What is the SFM Toolbox?

The SFM Toolbox collates a large number of tools, case studies and other resources, organised in modules. It has been created to provide forest owners, managers and other stakeholders with easy access to those resources for the implementation of SFM.

Modules

A module provides an overview of a thematic area relevant to the implementation of SFM.

Tools

A tool is a resource that supports and guides the implementation of SFM.

Cases

A case provides information on a particular instance of SFM application.

Contact

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Background

*What is SFM*

*Sustainable forest management* (SFM) can be viewed as the sustainable use and conservation of forests with the aim of maintaining and enhancing multiple forest values through human interventions. People are at the centre of SFM because it aims to contribute to society’s diverse needs in perpetuity.

The United Nations describes SFM as:

“*A dynamic and evolving concept [that] aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations*.”

This description makes it clear that SFM will change over time but that its purpose is, at a minimum, to maintain all forest values in perpetuity. SFM is a multidimensional concept because it incorporates the four pillars of sustainability - economic, social, cultural and environmental.

FAO supports SFM implementation worldwide. For further information click [here](#).
Quick starts

Quick starts are pre-defined scenarios a forester/professional may need to better know when working on the management of a certain type of forest, with a specific goal (production, protection, restoration, etc.). Each scenario provides a full list of modules to be viewed in order to acquire an exhaustive knowledge of the subject.

Click one of the quick start below to be directed to the list of modules most related with the forest management scenario of your interest.

Management of natural production forest

Natural forests are forests that regenerate naturally, they are composed of all the species that occur naturally in them. Natural-forest silviculture can be defined as the practice of controlling the establishment, growth, composition, health and quality of natural forests to meet diverse needs and values. Silvicultural practice consists of the interventions applied to forests to maintain or enhance their utility for specific purposes. In this specific case the goal of the silvicultural system is the production of wood and other forest products.

Forest and landscape restoration

The aim of forest and landscape restoration (FLR) is to develop diverse, productive and multifunctional landscapes that are resilient in the face of economic fluctuations and climatic change. FLR shifts the emphasis away from simply maximizing tree cover towards re-establishing multiple ecosystem functions in previously degraded landscapes, striving for a balance between restoring environmental services and improving the productive capacity of land for agriculture, forestry and other land uses.

SFM Implementation and REDD+
The aim of sustainable forest management (SFM) is to maintain and enhance the multiple values of forests over generations. It is, therefore, fundamentally important for REDD+. REDD+ is the term given to the concept of reducing emissions from deforestation and forest degradation, plus the sustainable management of forests and the conservation and enhancement of forest carbon stocks; it is part of the negotiation process of the United Nations Framework Convention on Climate Change (UNFCCC). This section is dedicated to REDD+ module and related concepts such as reducing deforestation, reducing degradation, etc. to be known more in depth to implements SFM under REDD+ framework.
Statistics

Top ten modules (20 Jul 2019 - 19 Jul 2020)

Our top 10 modules with the highest number of views during the past one year period are listed below:

1. Mountain forests
2. Silviculture in natural forests
3. Forest restoration
4. Wood harvesting
5. Reducing deforestation
6. Land use planning
7. Agroforestry
8. Watershed management
9. Forest inventory
10. Forest management planning

Top ten countries

The following countries are the most active users of the Toolbox. Users from these 10 countries account for over 84% of the user traffic.
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Modules

The SFM Toolbox modules are organized along thematic areas relevant to the implementation of SFM. In each module, you will find basic and in-depth information, tools and cases that will help you expand knowledge on a topic of interest and to put SFM into practice.

Select one of the thematic topics below and click to display relevant modules.

Policy, governance and economics

Development of forest-based enterprises

Forest finance

Forest governance

Forest law enforcement
People, forests and trees
Collaborative Conflict Management

Forestry Responses to Conflict & Disasters

Gender in Forestry

Participatory Approaches and Tools for SFM

*Poverty reduction, food security and well-being*
Agroforestry

Dryland forests and agrosilvopastoral systems

Forests, food security and nutrition

Health benefits from forests

Urban and peri-urban forestry
Biodiversity and ecosystem services

Forest and water

Forest pests

Mangroves restoration and management

Mountain forests
Protected areas

Wildlife management

*Climate actions, halting deforestation and degradation*

Climate change adaptation and mitigation

REDD+
Reducing deforestation

Reducing forest degradation

*Forest restoration and reforestation*

Forest and landscape restoration

Forest genetic resources
Forest reproductive material

Forest restoration

Management of planted forests

Use of treated wastewater in forestry

*Forest products, trade and markets*
Forest certification

Management of non-wood forest products

Occupational health and safety in forestry

Wood energy

Wood harvesting
Assessment, planning, management and monitoring

C&I: a tool for enhancing SFM

Forest inventory

Forest management monitoring

Forest management planning
Land-use planning
Silviculture in natural forests
Vegetation fire management
Watershed management
Tools

Tools

A tool is a resource that supports and guides the implementation of SFM. This section includes all the tools available in the SFM Toolbox, which can be in form of publications, e-learning videos, software etc.

You can browse the Tools through keywords in the free search box or you can narrow the search using the filters on the right side of the page.
A case provides information on a particular instance of SFM application. This section includes all the cases available in the SFM Toolbox, they can be in form of publications, videos, audios, websites, etc.

You can browse the Cases through keywords in the free search box or you can narrow the search using the filters on the right side of the page.
E-learning

This section of the SFM Toolbox provides links to available online courses and e-learning videos that support capacity building, training and awareness raising on topics relevant to sustainable forest management. These courses are also accessible from within the related modules under the E-learning subsection.

The available e-learning materials can also be browsed through the Tools page by selecting “E-learning” under the Type of Tool filter.

This section is also linked to the recently launched FAO elearning Academy, which has already developed a number of courses related to forestry. The platform offers free access to content on a variety of topics of global interest, which is available in a range of formats, including e-learning courses for self-paced learning, blended learning programmes, massive open online courses (MOOCs), technical webinars, online tutored courses, mobile learning, face to face training workshops, as well as University Master's Degree programmes and post graduate degrees.

FAO e-learning academy

The FAO elearning Academy is a platform that provides learning opportunities and multilingual e-learning courses for professionals working in food and nutrition security, social and economic development and sustainable management of natural resources, with the overall goal of strengthening capacity of member countries to achieve the 2030 Agenda for Sustainable Development, focusing on transfer of competencies, development of expertise, and promoting innovation.

List of FAO elearning Academy courses relevant to forestry

Addressing corruption in the tenure of land, fisheries and forests

This course provides an overview of corrupt practices in the tenure sector. It analyses the drivers and impact of corruption on the livelihoods and food security of poor and vulnerable people. It also introduces...

Addressing disputes and conflicts over the tenure of natural resources

This course provides guidance on managing competition over the use of land, fisheries and forests. It introduces a process for analyzing the underlying causes of disputes and conflicts. It also illustrates...

Addressing tenure issues in the context of natural disasters
One of the impacts of climate change is an increase in the incidence, severity and unpredictability of natural disasters. This course explains how livelihoods and tenure rights are affected by natural disasters, and illustrates how responsible governance of tenure of land, fisheries and forests...

**A guide to developing a resilient watershed management plan**

This course presents the basic principles and concepts related to resilient watershed management, and, through the description of a case study, practically illustrates the process for formulating a resilient watershed management plan, from the analysis of the enabling environment to the definition of the risk management measures to implement...

**Climate-smart forestry**

This course explores the role of forests and trees in Climate-Smart Agriculture (CSA). It takes into consideration the ecosystem services and goods that forests provide, and the importance of forests for the food security of forest-dependent people. It explores the complex relationship...

**Collecting household welfare data through forestry modules**

The e-learning on the ‘National socioeconomic surveys in forestry’ comprises four courses that aim to provide guidance on the use of forestry modules to collect data on the socioeconomic contributions of forests and non-forests environments to household welfare and livelihoods...
Estimating GHG emissions and carbon sequestration in agriculture, forestry and other land use with EX-ACT

Are you aware that AFOLU contributes to carbon sequestration as co-benefits through productive and sustainable landscape management? At the same time, Agriculture, Forestry and Land Use Change (AFOLU) is the second largest emitter of greenhouse gas (GHG) emissions worldwide...

Forest and Water Nexus – Introduction

This course is intended to provide an overview of forest and water relationships, and an understanding of the impacts of changing landscapes on water resources. It can be used as a stand-alone course...

Forests and transparency under the Paris Agreement

The objective of this course is to learn about the Enhanced Transparency Framework (EFT) under the Paris Agreement. It will be useful to those wishing to understand the importance of forest-related data collection, analysis and dissemination in meeting the Enhanced Transparency Framework...

Governing land for women and men

This course explains the importance to take into account gender and social issues when dealing with land tenure, and what actions must be adopted so that women and men from different social groups can equally participate in and benefit from land tenure governance processes...
How to monitor and promote policy changes on governance of tenure

The course provides guidance on some of the main issues to consider when implementing a monitoring activity: how to select the most appropriate approach or to identify the best data sources for monitoring, how to effectively communicate the results of the monitoring activity...

Introduction to forest and landscape restoration

Degradation of forests and landscapes impacts the global climate, and also the food security and livelihoods of communities. Forest and landscape restoration (FLR) is a process which brings stakeholders together to create healthy, resilient and productive landscapes and meet national, regional and global commitments.

Introduction to national socioeconomic surveys in forestry

The e-learning on the ‘National socioeconomic surveys in forestry’ comprises four courses that aim to provide guidance on the use of forestry modules to collect data on the socioeconomic contributions of forests and non-forests environments to household welfare and livelihoods...

Introduction to the responsible governance of tenure

The course introduces the main concepts and principles of the Voluntary Guidelines on the Responsible Governance of Tenure. It aims to help people understand the Guidelines and to apply the principles to practical situations in their countries, as well as to raise the general...
Measuring the role of forests and trees in household welfare and livelihoods

The e-learning on the ‘National socioeconomic surveys in forestry’ comprises four courses that aim to provide guidance on the use of forestry modules to collect data on the socioeconomic contributions of forests and non-forests environments to household welfare and livelihoods...

Monitoring forest and landscape restoration

As countries work to meet their national commitments to restoring degraded landscapes, it is important that all FLR interventions have manageable monitoring systems in place, to assess progress towards specific goals, support adaptive management and ensure transparency...

Operationalising the forestry modules

The e-learning on the ‘National socioeconomic surveys in forestry’ comprises four courses that aim to provide guidance on the use of forestry modules to collect data on the socioeconomic contributions of forests and non-forests environments to household welfare and livelihoods...

Putting the voluntary guidelines on tenure into practice: a learning guide for civil society organizations

This online guide for trainers and facilitators in Civil Society Organizations presents a methodology and a set of materials to enhance capacities on the “Voluntary Guidelines on the Responsible governance of Tenure of Land, Fisheries and Forests in the context of National Food security”...
Respecting free, prior and informed consent

The Voluntary Guidelines on Governance of Tenure state that responsible investments should do no harm, and safeguard against dispossession of legitimate tenure right holders. They also embody international legal provisions requiring the Free, Prior and Informed Consent (FPIC) from...

SDG indicators 15.1.1 and 15.2.1 - Forest area and sustainable forest management

This course has been developed to guide countries in reporting on Indicators 15.1.1 and 15.2.1. It illustrates the rationale of the indicators, the definitions and methodologies on which monitoring activities are based, and explains the process and the tools available for compiling...

Spatial planning in the context of the responsible governance of tenure

The course introduces spatial planning, identifying its rationale and benefits, its key principles and the main stages in the spatial planning process. It represents a useful reference for all those who want to promote and implement spatial planning in their countries as an instrument to...

Sustainable financing of Forest and Landscape Restoration

To meet countries' national commitments to restoring degraded landscapes, adequate public and private investments are needed to support the different steps of the FLR cycle. Financing sources are more efficient when used in a coordinated way.?
Tenure security for better forestry - Applying the Voluntary guidelines on the responsible governance of tenure

Governments and development actors increasingly recognize that strengthening tenure can create powerful incentives for the sustainable use of forest resources and contribute to achieving the UN Sustainable Development Goals and the Paris Agreement on climate change...

The national greenhouse gas inventory for land use

This course provides the necessary knowledge to build a sustainable National Greenhouse Gas Inventory (NGHGI) and assess greenhouse gas (GHG) emissions and removals from the land use sector. It focuses on the biological and physical process that lead to GHG fluxes from...
Gateway

*SFM Toolbox gateway*

This SFM Toolbox Gateway is an entry point to other relevant FAO Toolboxes and Platforms.

In the corresponding pages you will find a compilation of FAO platforms - sorted by thematic focus - that share similar objectives with the SFM Toolbox.

**Agriculture/agroforestry**

*Pastoralist Knowledge Hub*

Pastoralists produce food in the world’s harshest environments, and pastoral production supports the livelihoods of rural populations on almost half of the world’s land. They have traditionally suffered from poor understanding, marginalization and exclusion from dialogue. The Pastoralist Knowledge Hub is an initiative bringing together pastoralists and the main actors working with them to join forces and create the synergies for dialogue and pastoralist development.

*Technologies and Practices for Small Agricultural Producers (TECA)*

TECA (Technologies and Practices for Small Agricultural Producers) is a web-based platform for documenting and sharing sustainable technologies and practices to help small agricultural producers in the field. Under the forestry category, you can find technologies and practices on the planting and managing of forests as well as the processing of forestry products and their marketing. In addition, you can find practices and organizational techniques in the field of (agro)forestry for social and economic community use of resources.

*FAO's Global Action on Pollination Services for Sustainable Agriculture*

Pollination is a keystone process in both human managed and natural terrestrial ecosystems. It is critical for food production and human livelihoods, and directly links wild ecosystems with agricultural production systems. The site contains projects and major initiatives related to pollination services, and a section of resources in form of publications, multimedia, tools and guides, etc.
Biodiversity

**FAO Biodiversity Mainstreaming Platform**

FAO's work on biodiversity aims at supporting countries in balancing the need to improve the food and nutrition security and livelihoods of the poor, especially in rural areas, while at the same time preventing the degradation, contamination and loss of natural resources while building resilience to climate change, through policy development support, and country actions (projects to support conserving biodiversity).

Climate change

**Climate Smart Agriculture Sourcebook**

The Climate-Smart Agriculture Sourcebook comprises a wide range of knowledge and expertise on the concept of CSA to better guide policy makers, programme managers, sectoral experts, academics, extensionists, as well as practitioners to make the agricultural sectors (crops, livestock, fisheries and forestry) more sustainable and productive, while responding to the challenges of climate change and food security.

Knowledge Tank for agriculture sectors' adaptation to climate change

This Knowledge Tank contains tools, methods, case studies and other knowledge materials on climate change adaptation in the agriculture sectors (crops, livestock, forestry, fisheries and aquaculture); it targets national planners, development actors and decision makers; it supports countries in highlighting key resources for adaptation planning and budgeting, especially in formulating and implementing National Adaptation Plans (NAPs).

**KORE - Knowledge Sharing Platform on Resilience**

KORE (Knowledge Sharing Platform on Resilience) is a knowledge-sharing platform to support building resilience to food insecurity and malnutrition in the face of recurrent shocks and stresses. It helps inform programming and interventions to strengthen the resilience of agriculture-based livelihoods. The platform provides an overview of tools, approaches, programmes, analyses and methodologies on resilience implemented by FAO and other key partners in different contexts.
**Modelling System for Agricultural Impacts of Climate Change (MOSAICC)**

MOSAICC (Modelling System for Agricultural Impacts of Climate Change) is a powerful tool for simulation and is unique in that it combines several models in a single modelling system. The models and tools all run on a central server to which users can access via web interfaces. All models are connected to a single spatial database, which facilitates the exchange of data, guarantees data coherence and allows users to run simulations.

**The Forest and Landscape Restoration Mechanism (FLRM)**

The FLRM (Forest and Landscape Restoration Mechanism) aims to facilitate a process in selected countries that will support the enabling environment by strengthening institutional frameworks, organizational and technical capacity related to designing, planning and implementing large-scale FLR programmes. This knowledge base provides access to a comprehensive database of resources related to forest and landscape restoration in a wide range of aspects.

**Reducing Emissions from Deforestation and Forest Degradation (REDD+)**

The aim of REDD+ is to encourage developing countries to contribute to climate change mitigation efforts by: i) reducing greenhouse gas emissions (GHG) by slowing, halting and reversing forest loss and degradation; and ii) increasing removal of GHGs from the earth’s atmosphere through the conservation, management and expansion of forests.

**Energy**

**Safe Access to Fuel and Energy working group (SAFE)**

FAO is a member of the inter-agency SAFE Humanitarian Working Group, along with IOM, UNHCR, WFP and the Global Alliance for Clean Cookstoves. FAO’s work on Safe Access to Fuel and Energy (SAFE) adopts a holistic, multi-faceted approach, which takes into account the mutually reinforcing linkages between energy and environment, nutrition, health, gender, protection and livelihoods.
**Finance/investments**

**Investment Learning Platform**

This ILP Platform aims to provide concise and practical guidance to those who plan, formulate, implement or evaluate public investment in agriculture and rural development, in particular government, their advisors and partners. The structure of the ILP aims to provide easy entry points for users to find guidance related to investment cycle phases, themes and tasks.

**Fishery**

**Ecosystem Approach to Fisheries (EAF) toolbox**

The EAF (Ecosystem Approach to Fisheries) toolbox has been designed to guide users through each of the four main EAF management planning steps and activities using simplified text and clear instructions. The toolbox also helps users decide which tool(s) could be most appropriate for each step given the type of fishery, their resources and capacity.

**Food**

**Food loss reduction technical platform**

Each year, an estimated one-third of all food produced for human consumption is lost or wasted world-wide. The social, economic, and environmental impacts of food losses and waste (FLW) must be addressed concurrently due to their direct and significant impact on food and nutrition security, natural resources, and climate change. The technical platform facilitates local, national and regional level food loss and waste prevention, reduction and measurement.

**Global Feed Safety Platform**
The Global Feed Safety Platform is a knowledge exchange mechanism to produce, collect and make available a wide range of information and knowledge on feed safety from numerous sources across the world. It brings together all relevant stakeholders along the feed and food chain from the public and private sector, the civil society, academia and research centres.

**Right to food methodological toolbox**

The purpose of the Methodological Toolbox is to provide a practical aid for the implementation of the Right to Food Guidelines. It contains a series of analytical, educational and normative tools that offer guidance and hands-on advice on the practical aspects of the right to food. It covers a wide range of topics such as assessment, legislation, education, budgeting and monitoring.

**Urban Food Actions Platform**

This platform provides access to a comprehensive database of FAO and non-FAO resources related to urban food policies and programmes in a wide range of aspects: governance and planning, sustainable diets and nutrition, social and economic equity, food production and ecosystem management, food supply and distribution, food loss and waste.

**Land planning/monitoring**

**Land Cover Toolbox**

This toolbox gives access to a wall-to-wall mapping of land cover which is a critical component for many applications in which FAO is involved, including sustainable management of natural resources, environmental protection, food security, and humanitarian programs, as well as core baseline data for modelling. FAO has enhanced the ability to analyse and produce land cover information in many countries, developing accurate land cover products for national, regional and global applications.

**Land Resources Planning Toolbox**
The LRP (Land Resources Planning) Toolbox is a freely accessible online source for a range of stakeholders, directly or indirectly involved in land use planning. The Toolbox contains a comprehensive number of existing tools and approaches that are used to implement land resources planning. The overall goal of the Toolbox is to make potential users aware of the existence of these tools, and facilitate access to their information.

**Water**

**The FAO Water Platform**

The FAO Water Platform is designed to ensure programmatic coherence and operational effectiveness across FAO. FAO works on the conservation, development and sustainable management of water resources for agriculture and food production, including responses to environmental challenges and climate change affecting food and agriculture.

**Work and training**

**Decent Rural Employment Toolbox**

The Decent Rural Employment Toolbox has been designed to provide guidance to policy makers and planners, rural development practitioners and FAO staff at country level on how to systematize and scale up ongoing efforts to promote decent employment in rural areas. It is organized in modules that cover the main components of FAO’s approach to mainstreaming decent rural employment and offers quick access to practical tools including case studies, guidance materials and other useful resources.

**Family Farming Knowledge Platform**

The Family Farming Knowledge Platform gathers digitized quality information on family farming from all over the world; including national laws and regulations, public policies, best practices, relevant data and statistics, researches, articles and publications. It provides a single access point for international, regional and national information related to family farming issues; integrating and systematizing existing information to better inform and provide knowledge-based assistance to all stakeholders.
A Farmer Field School (FFS) brings together a group of farmers, livestock herders or fisherfolk, to learn on how to shift towards more sustainable production practices, by better understanding complex agro-ecosystems and by enhancing ecosystem services. A FFS group meets regularly during a production cycle, setting up experimentation and engaging in hands-on learning to improve skills and knowledge that will help adapt practices to their specific context.
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