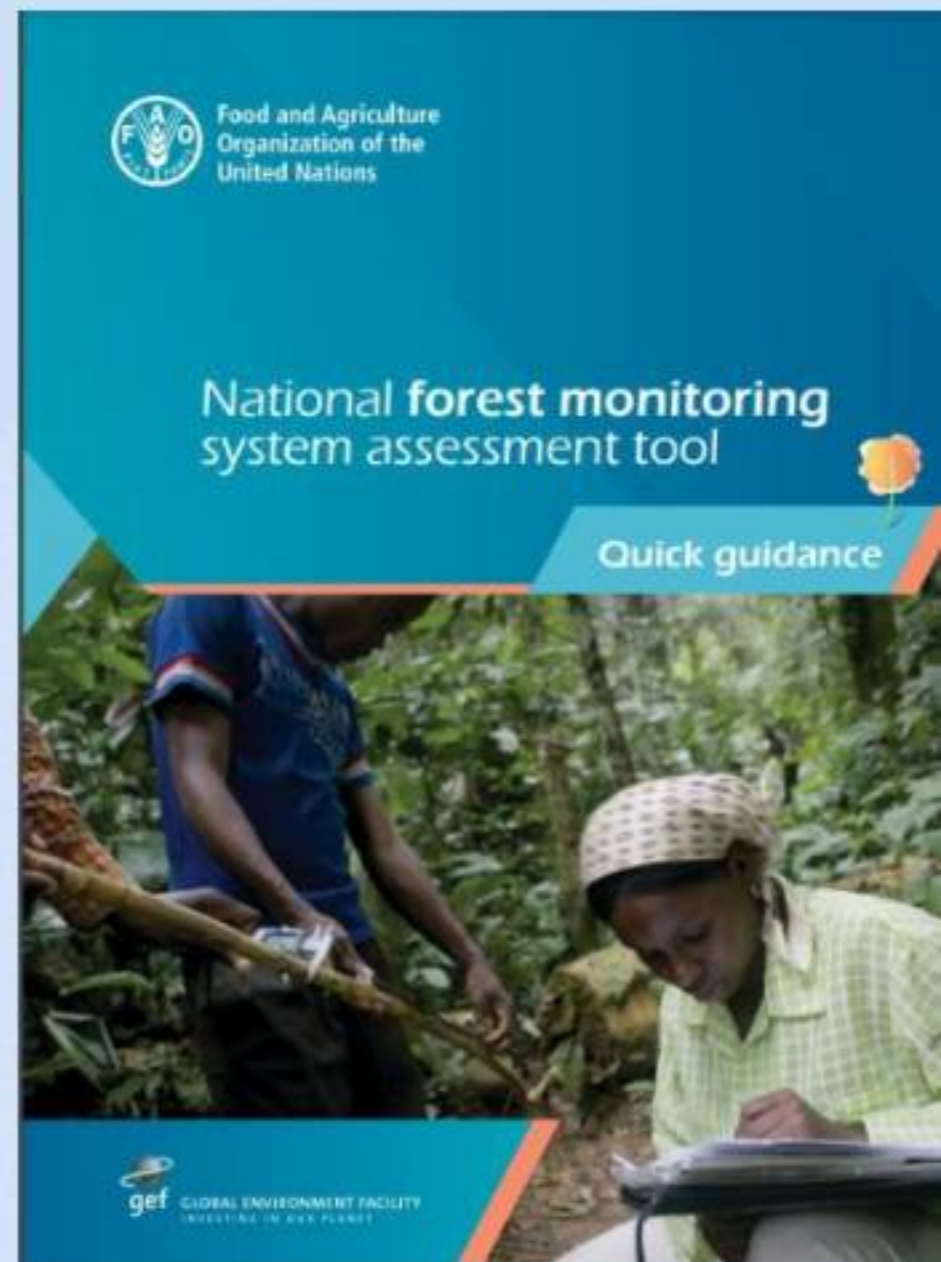
- [Transparency under the Paris Agreement. A pocket guide for young people and beginners](#)
- [Biennial transparency report \(BTR\) guidance and roadmap tool](#), a series of questions that helps countries to generate a country-driven roadmap to prepare the BTR. It has been developed in collaboration with PATPA.
- [Transparency Readiness Navigator](#), a tool to distillate the modalities, procedures and guidelines (MPGs) requirements for the national GHG inventory and to provide and assessment at global and regional levels on the readiness of countries in addressing them.
- [Archiving guidance for a national greenhouse gas inventory](#), a step-by-step guidance that helps countries define the structure and procedures for the archiving system, preventing the loss of information and facilitating the preparation of future GHG inventories.
- [Greenhouse Gas Data Management \(GHG-DM\) tool](#), an excel-based package to compile the metadata of the activity data and parameters for all reporting sectors. Each excel file contains a comprehensive list of data and parameters (Tier 1 and 2) to estimate all emissions and removals.
- [E-learning courses for national GHG inventories series](#), a collection of freely available 24/7 e-learning courses on national GHG inventories for agriculture and LULUCF following the 2006 IPCC guidelines. The courses offer certification, and they are:
  - [Preparing a greenhouse gas inventory under the Enhanced Transparency Framework](#) (EN, SP, FR)
  - [The national greenhouse gas inventory \(NGHGI\) for agriculture](#) (EN, SP)
  - [Estimating methane emissions from enteric fermentation using Tier 2 method-](#) (EN, SP, FR)
  - [The national greenhouse gas inventory \(NGHGI\) for land use](#) (EN)
  - [Assessing uncertainties in the national greenhouse gas inventory: a focus on land use](#) (EN, FR)

Support countries with performing thorough capacity assessments of forest monitoring across three critical dimensions:

1. institutional arrangements,
2. measurement and estimation
3. reporting and verification.

This tool also analyze the legal gaps and can be used to identify the country needs to operatized the National Forest Monitoring Systems (NFMS)

This tool draws its foundation from the [Voluntary guidelines on national forest monitoring](#) of the Food and Agriculture Organization of the United Nations (FAO), incorporates the resources of the [REDDcompass](#) from the [Global Forest Observations Initiative](#) (GFOI), and leverages FAO's wealth of field experience in forest monitoring across diverse national contexts.





Forest Inventory Data

Provides an inventory of datasets collected through farm and household surveys which contain information related to agriculture, forests, food security, and nutrition.

The [FAM](#) catalogue is populated by datasets which are collected directly by FAO and datasets whose collection are supported in some way by FAO.

FAM is continuously updated as new datasets from FAO and its Members become available. Organizations which collect relevant data are also highly encouraged to submit datasets for dissemination through FAM.





## Forest Inventory Data

[about](#) [← Food and Agriculture Microdata Catalogue](#)

This collection contains microdata, metadata, and related information on forest inventories across different countries

Years

Countries

License

Showing 1-5 of 5

[Study view](#) [Variable view](#)
Popularity 
[Forest Inventory Data](#)  [Reset search](#)

### National Biomass Study, 2016-2019.

Uganda, 2016-2019

National Forest Authority, Ministry of Water and Environment, District Forest Services

Collection: Forest Inventory Data

ID: UCA\_2016-2019\_NBS\_v01\_EN\_M\_v01\_A\_OC6 Last modified: Nov 18, 2021 Views: 5221

[Licensed data files](#)

### National Forest Inventory, 2002-2003.

Guatemala, 2002-2003

Instituto Nacional de Bosques

Collection: Forest Inventory Data

ID: GTM\_2002-2003\_NFI\_v01\_EN\_M\_v01A\_OC6 Last modified: Jan 26, 2023 Views: 2324

[Data available from external repository](#)

Enhance of the Data transparency  
of [National Forest Inventories](#)

Brazil

Guatemala

Mexico

Uganda

Lao People's Democratic Republic

Supports countries' open data policy, highlighting that transparent data systems empower public policy makers. Essential for formulating effective forest management and conservation strategies, contributing to climate change mitigation and compliance with the ETF.

## Free and open source tools and methods for data collection, analysis and reporting

### Integrated Solutions

#### Field Data Collection



**Ground**

Simple, intuitive, and versatile map-first data collection mobile application



**Arena Mobile**

The fast, new generation data collection tool works with Arena and runs on Android and iOS devices

#### Data Management



**Collect**

Easy and flexible survey design and data management



**Arena**

Online platform for survey design, data management, utilization and processing



**Whisp**

#### Visual Interpretation



**Collect Earth**

Augmented visual interpretation tool for land monitoring



**Collect Earth Online**

Custom built, open-source, high resolution satellite image viewing and interpretation system

#### Geospatial Analysis



**SEPAL**

System for earth observation data access, processing, analysis for land monitoring



**Earth Map**

The power of Google Earth Engine without coding. A user friendly tool for complex land monitoring

## Communications and knowledge to raise awareness of the importance of data collection, analysis and dissemination for transparency in the forestry sector.

### News

**FAO Forestry** @FAOForestry

With support from @theIGF, @FAO has launched a new phase of work to assist developing countries to monitor & report data on the state & changes in their forest cover more effectively & transparently.

Read more [on @theIGF's IGIP](#)

#CBTForest #ClimateAction @UNFCCC forestpost

2:41 PM · 9 Jun 2024 · 5,332 views

### In-Action page

Food and Agriculture Organization of the United Nations

Boosting transparency of forest data

Building global capacity to increase transparency in the forest sector (CBT-Forest): accelerating capacity building, knowledge sharing and awareness raising in an ambitious project led by the Food and Agriculture Organization of the United Nations (FAO), designed to accelerate capacity building, knowledge sharing, and awareness raising efforts in developing countries. The project aims to enhance the quality, consistency, accessibility and usability of forest-related data in the field of enhanced transparency (ET) components of the Paris Agreement.

What is CBT-Forest?

Launched in 2021, the Paris Agreement developed in tandem to address priority needs to enable states to meet climate change goals. CBT-Forest is a joint effort by the FAO and the Global Environment Facility (GEF) to provide international technical support in enhancing ET components of the Paris Agreement. The project aims to enhance the quality, consistency, accessibility and usability of forest-related data in the field of enhanced transparency (ET) components of the Paris Agreement.

Key features:

- Building global capacity to increase transparency in the forest sector (CBT-Forest): accelerating capacity building, knowledge sharing and awareness raising in an ambitious project led by the Food and Agriculture Organization of the United Nations (FAO), designed to accelerate capacity building, knowledge sharing, and awareness raising efforts in developing countries.
- Enhancing knowledge and expertise for both international and national forest and transparency.
- Strengthening and expanding networks with national partners, including academia, to ensure sustainability and resilience forest reporting.

### Flyer

Food and Agriculture Organization of the United Nations

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### Newsletter

Forest data & climate action

1,247 subscribers

100% active

**A journey in forest stewardship: Navigating FAO's transparent pathway to climate action**

News Editor: Sarah Khan

March 26, 2024

[Charting a Transparent Path for Global Forest Data and Innovative Climate Action](https://www.fao.org/communication/charting-a-transparent-path-for-global-forest-data-and-innovative-climate-action/)

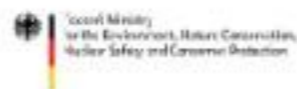
<https://www.fao.org/in-action/boosting-transparency-forest-data/en/>

EN: <https://www.fao.org/documents/card/en/c/cc9092en>  
 ES: <https://www.fao.org/documents/card/es/c/cc9092es>  
 FR: <https://www.fao.org/documents/card/fr/c/cc9092fr>

LinkedIn newsletter: [Forest data & climate action](#)

# Partnerships

## Collaborations



## Other FAO partners



Thanks!



global  
environment  
facility  
INVESTING IN OUR PLANET



**Check our web page:**

<https://www.fao.org/in-action/boosting-transparency-forest-data/en/>



**Check our E-learning series:**

[Forest monitoring for climate action](#)

