REDD+

Basic knowledge

This module is intended for forest and land managers interested in contributing to REDD+ national strategies or benefiting from REDD+ and the possible synergies between it and SFM. Readers may wish to read this module together with the Reducing Deforestation and Reducing Forest Degradaton modules.

What is 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). Globally, deforestation contributes about one-fifth of all greenhouse gas (GHG) emissions, and REDD+ is therefore central to global efforts to mitigate climate change. The aim of REDD+ is to encourage developing countries to contribute to climate-change mitigation by 1) reducing GHG emissions by slowing, halting and reversing forest loss and degradation; and 2) increasing removals of GHGs from the atmosphere through the conservation, management and expansion of forests.

The contribution of REDD+ to reducing GHG emissions and increasing forest carbon sinks is recognized explicitly in the Paris Agreement. This agreement, which was struck by the Conference of the Parties to the UNFCCC in December 2015, encourages all countries – both developed and developing – to take action to implement and support the Warsaw Framework for REDD+ and other relevant decisions already agreed under the UNFCCC.

When the Paris Agreement was reached in 2015, the Green Climate Fund was given an important role in serving the agreement and supporting the goal of keeping climate change well below 2 degrees Celsius. The Green Climate Fund (GCF) is a global fund created to support the efforts of developing countries to respond to the challenge of climate change. It specifically supports countries' REDD+ efforts, both early phases of REDD+ and results-based payments for forest emissions reductions. It is expected that the GCF will increase access to finance for REDD+ activities. The GCF is committed to liberating the potential of the private sector. It can finance private sector projects relating to mitigation and adaptation activities at all levels. For instance, it can support sustainable agriculture practices, expansion of forest areas, deforestation-free supply chains, etc. (see the Climate Change Adaptation and Mitigation module for additional information).

REDD+ and SFM

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+; in many countries it will be an essential means for achieving the objectives of curbing emissions from deforestation and forest degradation and conserving, managing and enhancing forest carbon stocks. The lessons learned and knowledge generated in the implementation of SFM in past decades, including through community forestry and multistakeholder

participatory approaches, will be crucial for the on-the-ground implementation of REDD+.

REDD+ offers opportunities for re-creating forests where they have been lost or degraded and thereby bringing more land under SFM. REDD+ may also generate additional revenue to broaden the financial base for forest conservation and sustainable management, increase the benefits deriving from forests and trees, and encourage the wider uptake of SFM.

Although REDD+ is a relatively new process, the goals of reducing deforestation and forest degradation and conserving and expanding forests are themselves not new. The wealth of knowledge and experience on SFM – as reflected in the tools and cases in this and related modules – offers a substantial base on which to build. Nevertheless, more knowledge is required on both SFM and REDD+, and science has an important role to play.

SFM and REDD+ objectives can be achieved most effectively by exploiting synergies between the two concepts. Experiences from SFM can contribute to the design and implementation of effective REDD+ strategies, while REDD+ architecture, actions and lessons can contribute to achieving the objectives of SFM.

Why is REDD+ of interest to forest and land managers?
REDD+ may be of interest to forest and land managers because it will help them:

- engage in multistakeholder discussion platforms through national REDD+ processes and thereby contribute to strategy development, the identification and prioritization of policies and measures (known as PAMs), especially those related to forests, cross-sectoral coordination, greater transparency in the allocation of national funds, and overall decision-making;
- contribute to the implementation of national strategies on REDD+ and other climate-change mitigation efforts;
- reverse deforestation and forest degradation on their lands and increase productivity;
- bring low-productivity agricultural lands under complete or partial tree cultivation; and
- gain access to new or additional financial resources and incentives (e.g. GCF) to support the implementation of forest management plans, to embark on forest landscape restoration, to enhance and diversify forest related economic activities, and/or to engage with deforestation-free supply chains.

REDD+ can be combined with other legitimate forest and land management objectives that do not conflict with REDD+ processes and objectives. The evolving mechanism for sustainable development established in the Paris Agreement can open up exciting opportunities for voluntary cooperation on some REDD+ activities.

To date, most countries have focused on getting ready for REDD+. Even in the readiness phase, however, forest and land managers may benefit from incentives, capacity development and services by contributing to REDD+ demonstration activities (see examples in the cases section). Demonstration projects serve to explore the potential of REDD+ and generate experiences until the enabling conditions for REDD+ are fully in place at the national and international levels. They facilitate innovation and learning and build the credibility of the concept.

Countries can strengthen the enabling environment for REDD+ by addressing, for example, governance, tenure rights, policies and regulations, fiscal incentives, access to financial services, transparency and participatory decision-making – all of which can have positive impacts on forest managers and their efforts to implement SFM. Countries may also include actions among their PAMs that support the engagement of large and small private actors – including forest and land managers – in REDD+.

To benefit from REDD+, forest and land managers may wish to explore:

- whether they can contribute to the formulation of national REDD+ strategies, reflecting their interests and concerns;
- whether their countries have already defined national REDD+ strategies and whether SFM is part of the planned PAMs. Forest and land managers may be able to contribute to the implementation of REDD+ strategies (benefiting from possible incentives), as well as take advantage of policies aimed at strengthening the enabling environment or facilitating the engagement of private actors in REDD+ (e.g. normative changes to favour the marketing of products generated by SFM combined with capacity strengthening to reduce illegal logging and unfair marketing strategies);
- whether their countries have established REDD+ benefit-sharing mechanisms (e.g. payments, services and projects), which may provide incentives for their own contributions to REDD+; and
- whether the monitoring, measuring, reporting and verification system that countries need to develop for REDD+ provides useful data for forest management planning and monitoring.

It may not be possible to achieve SFM and REDD+ goals through actions taken in the forest sector alone. A landscape approach involving good governance, land-use planning, and the well-designed coordination of the various land-use sectors is crucial for providing an

adequate framework for tackling the drivers of deforestation and forest degradation.

REDD+ contributes to SDGs:

Related modules

- Agroforestry
- Community-based forestry
- Forest and landscape restoration
- Forest certification
- Forest pests
- Forest restoration

- Gender in forestry
- Management of non-wood forest products
- Management of planted forests
- Participatory approaches and tools for SFM
- Protected areas
- Reducing deforestation
- Reducing forest degradation
- Silviculture in natural forests
- Vegetation fire management

In more depth

REDD+ phases

Countries interested in REDD+ are required to progress through three phases (UNFCCC Decision 1/CP.16, paragraph 73):

1. **the readiness phase**, involving the development of national strategies or action plans, PAMs, and capacity building;
2. **the implementation of national strategies and results-based demonstration activities**, involving the implementation of PAMs and national strategies or action plans that could involve further capacity building, technology development and transfer, and results-based demonstration activities; and
3. **results-based actions** that should be fully measured, reported and verified.

Most countries are in the readiness phase (phase 1), although some are moving into phase 2. Forest and land managers may benefit from capacity development, services and incentives through all the phases; contribute to demonstration activities in phase 2; and benefit from incentives through their contributions to the implementation of national REDD+ strategies in phase 3.

Under UNFCCC decisions, developing countries aiming to access REDD+ results-based payments must have in place the following four main elements (called the “Warsaw pillars”):

- a national strategy or action plan;
- a national forest monitoring system;
- a forest reference emission level or forest reference level; and
- a safeguards information system.

These elements are to be developed by national governments, but forest and land managers can play a role in the formulation and especially the implementation of national REDD+ strategies.

REDD+ activities, and policies and measures

Initially, debate on the role of forests in climate-change mitigation focused on reducing emissions from deforestation in developing countries, but this later broadened to ensure a more comprehensive approach to mitigating climate change and the wider participation of countries with diverse national circumstances. The following five REDD+ activities to contribute to mitigation actions in the forest sector have been globally agreed (UNFCCC Decision 1/CP.16, paragraph 70):

1. reducing emissions from deforestation;
2. reducing emissions from forest degradation;
3. the conservation of forest carbon stocks;
4. the sustainable management of forests; and
5. the enhancement of forest carbon stocks.

These five activities can best be implemented – collectively or separately – through a package of coordinated PAMs defined by each country and included in national strategies and action plans. The five activities overlap in practice; thus, when countries define their PAMs to address these activities, it may be most effective to include all five activities.

The table presents the five REDD+ activities, examples of PAMs, and relevant SFM Toolbox modules (where readers can find further information on those PAMs). Note that most PAMs will have the potential to contribute to several REDD+ activities.

REDD+ activities, examples of national policies and measures, and related SFM Toolbox modules

REDD+ activity	Explanation	Examples of policies and measures	Related SFM Toolbox modules
Reducing emissions from deforestation	Deforestation is conversion from a forest land use to another land use (e.g. from forest land to crop land)	National policies and measures (PAMs) will depend on the specific deforestation drivers identified in each country (e.g. agricultural expansion, infrastructure or mining). The module on reducing deforestation provides more information on possible PAMs for addressing each deforestation driver. The following are examples of possible PAMs: · Strengthen forest governance and law enforcement · Sustainably intensify agriculture to avoid the further expansion of agricultural land · Integrate landscape planning and management, including by harmonizing policies and laws among sectors · Diversify farmer livelihoods	Reducing Deforestation
Reducing emissions from forest degradation	Degradation is a change process caused by disturbance that negatively affects the characteristics of forests, resulting in a decline in the supply of forest goods and services	PAMs will depend on the specific degradation drivers identified in each country (e.g. unsustainable logging or charcoal and woodfuel collection). The module on "reducing forest degradation" provides more information to support the identification of PAMs in each case. The following are examples of possible PAMs: · Promote sustainable management and practices in multipurpose/production forests (e.g. capacity development on good silvicultural practices, and reduced impact logging) · Strengthen forest tenure and rights · Promote sustainable woodfuel harvesting and woodfuel use efficiency (e.g. efficient cook stoves) · Implement integrated fire management · Incorporate useful trees in agricultural landscapes to reduce pressure on forests by producing purposes wood and non-wood products for subsistence and local market	Reducing Forest Degradation
Conservation of forest carbon stocks	An effort to decrease the threat to forests and ensure permanence by establishing long-term commitments to conserve forest	· Expand and manage protected areas, including through joint management approaches with local communities · Implement integrated fire management · Implement integrated pest management	Forest Protected Areas Participatory Approaches and Tools in Forestry Vegetation Fire Management Forest Pests
Sustainable management of forests	The sustainable use of forests with the aim of maintaining and enhancing multiple forest values through human interventions	· Bring more forests under scientific management · Implement payment schemes for the environmental services rendered by forests · Strengthen community forest management · Obtain forest certification	Silviculture in Natural Forests Community-based Forestry Forest Certification
Enhancement of forest carbon stocks	Refers to 1) non-forest land becoming forest land; (2) the restoration of degraded forest landscapes; and 3) the enhancement of carbon stocks on forest land	· Restore forests and landscapes (including through community initiatives) · Adopt agroforestry practices and manage trees outside forests · Improve the silviculture and management of natural and planted forests	Forest and Landscape Restoration Forest Restoration and Rehabilitation Agroforestry Silviculture and Management of Planted Forests Silviculture in Natural Forests

The actions identified and selected by a country as strategic means for implementing REDD+ are unlikely to be restricted to forestry: they may include other land-use sectors, and some may be cross-sectoral. Nevertheless, a large number of REDD+ actions are likely to be primarily the responsibility of forest managers, who will play important roles in implementing REDD+ on the ground.

Identification and prioritization of REDD+ activities

The process of identifying and prioritizing REDD+ PAMs is a country-specific process led by government institutions, in which forest and land managers can be key actors. Indicative steps for this process are as follows:

1. Assess the priority REDD+ activities and their scale (e.g. national or subnational, or a combination of these).
2. Map and stratify ecosystems.
3. Classify ecosystems by land use, tenure and institutional regime.
4. For each ecosystem class, map land-conversion trends (e.g. deforestation, degradation, restoration and reforestation).
5. Identify, assess and prioritize the direct and underlying drivers of deforestation and degradation, as well as opportunities for – and barriers to – the conservation, management and enhancement of forest carbon stocks.
6. Define the main REDD+ intervention areas and prioritize them based on their potential to contribute to climate-change mitigation (e.g. community-managed miombo woodlands, where deforestation is due mainly to charcoal production).
7. Identify the most suitable forest and non-forest PAMs for each intervention area at the appropriate scale (e.g. local, subnational, national or regional), considering that a wide range of legal, policy and institutional actions at the national level will be common to most actions.
8. Prioritize locations and PAMs according to their mitigation potential; estimated costs and potential for funding; existing implementation capacities; non-carbon benefits; and alignment with national development priorities and plans. The identified PAMs will constitute the core elements of the national REDD+ strategy.
9. Assess the social and environmental benefits and risks of the PAMs so as to ensure that appropriate REDD+ safeguards are in place.
10. Implement the priority REDD+ PAMs in priority locations, for which the engagement of forest and land managers will be crucial.

This process should be seen as iterative, requiring the active engagement of all relevant stakeholders and sectors. The process will be led mainly by government institutions, but the knowledge and experience of small-scale and large-scale forest managers can contribute significantly to the identification and prioritization of drivers, PAMs and locations, as well as to the assessment of social and environmental risks.

REDD+ safeguards

To minimize the potential social and environmental risks of REDD+ and promote benefits beyond climate-change mitigation, the UNFCCC has adopted the following seven safeguards to be addressed and respected when undertaking REDD+ actions (UNFCCC Decision 1/CP.16, Appendix I):

1. that actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
2. transparent and effective national forest governance structures;
3. respect for the knowledge and rights of indigenous peoples and communities;
4. the full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in REDD+ actions;
5. that actions are consistent with the conservation of natural forests and biodiversity, ensuring that they are not used for the conversion of natural forests but are instead used to incentivize the protection and conservation of natural forests and their environmental services and to enhance other social and environmental benefits;
6. actions to address the risk of reversals; and
7. actions to reduce the displacement of emissions.

Each country should develop a safeguards information system to provide information on how the REDD+ safeguards are being addressed and respected in the implementation of REDD+ activities. Countries should periodically submit information on safeguards to the UNFCCC as a requisite for obtaining results-based payments (UNFCCC Decision 12/CP.17 and UNFCCC Decision 12/CP.19).

The consideration of REDD+ safeguards and the development of safeguards information systems are the responsibility of the governments of countries involved in REDD+. Forest and land managers should be aware, however, that the implementation of PAMs as part of national REDD+ strategies must assess social and environmental risks and address and respect the safeguards.

Reference levels

To participate in REDD+, countries should develop forest reference emission levels (FRELs) or forest reference levels (FRLs). The UNFCCC has defined FRELs and FRLs as “benchmarks for assessing each country’s performance in implementing REDD+ activities”. The construction of a FREL or FRL and its submission to the UNFCCC is entirely the responsibility of the government of each country.

FRELs and FRLs may be relevant for assessing the performance of countries in contributing to climate-change mitigation through forest-related actions. Reasons for developing FRELs or FRLs include the following:

- Countries may wish to access results-based payments. According to UNFCCC decisions, results-based payments require a

technically assessed forest reference level.
- Countries may wish to assess progress in achieving the outcomes of the PAMs taken in the forest sector to mitigate climate change for domestic reasons.
- Countries may wish to contribute to international mitigation through REDD+ actions under the UNFCCC.

It is possible that a single FREL/FRL can be prepared for more than one of the above reasons. A country may also consider using different FRELs/FRLs for different or combined reasons.

Reference levels are expressed in tonnes of carbon dioxide equivalent per year. Reference levels should be established transparently and take into account historical data, and they may be adjusted to national circumstances if a rationale for this is provided. More information on reference levels is available in the tools section.

The complexity of establishing reference levels should not deter countries from initiating REDD+. The UNFCCC and, specifically, the Warsaw Framework for REDD+ recognize that technological and human capabilities and circumstances vary between countries, and they encourage countries to make their best efforts to establish reference levels and to continue improving these as circumstances and capabilities develop.

National forest monitoring systems in the context of REDD+

To demonstrate performance in implementing REDD+, countries are requested to establish national forest monitoring systems (NFMSs) suitable for measuring, reporting and verifying emission reductions and the enhancement of forest carbon sinks (and an NFMS can also incorporate other information, if considered useful). Specifically, an NFMS should have:

- a **measurement** function – measuring REDD+ mitigation performance in carbon dioxide equivalents (i.e. anthropogenic forest-related GHG emissions by source, and removals by sink);
- a **reporting** function that provides information on GHG mitigation performance (emissions and removals in carbon dioxide equivalents) of REDD+ activities, which is submitted to the UNFCCC through national communications and biennial update reports; and
- a **verification** function that allows the independent review of results, which, under the UNFCCC process, involves a roster of experts in accordance with adopted guidelines to check the accuracy and reliability of information reported in GHG inventories and the procedures used to generate information.

Countries are also encouraged to develop additional **monitoring** functions, which can serve country-specific information needs and include monitoring the performance of REDD+ activities and safeguards. NFMSs should provide data that are transparent and consistent over time, adopt a combination of remote sensing and ground-based forest carbon inventory approaches, and build on existing systems while being flexible and allowing for improvement.

The Forest Inventory and Remote Sensing for Forest Monitoring and Management modules provide more information on forest monitoring.

Although NFMSs are designed to provide information at the national level, they may also generate biophysical and socioeconomic data of use to forest and land managers. Forest and land managers, or their representatives, may participate in the design and implementation of some elements of an NFMS through stakeholder platforms.

Gender and REDD+

The UNFCCC decisions on REDD+ request that countries address and respect gender considerations (ex. Decision 1/CP16).

Women's and men's specific roles, rights, responsibilities and priorities, as well as their particular use patterns and knowledge of forests, shape their experiences differently. As such, gender-differentiated needs, uses and knowledge of the forest are critical inputs to policy and programmatic interventions that will enable the long-term success of REDD+ on the ground.

However, social, economic, and cultural inequalities and legal impediments often mean that women are excluded (along with other marginalized groups such as indigenous peoples, the poor, youth and disabled people) from full participation in REDD+. It is, therefore, crucial that deliberate and meaningful efforts are taken to ensure REDD+ actions are inclusive, fair and gender-responsive both in policy and in practice (UN-REDD, 2011).

Mainstreaming gender into REDD+ policy, planning, implementation and evaluation can result in more precisely designed interventions, which would in turn increase the efficiency, effectiveness and sustainability of REDD+ implementations. It would require:

- recognizing women as primary users of forests with valuable knowledge and experience;
- facilitating gender-responsive REDD+ stakeholder engagement;
- clearly communicating the potential benefits to women;
- developing enforceable measures that ensure those benefits are both protected and delivered (ex. ensuring tenurial security for women and promoting women's property rights);
- fully integrating gender equality and women's empowerment principles in the design and implementation of REDD+ actions; and
- realizing gender-equality provisions in international agreements on REDD+.

E-learning

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...

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...

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...

Further learning

Angelsen, A. (ed.) 2008. *Moving ahead with REDD: Issues, options and implications.* CIFOR, Bogor, Indonesia.

Blaser & Thompson. 2010. CPF-Summary Paper on Sustainable Forest Management. Discussion paper to the attention of meeting of the COF, New York, April 2010.

Bruce, J. 2012. *Identifying and working with beneficiaries when rights are unclear: insights for REDD+ initiatives.* PROFOR. Washington DC.

CBD & GIZ. 2009. *Biodiversity and Livelihoods: REDD+ Benefits.*

Chandrasekharan Behr, D. 2012. *Making benefit sharing arrangements work for forest-dependent communities: overview of insights for REDD+ initiatives.* PROFOR. Washington DC.

Dyngeland, C. & Waized, B. 2013. *Views and preferences for compensation under REDD+ in Tanzania: Kilosa pilot project case study.* IIED, London.

IIED. 2009. *The costs of REDD: lessons from Amazonas.* IIED Briefing.

Sanz, Penman. 2015. REDD+, and overview where we are in 2015. Unasylva.

WWF. 2014. *Mapping UNFCCC REDD+: a visual guide to the systems and structures supporting REDD+ within the UNFCCC*

Credits

This module was developed with the kind collaboration of the following people and/or institutions:

Initiator(s): Maria Ruiz Villar - FAO, Forestry Department

This module was revised in 2018 to strengthen gender considerations.

Initiator(s): Gender Team in Forestry

Reviewer(s): Maria Ruiz Villar - FAO, Forestry Department