

**FOREST-RELATED TARGETS AND INDICATORS**

**FOR INTEGRATION IN**

**THE SUSTAINABLE DEVELOPMENT GOALS**

A Draft Proposal from the Collaborative Partnership on Forests (CPF)

Based on the work of

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**FOREST RELATED TARGETS AND INDICATORS FOR INTEGRATION**

 **IN SUSTAINABLE DEVELOPMENT GOALS**

**Summary**

Forests and trees outside forests are vital for sustainable development. Forests occupy one-third of the Earth’s land area, and about another half of the total remaining land area features sparsely scattered trees. These renewable natural resources are crucial for tackling many of the issues identified in *The Future We Want*, such as poverty, food security, climate change, biodiversity, sustainable production and consumption, and social inclusion, particularly meeting the basic needs of vulnerable people and ensuring their well-being.

The benefits of forests and trees outside forests are generated at the management unit, landscape, subnational, national and global scales. Socio-economic and environmental services provided by all types of forests go well beyond forest boundaries, benefit all humankind and maintain conditions for life on Earth. Increasing forest benefits for sustainable development is a clear, concrete, aspirational and easy-to-communicate concept.

Integrated approaches are needed for enhancing the multiple contributions of forests to SDGs as they will harness synergies and balance cross-sectoral tradeoffs between forests and other closely interlinked issues.

Several international instruments and processes offer a range of goals, objectives and targets on forests based on which forest-related targets and indicators can be developed. These include, among others, the Millennium Development Goals, , the Non-Legally Binding Instrument on All Types of Forests (Forest Instrument) and its four shared Global Objectives on Forests, agreed by the United Nations Forum on Forests and subsequently adopted by the General Assembly; International Tropical Timber Agreement , the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011–2020, including Aichi targets; the UN Framework Convention on Climate Change, the Kyoto Protocol and decisions on reducing emissions from deforestation and forest degradation in developing countries (REDD+); the UN Convention to Combat Desertification and the Rio+20 embraced concept on land degradation neutrality, the UN Zero Hunger Challenge; and the Global Partnership on Forest Landscape Restoration.

Based on this background, the members of the Collaborative Partnership on Forests[[1]](#footnote-1) propose the following ten targets for forests and trees outside forests for integration in the sustainable development goals (SDGs). These targets build on and are designed to support and contribute to the achievement of the goals, objectives and targets in the existing global intergovernmental instruments and policy fora relevant to forests. The proposed targets are applicable to different constellations of SDGs, and can be transferred and tailored by countries to their national and local circumstances, capacities and level of ambition.

**Target 1: All the world’s forests managed sustainably.** Sustainable forest management (SFM) aims to maintain and enhance the economic, social and environmental values of forests, for the benefit of present and future generations. This target focuses on the long-term sustainability of forest resources and landscapes. It is a positive, aspirational, action-oriented, forward-looking and easy-to-communicate concept that addresses, in a balanced way, all the pillars of sustainable development. SFM is a tool for balancing diverse objectives and managing their tradeoffs through participatory decision-making processes. It is applicable to all countries, including countries that have lost their forests and wish to re-establish them. This target can be easily translated to national conditions as SFM covers all forest activities and functions and is applicable at all geographic scales. The Member States of the United Nations have already made a political commitment to achieving SFM in the Forest Instrument.

**Target 2: The world’s forests and tree resources improved.** The value of forests and trees outside forests as natural assets is determined by both their quantity (area and volume) and quality (e.g. their composition and health). The extent and quality of forests and trees outside forests are easy concepts to communicate. This target underpins biodiversity, climate, and all the other multiple benefits of forests.

**Target 3: Climate change mitigation benefits from forests increased.** Deforestation and forest degradation are a major cause of global carbon dioxide emissions, but sustainably managed forests are important carbon sinks. Protecting forests, improving forest management and establishing new forests all increase the climate-mitigation benefits of forests. Carbon stocks in harvested wood products in use can also be increased.

**Target 4: Direct and indirect contributions of forests and trees to food security and nutrition increased.** Forests and trees are major sources of nutritious foods, such as fruits, nuts, leaves, oils, honey, wild meat and insects, and 2.4 billion people rely on fuelwood for cooking. Forests boost agricultural productivity and benefit agriculture by, for example, regulating the climate, providing fresh water, and harbouring pollinators.

**Target 5: Poverty reduced through increased income and employment from forests.** Hundreds of millions of people worldwide obtain income and employment from forests, especially in developing countries. Empowering women in the forest sector creates significant employment and business opportunities for them and has important spillover benefits for households and communities in terms of food security, health and education.

**Target 6: Forest-related biodiversity conserved and improved.** Forests hold up to 80 percent of all terrestrial biodiversity. Biodiversity underpins forest productivity, resilience and adaptive capacity and is essential for maintaining ecological processes such as carbon sequestration, pollination, seed dispersal and decomposition. Biodiversity is fundamental for food security.

**Target 7: Fresh water supply from forest areas improved.** Forests are natural filtration and storage systems that supply an estimated 75 percent of usable water globally. Forests promote the infiltration of rainwater into soil and then into groundwater, providing water supplies in dry periods and helping reduce flood peaks.

**Target 8: Resilience of people and forests against slow-onset and extreme events increased.** Forests and trees increase the resilience of food-production systems and therefore the resilience of households to shocks and slow-onset changes. SFM increases resilience through approaches that value and apply local knowledge and in which management is adapted over time based on monitoring, evaluation and learning.

**Target 9: Contributions of forests to a green economy increased.** Forests and trees will play a crucial role in the move to a green economy, providing, for example, a sustainable source of bioenergy and biomaterials, recreation opportunities, and diverse genetic materials for foods and medicines.

**Target 10: Increased financial resources from all sources to sustainably manage forests.**  The current level of resources allocated to SFM is insufficient. Action is needed at all levels to mobilize sufficient financing from all sources to manage the world’s forests sustainably.

**Indicators**

The document on which this summary is based proposes measurable indicators for each of the ten targets. Considerable data are available, but there are also data gaps, particularly with respect to biodiversity and social benefits. The indicators presented in the main document will need to be further developed, therefore, when more information on the format of the SDGs is available. Ultimately, the targets will need to be adapted to national and local conditions.

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**LIST OF ACRONYMS**

C&I Criteria and Indicators

CBD Convention on Biological Diversity

CITES Convention on International Trade in Endangered Species

COP Conference of Parties

CPF Collaborative Partnership on Forests

FAO Food and Agriculture Organization of the United Nations

FLEG Forest Law Enforcement and Governance

FLEGT Forest Law Enforcement, Governance and Trade (European Union)

GEI Green Economy Initiative (UNEP)

GG Global Goals (FAO)

GHG Greenhouse gas

GPFLR Global Partnership on Forest Landscape Restoration

IPCC Intergovernmental Panel on Climate Change

ITTA International Tropical Timber Agreement

ITTO International Tropical Timber Organization

LBA Legally Binding Agreement on Forests in Europe (draft)

LULUCF Land Use, Land Use Change and Forestry

MDG Millennium Development Goal

MRV Monitoring, Reporting and Verification

NLBI Non Legally Binding Instrument on All Types of Forests

NWFP Non-wood forest products

OWG Open Working Group of the General Assembly

REDD Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

Rio+20 United Nations Conference on Sustainable Development, Rio de Janeiro, 2012

SCP Sustainable Consumption and Production

SDG Sustainable Development Goal

SFM Sustainable forest management

SLM Sustainable land management

SNRM Sustainable natural resources management

SO Strategic Objectives (FAO)

UNCCD UN Convention to Combat Desertification

UNEP United Nations Environment Programme

UNFCCC UN Framework Convention on Climate Change

UNFF United Nations Forum on Forests

ZNLD Zero Net Land Degradation

10 YFP 10-Year Framework of Programme on Sustainable Consumption and Production

# Introduction

## Background

One of the main outcomes of the United Nations Conference on Sustainable Development (Rio+20) held in Rio de Janeiro in June 2012, was the agreement by member States to launch a process to develop a set of sustainable development goals (SDGs). The goals were foreseen to address and incorporate in a balanced way all the three dimensions of sustainable development and their interlinkages; be coherent with and integrated into the UN development agenda beyond 2015; and serve as drivers for implementation and mainstreaming of sustainable development in the United Nations system as a whole.

An Open Working Group (OWG) of the General Assembly has been tasked with preparing a proposal on the SDGs, which should be concise, action-oriented, limited in number, aspirational and easy to communicate. The SDGs should be global in nature and universally applicable to all countries. The goals should be based on Agenda 21 and the Johannesburg Plan of Implementation, fully respect the Rio Principles, and take into account different national circumstances, capacities and priorities. The SDGs are to be consistent with international law, build upon commitments already made, and contribute to the full implementation of the outcomes of all major summits in the economic, social and environmental fields. They should address and be focused on priority areas for the achievement of sustainable development. Governments should drive SDG implementation with the active involvement of all relevant stakeholders, as appropriate. The process towards achievement of the goals needs to be assessed and accompanied by targets and indicators, and must also take into account different national circumstances, capacities and levels of development. The OWG will submit a report to the sixty-eighth session of the General Assembly, containing a proposal for sustainable development goals for consideration and appropriate action.

Forests are vital to achieving global sustainable development. This is highlighted in the *Issues Brief on Forests*, which was submitted to the OWG by the Technical Support Team coordinated by the United Nations Forum on Forests (UNFF) with strong inputs from several members of the Collaborative Partnership on Forests (CPF)[[2]](#footnote-2). The document calls for a set of targets and indicators to facilitate the incorporation of forest-related issues in the SDGs. These should guide and promote concrete actions at global, regional and national levels that would guarantee the social, economic and environmental benefits of trees, forests and forest ecosystems to humankind, in a sustainable manner.

CPF at its meeting in November 2013 in Warsaw agreed to form a working group led by FAO to develop a proposal for targets and indicators on forests. Such targets would be focused on global issues, limited in number, easy to understand by all relevant stakeholders, suitable for incorporation in national and regional development plans, and draw on existing data to the extent possible. The targets should be assessed against time-bound and geographically-related indicators based on quantitative and qualitative data.

The objective of this paper is to propose targets on forests that are focused on the positive contributions that forests make to sustainable development, including human development. They consider aspects such as forests’ contribution to a green economy, food security and poverty reduction, economic development, sustainable consumption and production patterns, and a healthy environment. The targets have been largely derived from the goals and objectives of the existing international instruments.

## Approach

The proposed targets and indicators are the outcome of an analysis that consisted of the following steps:

1. The international policy instruments that contain forest-related targets and indicators were identified and their relevance for SDG-related targets and indicators for forests was assessed.
2. Existing indicators for assessing the socioeconomic and environmental benefits of forests were reviewed.
3. Commonalities, differences and links between the objectives and targets of the international instruments were identified.
4. Potential gaps/trade-offs in the existing objectives and targets were identified.

Based on the analysis of the collected information, a limited number of targets have been proposed, covering all aspects of the multifunctionality of forests and the three dimensions of sustainable development. For each of the targets, in turn, a limited number of measurable indicators have been proposed, which can be qualitative or quantitative.

It is important to point out that the proposed targets and indicators can be used independently of the way in which forests are integrated into the future SDG framework, i.e. whether there is a stand-alone SDG on forests or whether forests are included in a natural resource-related SDG or in other SDGs. This will ultimately be a decision by the Member States. The purpose of this analysis and proposal is to demonstrate the multifunctionality of forests, their multiple contributions to sustainable development and how these can be reflected through selected targets and indicators.

The following instruments relevant to forests were included in the analysis on how forests are identified in their goals, targets and indicators:

The Millennium Development Goals (MDGs)

Forest sector instruments

* the Global Objectives on Forests, the Non-Legally Binding Instrument on All Types of Forests (Forest Instrument) and the seven thematic elements of SFM agreed by UNFF
* the International Tropical Timber Agreement (ITTA) and the Criteria & Indicators (C&I) of SFM and Strategic Priorities of the International Tropical Timber Organization (ITTO)
* the draft Legally Binding Agreement on Forests in Europe (LBA) (working title) and the C&I of Forest Europe
* the Montreal Process and its C&I

Rio Conventions

* Agenda 21 including its Forest Principles
* the Convention on Biological Diversity (CBD) and the Strategic Plan for Biodiversity 2011-2020, including five Goals and 20 Aichi Targets
* the UN Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and decisions on REDD-plus (Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in reducing emissions - REDD+)[[3]](#footnote-3)
* the UN Convention to Combat Desertification (UNCCD) and the Rio+20 embraced concept on land degradation neutrality

Food, agriculture and land

* the UN Zero Hunger Challenge
* FAO’s Global Goals (GG) and Strategic Objectives (SO)
* FAO’s Zero Illegal Deforestation Challenge
* the Global Partnership on Forest Landscape Restoration (GPFLR) and its Bonn Challenge of Restoration

Trade and economic development

* the Convention on International Trade in Endangered Species (CITES)
* Forest Law Enforcement, Governance and Trade (FLEGT) of the European Union and the Forest Law Enforcement and Governance (FLEG) initiative
* UNEP Green Economy Initiative (GEI)
* 10-Year Framework of Programmes (10 YFP) on Sustainable Consumption and Production (SCP) adopted at Rio+20 Conference

The goals, objectives and targets/elements of the instruments are listed in Annex 1. Some of the instruments have been agreed upon through an intergovernmental negotiation process, while others have been adopted by the governing bodies of international or regional institutions, or stakeholders of an international partnership. The list is not comprehensive (particularly in the latter group which is represented only by GPFLR) but may still be considered sufficient for the purposes of this analysis.

Annex 2 provides a more detailed description of the framework used for the analysis; commonalities, gaps and trade-offs; and targets and indicators used in the selected international instruments. Annex 3 illustrates the interlinkages between the objectives of these instruments by thematic area.

# Possible targets and indicators for forests in Sustainable Development Goals

## Criteria for forest-related targets and issues to be addressed

The following criteria have been identified for SDGs and need to be considered for integration into any forest-related targets:

Adherence to global commitments:

* based on Agenda 21, the Johannesburg Plan of Implementation, Rio+20 Outcome Document and respect all of the Rio Principles,
* consistent with international law
* build upon commitments already made and contribute to the full implementation of the outcomes of all major summits in the economic, social and environmental fields

National conditions and applicability

* take into account different national circumstances, capacities, priorities and levels of development
* respect national policies and priorities
* global in nature and universally applicable to all countries

Characteristics of targets

* relevance (focused on priority areas for the achievement of sustainable development)
* action-oriented
* limited in number
* aspirational
* concise and easy to communicate

Based on *The Future We Want,* the following themes can be identified as priority issues for forest-related targets and indicators:

* poverty
* food security
* climate change
* social inclusion, particularly vulnerable people
* gender equity
* resilience of ecosystems
* biodiversity
* maintenance of water quantity and quality
* desertification, land degradation and drought
* disaster risk reduction and resilience to disasters
* energy
* green economy
* sustainable production and consumption

## Framework for forest-related targets and indicators for SDGs

A possible framework for forest-related targets and indicators for SDGs can be based on actions, enhanced assets and outcomes. Figure 1 illustrates how this translates into targets for forests in the SDGs. Targets for forests in the SDGs are not totally new, as they build on and are supportive to the existing goals, objectives and targets on forests such as the Global Objectives on Forests, and the Aichi Targets

Forest-related actions that lead towards the achievement of SDGs can be expressed as sustainable management of forests for a variety of purposes on different geographic scales (forest farm/management unit, landscape, subnational, national, regional and global). These actions cover a broad range of interventions at international, regional, national and local levels including the creation of good governance and other enabling conditions for sustainable forest management (SFM), and practical measures on the ground (protection, conservation, silviculture, harvesting, utilization of forest products, participatory processes in decision making, etc.). [[4]](#endnote-1)[[5]](#footnote-4)

As assets, the world’s forests and trees outside forests are a renewable natural resource which needs to be maintained, enhanced and used responsibly. Changes in the quantity and quality of forests and trees are due to removals and additions as results of sustainable management actions. Improving the world’s forests and tree resources requires (a) arresting of negative trends such as: deforestation and forest degradation, impoverishment of biodiversity, land degradation/desertification, deterioration of livelihoods and wellbeing of the poor and vulnerable, etc.; and (b) measures to enhance the quality and quantity of these resources.

The ultimate expected outcomes in the SDGs are increased environmental, social and economic benefits for people. This can be achieved through an enhanced forest resource base, both in quantity and quality, which in turn requires the sustainable management of forest resources (actions).

In order to achieve these outcomes adequate inputs are necessary. Of special importance are financial resources which have been grossly inadequate in the past. They would make it also possible to generate other necessary inputs such as skilled human resources, knowledge, innovation, etc.

Specific targets and indicators vary depending on geographic scale (global, regional, national, subnational, landscape, farm/forest management unit) and on the respective context. However, a number of universal targets and indicators can be identified at the global level, even though they need to be interpreted and adapted in national and local conditions, as appropriate.

**Figure 1. Framework of forest-related targets and indicators for Sustainable Development Goals**

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While the framework is based on the supply side, the level of desired outcomes is defined by the demands of humankind as expressed in SDGs. Forests and trees outside forests represent a key strategic natural capital asset to meet those demands for the broad range of products and services generated by this renewable resource.

The existing objectives and targets of the international forest related instruments (Annex 1; Annex 2 Table 1) sit within the proposed framework. These instruments have been carefully negotiated under various competent fora and their targets remain valid for the parties involved. The purpose here is not to repeat or replace them but to provide a broad comprehensive set of targets which can link the existing commitments with the SDGs.

## Forest benefits and their indicators

Forests and trees outside forests provide multiple contributions to many priority SDG issues, such as poverty reduction, food security, climate change, resilience of ecosystems and livelihoods, maintenance of water quantity and quality, desertification, land degradation and drought, disaster risk reduction and resilience to disasters, energy and sustainable consumption. These contributions, both direct and indirect, are particularly important for meeting the basic needs and well-being of forest-dependent vulnerable people, gender equity, and social inclusion. These multiple benefits are inherent in the international instruments related to forests, such as UNCCD, CBD, UNFCCC, NLBI, ITTA, LBA, Montreal Process, GPFLR and GEI

Forests can be designated and managed for specific principal objectives or multiple use. In practice, different objectives are usually combined with each other when setting management objectives at landscape and farm/management unit level.

Benefits are generated on different geographic scales (forest farm/management unit, landscape, subnational, national and global levels) and some go beyond forest boundaries (e.g. many environmental services, substitution of non-renewable materials and energy sources). The contributions to sustainable development from forests and trees are particularly important when integrated in a landscape approach and should not therefore be understood in isolation from other uses of land.

The generation of various forest benefits as a concept is clear, concrete, aspirational and easy to communicate but would require a focus on key aspects. Combining various benefits into a single indicator (e.g. expressed in monetary terms or a consolidated index) is not feasible.

The multiple benefits should preferably be measured as specific outcomes (e.g. poverty reduction, improved food security, improvement of the status of threatened species, reduced workload of women in collecting fuelwood, consumption of medicinal plants, quality of downstream water, etc.). However, due to constraints in data availability, proxies often have to be used which are typically related to outputs (e.g. value added of wood production and processing, volume of charcoal production, production of non-wood forest products (NWFPs), extent of protected areas, reduced water run-off, etc.) or inputs (employment, energy, raw materials, etc.). A number of indicators relating to contributions to sustainable development are identified in the following section for each of the targets on the economic, social and environmental benefits of forests, derived from the existing C&I sets for SFM. Where applicable, indicators should be gender-disaggregated.

The universally applicable targets on increasing forest benefits are, however, highly context specific, and they would need to be specified in national and local conditions. This calls for the design of suitable indicators at country, landscape and farm/management unit levels. Time-bound values for targets may be established for individual indicators on national and local levels. However, several universal indicators can be identified many of which are already applied for international-level reporting.

## Proposed targets and indicators for forests

Based on the framework presented in Figure 1, the following ten forest-related targets may be considered for integration into the SDGs:

**(1) All the world’s forests managed sustainably**

Justification:

* The NLBI defines SFM as *“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”.* Therefore,SFM addresses all the pillars of sustainable development in a balanced way.
* Through the Global Objectives on Forests and the Forest Instrument, the Member States of the United Nations have made a political commitment to achieving SFM. SFM is universally applicable to all countries including those few countries that have lost all their forests but wish to re-establish them.
* Each country should define what SFM consists of in their particular conditions and appropriate measures to achieve it. The focus in implementation is often in creating enabling conditions which is where government needs to be the driving force.
* The concept of SFM covers the multiple functions of forests including production, protection, biodiversity conservation, emissions reductions from deforestation and forest degradation, other environmental services, combating of land degradation/desertification, generation of income and employment, food production, energy supply and various contributions to a green economy based on low carbon renewable natural resources. However, it must be emphasized that in each specific case – be it a farm, a forest management unit, a landscape or a higher level geographic unit – forests are managed for specific objectives to generate a desired combination of products and services while respecting the requirements for their sustainability.
* SFM focuses on action to be taken by all stakeholder groups.
* SFM is a tool for balancing between different objectives and managing their trade-offs through participatory processes involving stakeholders in decision-making.
* The concept of SFM is positive, aspirational and forward-looking (as there is still a long way to go to achieve SFM in many countries), and it is easy to communicate (e.g. by demonstrating sustainably managed forests vs. unsustainable forest utilization).
* SFM is applicable on all geographic scales (global, national, subnational, landscape and farm/management unit) and its focus is on the long-term sustainability of forest resources and forest landscapes.
* SFM is a dynamic concept, meaning that its contents can be adjusted over time along with the changing values of society, accumulated knowledge and technological development. This would keep all the countries (including those that are more advanced) “in the loop” of monitoring and improving their performance in SFM implementation. There is a long-established track record on practical implementation of SFM in specific country and local conditions.
* At regional and national levels, several sets of Criteria & Indicators have been developed, tested and implemented to monitor progress towards SFM and its various elements on different geographic scales. Progress is monitored regularly in several regions.
* Being a holistic concept, SFM allows specification of sub-targets covering, for example, forest restoration, protected areas, etc.

Contribution to the following global goals and objectives:

* SFM is an explicit concept in several international instruments related to forests (NLBI, ITTA, LBA (draft), the Montreal Process, CBD’s guidelines on sustainable use and programme of work on forest biodiversity, Aichi Target 7, UNCCD (as part of SLM), FAO’s GG3 and SO2 (as part of SNRM), and FLEGT.
* SFM is implicitly an element of MDG7, REDD+ and LULUCF under the UNFCCC and the Kyoto Protocol (namely forest management), FAO Zero Illegal Deforestation Challenge, GPFLR Bonn Challenge (prevention of degradation), CITES, and GEI.
* The UN Zero Hunger Challenge and food security-related targets cannot be met without sustainable management of forests because of their direct and indirect contributions to (a) availability and access to natural resources for forest foods (edible plants and animals) and food production through crop production and animal husbandry; (b) medicinal plants; (c) energy for cooking food; (d) clean water; and (e) other ecosystems goods and services of forests.

Possible indicators:

* Forest area under SFM: SFM-certified forest area, area under approved forest management plans\*
* Forest area by principal designated function (production, soil and water conservation, biodiversity conservation, social services, multiple use)\*
* Number of countries with forest policies, legislation and national plans for SFM implementation
* Protected forest area under approved management plans
* Area of restored forests and rehabilitated forest lands
* Number of countries applying criteria and indicators for SFM\*
* Proportion of forest products from legal and sustainable sources

Information on the indicators marked with an asterisk is available in the FAO Global Forest Resources Assessment.

**(2) The world’s forests and tree resources improved**

Justification:

* As a natural capital asset, forests and trees outside forests include both the quantity (area and volume), and the quality (type of forest and other characteristics).
* Forest area and the volume and quality of forest biomass are fundamental in one way or another to most of the global objectives related to forests (MDG7, SFM, biodiversity, CO2 concentration, land degradation/desertification, etc.). In addition, forest area is already explicitly expressed in the goals or indicators of several instruments (Annex 1) and is implicit in several others (Annex 3).
* The significance of the extent and quality of forests and trees outside forests for people is so obvious that the target is easy to communicate and understand.
* Trees outside forests are included in the target even though measurable indicators on their extent are not readily available. In view of the fact that more than half of the world’s population is urban, this component could be more familiar to them (trees in urban areas) than “distant” forest areas in the countryside. The rapid progress in remote sensing of tree cover can be expected to provide means of monitoring changes in agroforestry and other forms of trees outside forests.
* While reducing deforestation is a goal shared by many international forest-related instruments, it is recognized that each country should define its own desirable levels of forest area within the context of its national strategy for sustainable development. In some countries a decrease in the forest area could be necessary to achieve sustainable development.
* Because of the importance of the global environmental services provided by the world’s forests and trees, a global level universal target as expressed above would be feasible as “improved” incorporates both quantity and quality aspects while recognizing that countries have shared but differentiated roles in contributing to its achievement.

Contribution to the following global goals and objectives:

“Improved” in the target would mean increased contribution of forests to the three pillars of sustainability. The target would contribute to the following goals and objectives:

* MDG Target 7 (proportion of land area covered by forest)
* GOF1 (reverse forest loss) and indirectly GOF2 (enhance benefits) and GOF3 (increase area of protected forests)
* ITTA implicitly and through ITTO´s C&I (extent and condition of tropical forests)
* LBA and the C&I of Forest Europe (maintain and enhance forest resources)
* the C&I of the Montreal Process (implied in all criteria)
* CBD and Strategic Goals B, C and D of the Aichi Targets, in particular Aichi Targets 5 (halving loss of forests by 50%)-and 15 (ecosystem resilience, conservation and restoration), and enhancement of ecosystem services (Aichi Target 14) provided by forests
* UNFCCC and REDD+ (reducing emissions from deforestation and forest degradation and enhancing removals and forest carbon stocks)
* UNCCD and land degradation neutrality (restoration and rehabilitation by increased forest/tree cover and biomass, UNCCD progress indicator on land cover)
* FAO GG3 (sustainable management and utilization of natural resources) and SO2 (producing and managing resources sustainably)
* GPFLR (forest cover as underlying element of forest landscape restoration)
* UNEP GEI (increase natural capital as economic asset)
* Increase in forest area has been identified in many other international and regional commitments. The APEC Ministerial Statement 2007, for example, made a strong commitment to increasing forest cover in the APEC region by 20 million hectares by 2020.

Possible indicators:

In order to measure progress toward the proposed target, reflecting the different aspects of the natural capital in forests and trees outside forests, status and change over time can be assessed based on the following indicators:

* Total forest area by region, country and type of forest (primary forest, other forests naturally regenerated, planted)\*
* Loss of forest area (gross and net)\*
* Area of restored forests and rehabilitated forest lands
* Proportion of land area under forests and trees\*
* Volume and composition of the growing stock\*
* Removals of wood and noon-wood forest products\*
* Quantity of trees outside forests
* Forest area affected by pest, diseases and fire\*
* Carbon stock in the forest biomass\*
* GHG emissions from deforestation and forest degradation

**(3) Climate change mitigation benefits from forests increased**

Justification:

* Deforestation and forest degradation are a major cause for global carbon dioxide emissions, but sustainably managed forests are important carbon sinks. Protecting forests, improving forest management and establishing new forests all increase the climate-mitigation benefits of forests. Carbon can also be stored in wood products.
* According to the IPCC, reducing and/or preventing deforestation is the mitigation option with the largest and most immediate carbon stock impact in the short term per hectare and per year globally as the release of carbon as emissions into the atmosphere is prevented.

Contribution to the following global goals and objectives:

* The Parties to the UNFCCC[[6]](#footnote-5) have committed to promote sustainable management and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases (GHGs), including forests.
* According to the Kyoto Protocol[[7]](#footnote-6), Annex I Parties, in meeting their emission reduction commitments, shall implement and/or further elaborate policies and measures to protect and enhance sinks and reservoirs of GHGs and promote sustainable forest management, afforestation and reforestation. net changes in GHG emissions by sources and removals by sinks through direct human-induced LULUCF activities, limited to afforestation, reforestation and deforestation that occurred since 1990, can be used to meet  Parties’ emission reduction commitments.  Under Article 3.4 of the Kyoto Protocol, Parties may elect additional human-induced activities related to Land Use, Land Use Change and Forestry (LULUCF) specifically, forest management, cropland management, grazing land management and revegetation,
* The Clean Development Mechanism (CDM) of the Kyoto Protocol[[8]](#footnote-7) makes provisions for the implementation of LULUCF project activities by Parties.  The [mechanism](http://cdm.unfccc.int/index.html) allows for the implementation of LULUCF project activities, limited to afforestation and reforestation, in non-Annex I countries.  These project activities assist Annex I Parties in achieving compliance with their emission reduction commitments under Article 3, while simultaneously assisting non-Annex I Parties to achieve sustainable development. Under [joint implementation](http://ji.unfccc.int/) (Article 6), an Annex I Party may implement projects that increase removals by sinks in another Annex I country.
* The parties of UNFCCC have identified policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries The COP has invited Parties, relevant organizations and stakeholders to support ongoing efforts, capacity building, demonstration activities and mobilization of resources relating to reducing emissions from deforestation and forest degradation in developing countries.
* CO2 emissions are part of the indicators of MDG7
* Climate change services of forests are included in the Criteria and Indicators developed under various international and regional processes (ITTO, Montreal Process, Forest Europe, Tarapoto and others)
* Aichi Target 15 calls for contribution of biodiversity to carbon stocks.
* The Bonn Challenge of GPFLR calls for restoration of deforested and degraded lands which will enhance forest carbon stocks.
* GEI promotes investment in reduction of carbon emissions and to prevent loss of environmental services

Possible indicators:

* Area covered by forests and trees\*
* GHG emissions from deforestation and forest degradation\*
* Change in forest carbon stocks\*
* Area of restored forests and rehabilitated forest lands
* Change in carbon stocks and flows in harvested wood products in use

**(4) Direct and indirect contributions of forests and trees to food security and nutrition increased**

Justification:

* Forests and trees are major sources of nutritious foods, such as fruits, nuts, leaves, oils, honey, wild meat and insects, and 2.4 billion people rely on fuelwood for cooking.
* Forests contribute to agricultural productivity and benefit agriculture by, for example, regulating the climate, providing fresh water, and harboring pollinators.

Contribution to the following global goals and objectives:

* MDG1C called for halving the proportion people suffering from hunger.
* The UN Zero Hunger Challenge and food security-related targets cannot be met without sustainable management of forests because of their direct and indirect contributions to (a) availability and access to natural resources for forest foods (edible plants and animals) and food production through crop production and animal husbandry; (b) medicinal plants; (c) energy for cooking food; (d) clean water; and (e) other ecosystems goods and services of forests.
* Several Aichi Targets (notably 9, 13, 14) are related the contributions of forests and trees to food security.

Possible indicators:

* Availability of and access to forest foods
* Status of nutrition in forest areas
* Wood fuel consumption for cooking and heating; and contribution to total household energy consumption
* Time used to collect fuelwood by women

For this target, the indicators for indirect contributions to food security and nutrition (income generation, ecosystem provisioning, supporting and regulating services, including protection of soil and water) should also be considered.

**(5) Poverty reduced through increased income and employment from forests**

Justification:

* Hundreds of millions of people worldwide obtain income and employment from forests, especially in developing countries. Forest based economic activities represent a huge potential for poverty reduction for communities and smallholders through generation of income from sales of forest products and services as well as wages and salaries earned. This potential is grossly underutilized.
* Empowering women in the forest sector creates significant employment and business opportunities for them and has important spillover benefits for households and communities in terms of food security, health and education.

Contribution to the following global goals and objectives:

* MDG1A calls for halving the proportion of people whose income is less than $1.25 per day. Most of the unutilized potential of income generation by forest based activities is found in rural areas of developing countries.
* Poverty reduction is inherent in several other forest related instruments including the NLBI, Aichi Targets, REDD+, UNCCD, the UN Zero Hunger Challenge, FAO Global Goals and GEI.

Possible indicators:

* Income earned from the sale of forest products and services
* Employment
* Salaries and wages paid
* Change in the forest area under different ownership/tenure/use rights by type of owner/manager (public, individuals and families, local communities, indigenous and tribal communities, enterprises)\*
* Access of local communities, families and individuals to markets for forest products and services
* Amount and value of wood and non-wood forest products generated to local communities and smallholders
* Value generated from forest environmental services to local communities

**(6) Forest-related biodiversity conserved and improved**

Justification:

* Forests hold up to three-quarters of all terrestrial biodiversity and are therefore critical for its maintenance and reduction of loss of species and habitats.
* Biodiversity underpins forest productivity, resilience and adaptive capacity and is essential for maintaining ecological processes such as carbon sequestration, pollination, seed dispersal and decomposition. Biodiversity is fundamental for food security.

Contribution to the following global goals and objectives:

* Biodiversity is an explicit element of CBD and its Aichi Targets, MDG7, GOFs, ITTA, LBA, CITES, Zero Illegal Deforestation, and the Bonn Challenge of GPFLR
* Biodiversity conservation is also inherent in several other instruments including REDD+, UNCCD, FAO Global Goals, GEI and SCP.

Possible indicators:

* Area of forest under SFM\*
* Area and status of protected areas\*
* Status of threatened forest species and share of threatened forest species
* Area and status of valuable habitats and biological corridors
* Area of restored forests and forest landscapes
* Number of countries with adequate information and monitoring systems for forest genetic resources
* Status of *in situ* and *ex situ* conservation of forest genetic resources
* Population dynamics and conservation of terrestrial wildlife

**(7) Fresh water supply from forest areas improved**

Justification:

* Forests are natural filtration and storage systems that supply an estimated 75 percent of usable water globally. Forests promote the infiltration of rainwater into soil and then into groundwater, providing water supplies in dry periods and helping reduce flood peaks.
* Forests are particularly important in protection of watersheds in mountains, coastal areas and other sensitive ecosystems.
* About eight percent of the world’s forests have protection of soil and water resources as their primary objective including avalanche control, prevention of landslides, sand dune stabilization, desertification control or coastal protection.

Contribution to the following global goals and objectives:

* MDG1 and MDG7, the UN Zero Hunger Challenge and food security-related targets cannot be met without the maintenance and improvement of the protective roles of all types of forests.
* Soil and water conservation are inherent in UNCCD and the Degradation Neutrality target, several Aichi Targets, the first three GOFs, ITTA, and LBA.
* The Bonn Challenge of GPFLR on restoration of deforested and degraded lands relies on conservation of soil and water.

Possible indicators:

* Water quantity and quality in and from forest areas
* Area of restored forests and rehabilitated forest lands
* Status of water catchment areas
* Unit consumption of water in processing industries (wood, pulp and paper)
* Wastewater management effectiveness

**(8) Resilience of people and forests against slow-onset and extreme events increased**

Justification:

* Forests and trees increase the resilience of food-production systems and therefore the resilience of households to shocks and slow-onset changes. Of particular importance is the role of forests for indigenous peoples and other vulnerable communities and groups, particularly women and youth.
* All forests and woodlands, including productive forests, play a protective role to varying degrees. The protective functions could often be enhanced by an alteration of the management regime. It is not only a matter of maintaining the forest cover but establishing the quality of forest which can provide the necessary conservation functions.
* SFM increases resilience of people and forests through approaches that value and apply local and scientific knowledge and in which management is adapted over time based on monitoring, evaluation and learning.

Contribution to the following global goals and objectives:

* Resilience of forest ecosystems underpins the achievement of CBD and its Aichi Targets, MDGs, GOFs, Zero Illegal Deforestation and the objectives of UNCCD,
* Resilience of forest dependent communities depends on their sustained and improving livelihoods linking this target to the objectives of poverty reduction and food security in several international instruments.
* The Bonn Challenge of GPFLR is targeted at improving the resilience in degraded areas and thereby preventing impacts of extreme weather events.
* Increased resilience is also inherent in several other instruments including NLBI, ITTA, LBA, REDD+, FAO Global Goals, GEI and SCP.

Possible indicators:

* Area under Sustainable Land Management (SLM) in forest landscapes
* Land productivity in forest areas/landscapes
* Soil condition and erosion in forest areas/landscapes
* Area of restored forests and rehabilitated forest lands in disaster-prone areas
* Area under wildfire management
* Change in the capacity of forests to adapt to gradual or extreme climate-related events
* Resilience of livelihoods of forest-dependent communities

**(9) Contributions of forests to a green economy increased**

Justification:

* Green economy and Sustainable Consumption and Production (SCP) are targeted at reducing resource use, degradation and pollution along the life cycle of goods and services, while increasing the quality of life for all. They promote resource and energy efficiency and sustainable infrastructure while offering opportunities such as creating new markets and generating green and decent jobs, such as markets for organic food, fair trade, sustainable housing, renewable energy, sustainable transport and tourism.
* Forests and trees will play a crucial role in the move to a green economy and SCP, providing, for example, a sustainable source of bioenergy and biomaterials, recreation opportunities, and diverse genetic materials for foods and medicines.

Contribution to the following global goals and objectives:

* Economic development based on sustainable consumption and production is an explicit objective of the 10-Year Framework of Programmes on Sustainable Consumption and Production adopted at Rio+20 Conference and UNEP’s Green Economy Initiative
* ITTA promotes consumption and production of tropical timber and timber products from sustainable sources. This is also inherent in GOF2 and LBA.
* CITES is aimed at eliminating over-exploitation of wild fauna and flora through international trade.
* Aichi Target 4 calls for sustainable production and consumption keeping the impacts of use of natural resources well within safe ecological limits.
* FLEGT/FLEG promotes elimination of trade from illegal sources as a step towards sustainability of forest management.

Possible indicators:

* Forest sector contribution to GNP\*
* Production and value of wood and non-wood forest products and services (industrial wood, fuelwood and charcoal, non-wood forest products, ecotourism, etc.)\*\*
* Share of forest-based biomass in total energy supply
* Consumption of fuelwood and charcoal in rural and urban areas
* Efficiency in production and processing of wood and non-wood products
* Energy efficiency in the forest products supply chain (logistics and processing)
* Use of wood products for housing and other building and construction
* Waste paper recovery rate and utilization ratio in paper and paperboard production\*\*
* Use of paper and paperboard for communication, education, packaging and other purposes\*\*
* Value of exports and imports of forest products\*\*
* Recreational value of forests

The indicators marked with two asterisks are reported in the *FAO Yearbook of Forest Products* and *FAO Recovered Paper Data*.

**(10) Increased financial resources from all sources to sustainably manage forests**

Justification:

* Financial resources available to SFM are grossly inadequate. While the ODA part of the GOF4 may have at least temporarily been achieved[[9]](#footnote-8), this Objective still remains to be achieved as it calls for mobilizing significantly increased new and additional financial resources from all sources for the implementation of SFM.
* There is no mechanism in place to prevent that the recent ODA trend reverses in the future and there is no indication that it can be sustained in the future. Moreover, even despite the recent increase, ODA still falls far short of country needs. The target will help ensure that continued, sustained and irreversible financing, including ODA, is available for forests.
* There are significant thematic and geographic gaps in the existing financial flows to support SFM implementation and addressing them remains a priority. New financial resources are necessary to address these gaps.
* In view of the current undervaluation of the world’s forest resources, there is a need for policy changes to mobilize financial resources from all sources for SFM implementation.
* Innovative and blended sources of financing can be additional to traditional sources (e.g., by creating levies or taxes on certain industries or creating new markets). Complementary blended sources can catalyze public and private financing; in particular ODA can be used as leverage for private financing. These approaches should be promoted.
* The currently available information on financial resources has many significant gaps and needs improvement. Monitoring of this target would lead to improvement on knowledge on the financial flows to SFM from all sources thereby supporting the achievement of all the previous nine targets related to forests.

Contribution to the following global goals and objectives:

* The fourth Global Objective on Forests of the Forest Instrument calls for reverse the decline in official development assistance for sustainable forest management and mobilize significantly-increased new and additional financial resources from all sources, including private and public, domestic and international, for the implementation of SFM.
* Increased financial resources for SFM are critical for the achievement/implementation of the first three GOFs, ITTA, LBA, CBD and its Aichi Targets, REDD+, UNCCD, UN Zero Hunger Challenge, FAO’s Global Goals, Zero Illegal Deforestation Challenge, the Bonn Challenge, CITES, FLEGT, the UNEP Green Economy Initiative, and Sustainable Consumption and Production.

Possible Indicators:

* ODA flows to forestry and forests under the other thematic codes of the OECD/DAC
* International and domestic private investment flows to the forest sector (forestry, wood-based industries, non-wood forest products, tourism, wildlife management, etc.).
* Number of blended and innovative sources of financing, including national forest funds, special levies and payments for ecosystem.
* Funding flows generated by forest environmental services
* Level of domestic public financing for SFM, including from national budget allocations
* Distribution of SFM financing among countries and country categories
* Distribution of SFM financing among thematic elements

It is noted that an indicator can be used to measure progress in relation to more than one specific target (e.g. area of restored forests and rehabilitated forest lands is relevant for measuring reduced emissions and enhancement of carbon pools in forests and trees, biodiversity conservation, soil and water conservation, and provision of other environmental services).

# Concluding remarks

The framework for forest-related targets and indicators presented here is designed to support and contribute to the achievement of the existing forest related goals, objectives and targets on forests. These targets should be flexible and applicable to different constellations of SDGs. Should countries decide on a natural resources-related SDG, the targets presented could be combined with those on other natural resources while the selected forest-specific indicators are maintained. In the absence of a stand-alone SDG on forests or natural resources, individual targets and indicators can be integrated into other relevant SDGs.

The proposed targets sit within a framework including (i) inputs, (ii) actions, (iii) enhanced assets, and (iv) outcomes (contributions to SDGs). The proposed targets have direct linkages to the identified SDG priority areas and the goals and objectives of the existing international forest related instruments. The targets contribute to the achievement of the Global Objectives on Forests, which have been agreed upon by all UN Member States, as well as several Aichi Targets.

As the forest related targets need to focus on action on the ground and be applicable in varying national and local conditions, as indicated by the SDG criteria, it is difficult to find a better candidate that covers all of the multiple forest functions than achieving SFM worldwide. A series of individual indicators for measuring progress in SFM can be derived from the available international/regional C&I and datasets. The available financial resources are inadequate for achieving SFM worldwide which is addressed in the last target on inputs.

The target on the quantity and quality of forests and trees outside forests is useful but cannot alone capture their role in sustainable development. Nor does this target meet many of the criteria set for SDGs, in spite of being easy to understand and communicate. Due to the diversity of country situations and political sensitivities related to land use, an international target on improved forests and tree resources can be feasible at a global level while recognizing the shared but differentiated roles of each nation in contributing to its achievement.

The proposed seven targets on outcomes focusing increasing forest benefits to sustainable development is fundamental for SDGs focusing on outcomes at all geographic scales (forest farm/management unit, landscape, national, regional and global) while linking the future needs of humankind with what forests should provide.

Given that SFM, sustainable land management (SLM) and sustainable natural resources management (SNRM) are closely related concepts that produce similar outcomes, there is scope for the integration of actions and targeted benefits. The focus would be on outcomes at landscape/subnational levels to balance cross-sectoral trade-offs which are crucial for SDGs in specific country conditions and local situations. These trade-offs are often related to land use practices and land use change, and they need to be addressed in the broader context of poverty reduction, food security, maintenance of life-supporting systems, and other dimensions of sustainable development.

There is a considerable amount of data available on indicators related to the proposed targets but also there are also data gaps, particularly with respect to biodiversity and social benefits. Most datasets refer to the characteristics of forests and outputs of products and services. Obtaining information on outcomes has proven costly. In addition, the available data usually cover only the formal sector and yet, particularly in developing countries, the informal sector in forest-based activities is significant and sometimes larger than the formal sector, although poorly known. Addressing data gaps is an area on which further studies are required, together with information on how the benefits derived from forests are shared among population groups (particularly the poor, indigenous peoples, and other vulnerable groups). For these reasons, the tentative list of indicators presented needs further work when there is more information on SDGs.

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NLBI: <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N07/349/31/PDF/N0734931.pdf?OpenElement>

ITTA: <http://www.itto.int/itta/%E2%80%8E>

LBA Europe: <http://www.forestnegotiations.org/INC/ResINC4/reports>

Montreal Process: <http://www.montrealprocess.org/Resources/Criteria_and_Indicators/>

CBD: <http://www.cbd.int/convention/>

Aichi Biodiversity Targets: <https://www.cbd.int/sp/targets/>

UNFCCC: <http://unfccc.int/resource/docs/convkp/conveng.pdf>

REDD+ Decisions: <http://unfccc.int/2860.php#decisions>

UNCCD: <http://www.unccd.int/en/about-the-convention/Pages/About-the-Convention.aspx>

Land Degradation Neutrality:

<http://www.unccd.int/en/programmes/RioConventions/RioPlus20/Pages/Land-DegradationNeutralWorld.aspx>

UN Zero Hunger Challenge: <http://www.un.org/en/zerohunger/challenge.shtml>

FAO Global Goals: <http://www.fao.org/docrep/x3551e/x3551e02.htm>

FAO Strategic Objectives: <http://www.fao.org/docrep/meeting/027/mg015e.pdf>

FAO Zero Illegal Deforestation Challenge: <http://www.fao.org/news/story/en/item/172595/icode/>

GPFLR Bonn Challenge: <http://www.forestlandscaperestoration.org/topic/bonn-challenge>

CITES: <http://www.cites.org/eng/disc/text.php>

FLEGT:

<http://www.ecc-platform.org/index.php?option=com_k2&view=item&id=3970:eu-action-plan-on-forest-law-enforcement-governance-and-trade-flegt&Itemid=748>

FLEG:

<http://www.worldbank.org/en/topic/forests/brief/fleg-regional-forest-law-enforcement-governance>

UNEP Green Economy Initiative: <http://www.unep.org/greeneconomy/>

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http://www.unep.org/resourceefficiency/Policy/SCPPoliciesandthe10YFP/The10YearFrameworkProgrammesonSCP.aspx

**Annex 1**

**List of international instruments with goals and objectives on forests**

|  |  |  |
| --- | --- | --- |
| **Instrument** | **Goals/objectives**  | **Elements, targets, indicators** |
| **UN MILLENIUM DEVELOPMENT GOALS (selected goals, targets and indicators)** |
|  | 1. Eradicate [extreme poverty and hunger](http://en.wikipedia.org/wiki/Extreme_poverty) | Target 1A: Halve, between 1990 and 2015, the proportion of people whose income is less than $1.25 a day * + - Proportion of population below $1.25 per day (PPP values)
		- Poverty gap ratio [incidence x depth of poverty]
		- Share of poorest quintile in national consumption

Target 1B: Achieve full and productive employment and decent work for all, including women and young people * + - Growth rate of GDP per person employed
		- Employment-to-population ratio
		- Proportion of employed people living below $1.25 (PPP) per day
		- Proportion of own-account and contributing family workers in total employment

Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger * + - Prevalence of underweight children under five years of age
		- Proportion of population below minimum level of dietary energy consumption
 |
|  | 3. Promote [gender equality](http://en.wikipedia.org/wiki/Gender_equality) and [empower](http://en.wikipedia.org/wiki/Empowerment) women | Target 3A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015 * + - Share of women in wage employment in the non-agricultural sectors
 |
|  | 7. Ensure environmental [sustainability](http://en.wikipedia.org/wiki/Sustainability) | Target 7A: Integrate the principles of [sustainable development](http://en.wikipedia.org/wiki/Sustainable_development) into country policies and programmes; reverse the loss of environmental resourcesTarget 7B: Reduce [biodiversity](http://en.wikipedia.org/wiki/Biodiversity) loss, achieving, by 2010, a significant reduction in the rate of loss* + - Proportion of land area covered by forest
		- [CO2 emissions](http://en.wikipedia.org/wiki/CO2_emission), total, per capita and per $1 GDP (PPP)
		- Proportion of terrestrial and marine areas protected
		- Proportion of [species threatened](http://en.wikipedia.org/wiki/Threatened_species) with extinction
 |
|  | 8. Global partnership for development | Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system * Includes a commitment to [good governance](http://en.wikipedia.org/wiki/Good_governance), development and [poverty reduction](http://en.wikipedia.org/wiki/Poverty_reduction) – both nationally and internationally
 |
| **FOREST SECTOR INSTRUMENTS** |
| **Global Objectives on Forests (GOFs)** | Global Objectives on Forests1. Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation
2. Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people;
3. Increase significantly the area of protected forests and other sustainably managed forests, and increase the proportion of forest products derived from sustainably managed forests
4. Reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased new and additional financial resources from all sources for the implementation of sustainable forest management.
 | Thematic elements1. Extent of forest resources2. Biological diversity3. Forest health and vitality4. Productive functions of forest resources5. Protective functions of forest resources6. Socioeconomic functions7. Legal, policy and institutional frameworkRegional C&I sets |
| **International Tropical Timber Agreement (ITTA), 2006/ International Tropical Timber Organization (ITTO)** | ObjectivePromote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forestsStrategic Priorities1. Promote Good Governance and Enabling Policy Frameworks for Strengthening SFM and Related Trade, and Enhancing SFM Financing and Investment
2. Increase the Contribution of Tropical Forests to National and Local Economies, Including through International Trade
3. Enhance the Conservation and Sustainable Use of Biodiversity in Tropical Timber Producing Forests
4. Reduce Tropical Deforestation and Forest Degradation and Enhance the Provision of Environmental Services
5. Improve the Quality and Availability of Information on Tropical Forests, Forest Product Markets and Trade
6. Build and Develop Human Resource Capacity to Implement SFM and Increase Trade in Forest Goods and Services from Sustainably Managed Forests
 | SFM Criteria for tropical production forests 1. Enabling conditions for sustainable forest management2. Extent and condition of forests3. Forest ecosystem health4. Forest production5. Biological diversity6. Soil and water protection7. Economic, social and cultural aspectsITTO has detailed indicative outcomes and indicators for each Strategic Priority |
| **Legally Binding Agreement on Forests in Europe (LBA)**(draft 8 November 2013) | 1. To reinforce and strengthen the implementation of sustainable forest management and to ensure multifunctionality of forests and the long-term provision of a broad range of forest ecosystem services and goods derived from them;
2. To enhance the role of forests and forestry in contributing to solving global challenges;
3. To provide a framework for fostering national actions and international cooperation
4. To maintain, protect, restore and enhance forests, their health, productivity, biodiversity, vitality and resilience to threats and natural hazards, and their capacity to adapt to climate change as well as their role in combating desertification;
5. To ensure that forests contribute effectively to sustainable development, livelihoodsand the well-being of society by providing economic, environmental, cultural and social benefits at all levels.
 | Pan-European Criteria for SFM1. Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles;
2. Maintenance of forest ecosystems’ health and vitality;
3. Maintenance and encouragement of productive functions of forests (wood and non-wood);
4. Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems;
5. Maintenance, conservation and appropriate enhancement of protective functions in forest management (notably soil and water);
6. Maintenance of other socioeconomic functions and conditions;

These criteria with their 35 quantitative indicators to be used in monitoring of progress.  |
| **Montreal Process** | Provide a response to the pressing need for sustain-able forest management through development and implementation of Criteria and Indicators for SFM. They provide a common framework for member countries to describe, monitor, assess and report on national forest trends and progress toward SFM through a common understanding within and across countries of what is meant by SFM. | Montreal Process Criteria for SFM1 - Conservation of biological diversity2 - Maintenance of productive capacity of forest ecosystems3 - Maintenance of forest ecosystem health and vitality4 - Conservation and maintenance of soil and water resources5 - Maintenance of forest contribution to global carbon cycles6 - Maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies7 - Legal, institutional and economic framework for forest conservation and sustainable management These criteria together with their 54 indicators to be used in monitoring of progress. |
| **RIO CONVENTIONS** |
| **Convention on Biological Diversity (CBD)** | Main objectives of the Convention:The conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding |  |
| **Strategic Plan for Biodiversity 2011-2020-** **Aichi Biodiversity Targets** | The Strategic Plan for Biodiversity 2011-2020 and its 20 Aichi Targets provide an agreed overarching framework for action on biodiversity and a foundation for sustainable development for all stakeholders, including agencies across the UN system.The 2050 Vision stresses the role of biodiversity for human wellbeing: “biodiversity to be valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy Planet and delivering benefits essential for all people”. The Strategic Plan also includes means of implementation, monitoring, review and evaluation as well as support mechanisms (strategy for resource mobilization, capacity building, technical and scientific cooperation).[Strategic Goal A](http://www.cbd.int/sp/targets/#GoalA): Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society | Target 1 By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably. |
| Target 2By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems |
| Target 3 By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socioeconomic conditions. |
| Target 4 By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.  |
| [Strategic Goal B](http://www.cbd.int/sp/targets/#GoalB): Reduce the direct pressures on biodiversity and promote sustainable use | Target 5 By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. |
| Target 6 By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits. |
| Target 7 By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. |
| Target 8 By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity. |
| Target 9 By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment. |
| Target 10 By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning. |
| [Strategic Goal C](http://www.cbd.int/sp/targets/#GoalC): To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity | Target 11By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. |
| Target 12By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. |
| Target 13 By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socioeconomically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity. |
| [Strategic Goal D](http://www.cbd.int/sp/targets/#GoalD): Enhance the benefits to all from biodiversity and ecosystem services | Target 14 By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable. |
| Target 15By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification. |
| Target 16By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation. |
| [Strategic Goal E](http://www.cbd.int/sp/targets/#GoalE): Enhance implementation through participatory planning, knowledge management and capacity building | Target 17By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.  |
| Target 18 By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels. |
| Target 19By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.  |
| Target 20By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties. |
| **UNFCCC** | To achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. |  |
| **- REDD+****(under development under the UNFCCC)** | Slow, halt and reverse forest cover and carbon loss, according to national circumstances.REDD+ is a mitigation option that developing countries can voluntarily choose to implement.REDD+ mitigation actions (1/CP.16 para 70)(a) Reducing emissions from deforestation(b) Reducing emissions from forest degradation(c) Conservation of forest carbon stocks(d) Sustainable management of forests(e) Enhancement of forest carbon stocks | Core elements in implementing REDD+ in developing countries include: develop: national strategy or action plan, national forest reference emission level and/or forest reference level, national forest monitoring system, addressing and respecting the safeguards and addressing the drivers of deforestation (decision 1/CP.16, paras 71-72, decisions 12/CP.17 and 12/CP.19 on safeguards, decision 11/CP.19 on national forest monitoring systems, decision 13/CP,.19 on the technical assessment of proposed forest reference emission levels and/or forest reference levels, decision 14/CP.19 on MRV and decision 15/CP.19 on addressing the drivers of deforestation and forest degradation. |
| **UNCCD** | To combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas. |  |
| **Degradation neutrality** | **A land-degradation neutral world** is an aspirational goal, agreed at the UN Conference on Sustainable Development (Rio+20) in June 2012. To achieve this goal, land degradation should be avoided and for every hectare of degraded land a hectare of land should be restored, preferably in the same ecosystem and landscape. A land-degradation neutral world is a prerequisite for assuring water, food and energy security, alleviating poverty and mitigating climate change.  | Zero net loss in the amount of healthy and productive land. Zero Net Land Degradation (ZNLD) by 2030 that is achieving a stable state in the extent and quality of productive land the world over. Actions: to:(1) avoid or minimize land degradation by eliminating or reducing the drivers of land degradation to the greatest extent possible;(2) adopt and scale up SLM practices, both in area and effectiveness, from the local to the landscape level, in order to maintain or improve the quality, quantity and flow of ecosystems services, as well as the status of biodiversity that underpins them, for human wellbeing; and (3) restore and rehabilitate degraded land so as to assist the recovery of biodiversity and ecosystem services, and thus increase the health and productivity of land and water resources already degraded(*The Future We Want*) Monitoring: The implementation and monitoring mechanisms for a ZNLD target would necessarily be action-oriented, mainly at local community or landscape level, ensuring complementarity and coherence in addressing land degradation with an enabling environment at all scales and levels of governance. |
| **FOOD, AGRICULTURE AND LAND** |
| **UN Zero Hunger Challenge** | * + 1. Zero stunted children less than 2 years
		2. 100% access to adequate food all year round
		3. All food systems are sustainable
		4. 100% increase in smallholder productivity and income
		5. Zero loss or waste of food
 |  |
| **FAO Global Goals and Strategic Objectives** | Goals:1) Eradication of hunger, food insecurity and malnutrition, progressively ensuring a world in which people at all times have sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life; 2) Elimination of poverty and the driving forward of economic and social progress for all, with increased food production, enhanced rural development and sustainable livelihoods; and 3) Sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations. Five cross-cutting strategic objectives. * contribute to the eradication of hunger, food insecurity and malnutrition.
* increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner.
* reduce rural poverty.
* enable more inclusive and efficient agricultural and food systems at local, national and international levels.
* increase the resilience of livelihoods to threats and crises.
 | Principles of sustainability of agriculture and food systems (proposal in the draft “Common Vision”)1. Enhancing the efficiency of resources used
2. Conserving, protecting and enhancing natural resources
3. Improving and protecting rural livelihoods and social well-being
4. Enhancing the resilience of people, communities and ecosystems, specially to climate change and market volatility
5. Promoting and improving governance

Cross-cutting elements are identified in the Voluntary Guidelines on Responsible Governance of Land, Fisheries and Forests in the Context of National Food Security |
| **FAO Zero Illegal Deforestation Challenge** | Call for countries to promote tree planting and to consider a Zero Illegal Deforestation target as two closely linked goals  |  |
| **Global Partnership on Forest Landscape Restoration (GPFLR)/****Bonn Challenge** | Landscape restorationLandscape restoration goes far beyond tree-planting. It is a nature-based solution – going beyond conventional approaches and cutting across sectors. It is about restoring the essential ecosystem functions which nature provides, which people fundamentally rely upon and which make concrete contributions to solving global challenges, from food and poverty to living within planetary boundaries.  | Restoration of 150 million hectares of deforested and degraded lands by 2020. The landscape aspect is important because recovering a mixture of goods and services, such as clean water, improved soils, scaled-up carbon storage, and accessible fuel wood, cannot be achieved on a single site, or by a single intervention. The landscape approach requires all stakeholders to make common decisions. |
| **TRADE AND ECONOMIC DEVELOPMENT** |
| **CITES** | Protection of certain species of wild fauna and flora against over-exploitation through international trade CITES Strategic Goal 3:… reducing the rate of biodiversity loss and to achieving relevant globally-agreed goals and targets by ensuring that CITES and other multilateral instruments and processes are coherent and mutually supportive | Reduce trade in illegal wild fauna and flora of listed species |
| **FLEGT/FLEG** | FLEGT: Ensure that wood being sold in the EU can be shown to be legal. The purpose is to reduce illegal logging by strengthening sustainable and legal forest management, improving governance and promoting trade in legally produced timber. The FLEGT Action Plan sets out measures to:* prevent the import of illegal timber into the EU;
* improve the supply of legal timber;
* increase demand for timber from responsibly managed forests.
 | Action areas:1. Supporting timber-producing countries, including promoting fair solutions to the illegal logging problem
2. Promoting trade in legal timber, including developing and implementing VPAs between the EU and timber-producing countries
3. Promoting public procurement policies, including guidance on how to deal with legality when specifying timber in procurement procedures
4. Supporting private sector initiatives, including encouraging voluntary codes of conduct for private companies sourcing timber
5. Safeguarding financing and investment, including encouraging financial institutions investing in the forest sector to develop due care procedures
6. Using existing or new legislation to support the Action Plan, including the [EU Timber Regulation](http://ec.europa.eu/environment/eutr2013/)
7. Addressing the problem of conflict timber, including supporting the development of an international definition of conflict timber.
 |
| **UNEP Green Economy Initiative** | A green economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. These investments need to be catalyzed and supported by targeted public expenditure, policy reforms and regulation changes. This development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature.Green economy results in **improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities** (i.e. it is **low carbon, resource efficient** and **socially inclusive) (working definition)**. | UNEP activities: Promoting the [Green Economy Report](http://www.unep.org/greeneconomy/GreenEconomyReport/tabid/29846/Default.aspx) and related research materials, which will analyze the macroeconomic, sustainability, and poverty reduction implications of green investment in a range of sectors from renewable energy to sustainable agriculture and provide guidance on policies that can catalyze increased investment in these sectors.  1. Providing [advisory services](http://www.unep.org/greeneconomy/AdvisoryServices/tabid/4603/Default.aspx) on ways to move towards a green economy in specific countries.
2. Engaging a wide range of [research](http://www.unep.org/greeneconomy/ResearchProducts/tabid/4605/Default.aspx), non-governmental organizations, business and UN partners in implementing the Green Economy Initiative.

Data sources/indicatorsSystem of Environmental and Economic Accounting (SEEA) by the UN Statistical Division, and the adjusted net national savings methods of the World Bank Additional indicator: Reallocation from “brown” investment (BAU) to “green” investment |
| 10-Year Framework of Programmes (10 YFP) on Sustainable Consumption and Production (adopted at Rio+20 Conference) | SCP aims to do “more and better with less,” by reducing resource use, degradation and pollution along the life cycle of goods and services, while increasing the quality of life for all.One of SCP’s main goals is to ‘decouple’ economic growth and environmental degradation by increasing the efficiency of resource use in the production, distribution and use of products. SCP aims to keep the energy, material and pollution intensity of all production and consumption functions within the carrying capacities of natural ecosystems.  | SCP is about promoting resource and energy efficiency and sustainable infrastructure while offering opportunities such as creating new markets and generating green and decent jobs, such as markets for organic food, fair trade, sustainable housing, renewable energy, sustainable transport and tourism. SCP is especially beneficial for developing countries as it provides an opportunity for them to “leapfrog” to more resource-efficient, environmentally sound and competitive technologies, allowing them to bypass inefficient and polluting phases of development. SCP uses a “life-cycle perspective” as a means of increasing the sustainable management of resources and achieving resource efficiency in all stages of the value chain. SCP paves the way to accelerating the transition to an eco-efficient economy, while turning environmental and social challenges into business and employment opportunities. |

**Annex 2**

**Description of the analytical framework, commonalities, gaps and trade-offs, and targets and indicators used in international instruments**

Figure 2 below illustrates the framework used for the analysis. It takes the closely related concepts of sustainable forest management (SFM), sustainable land management (SLM), and sustainable natural resource management (SNRM) as the focal area of intervention in contributing to the goals of sustainable development.

**Figure 2. Sustainable development and forests**

The Non-Legally Binding instrument on All Types of Forests defines SFM as follows:

 *“[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”.*

The definition can be adapted to all types of land use as well as management of all renewable natural resources.

Managing forests as a renewable natural resource generates a broad range of outputs leading to outcomes which cover all the three pillars of sustainability. SDGs create the “demand” for these outcomes which can be expressed as various contributions of forests such as economic growth, nutrition, poverty reduction, decent jobs, gender equality, conservation, etc. How SDGs are defined and prioritized has therefore direct implications for how forests should be managed and utilized. This has to happen in a balanced way.

Action can be taken at different geographic scales on which specific targets can be set and progress can be monitored. In order to make sustainable management of forests to happen, a set of enabling conditions are needed (good governance, adequate policy and legal framework, remunerative markets and trade for sustainably produced products and services, technology, capacity of actors, etc.).

Commonalities in the objectives of international instruments

Annex 3 attempts to demonstrate commonalities and differences between the goals and key objectives of the selected international instruments denoting their linkages by thematic area covering most aspects related to forests in sustainable development. These include SFM, forest cover, food security, poverty reduction, socioeconomic aspects, productive and protective functions of forests, restoration, biodiversity, climate change mitigation and adaptation, other environmental services, energy, sustainable consumption, trade & investment, policy and legal frameworks, and gender.

Several of the reviewed existing instruments have a broad coverage over the three pillars of sustainable development (MDGs, Forest Instrument, ITTA, LBA, UNCCD, Strategic Plan for Biodiversity 2011-2020, FAO’s GGs and SOs, and GEI). The four forest sector instruments building on SFM also belong to this category.

The other instruments are more focused on specific issues (CBD, UNFCCC, Zero Hunger, the Bonn Challenge, Zero Illegal Deforestation, CITES and FLEGT/FLEG) even though in practice they indirectly or implicitly tend to cover broader sustainability issues which is demonstrated by their practical work.

Common cross-cutting themes/objectives such as capacity building, international cooperation, and financing are not included in the analysis here but they are present in almost all the reviewed instrument in a way or another.

Trade-offs

It is apparent that each international instrument has its own specific goals and objectives. In the context of the holistic MDGs, forests are identified only from the perspective of environmental sustainability. This is also apparent in the Rio Conventions even though poverty reduction (UNCCD) and sustainable use (CBD) to which forests provide important contributions are also identified. In the context of hunger and food security forests are perceived as part of sustainable management and utilization of natural resources targeted at eradication of hunger and elimination of poverty ensuring possibilities to implement sustainable food and agriculture systems.

Trade-offs in the use of forest land and setting objectives for forests are a key issue and they can be both positive and negative. There are both intersectoral and intrasectoral trade-offs to be managed. Intersectoral trade-offs are related to land use and land-use change (food security, greenhouse gas emissions, infrastructure, urban development) as well as to macro-economic policies which may have a positive or negative impact on forests. Key issues include how to decouple increased food production from forest land conversion and economic growth from extensive use of natural resources.

The forest sector instruments seek a balanced holistic approach through SFM including environmental, social and economic aspects drawing on criteria and indicators. SFM is a tool to balance various objectives and functions in varying ecological and socioeconomic conditions based on societal choices that rely on (i) participatory methods in planning and implementation to legitimize management interventions and to address conflicting interests, (ii) available scientific and traditional knowledge, (iii) state-of-the-art technology, and (iv) effective management systems.

There are also positive or negative intrasectoral trade-offs between environmental, social and economic goals in management and utilization of forest resources. Balancing between them is not easy as e.g. environmental objectives can be in conflict with social or economic objectives which in turn may not be compatible. Therefore, genuine conflicts of interest can emerge among stakeholder groups. Several tools exist to avoid and manage stakeholder conflicts drawing on broad-based participation in decision-making on how forests are used.

Targets and indicators of international instruments

Five instruments have quantitative or qualitative targets but have no targeted dates (Forest Instrument, ITTA, REDD+, UN Zero Hunger Challenge, and FAO Zero Illegal Deforestation Challenge) (see table in the next page). The other targets have quantitative and qualitative elements as well as dates, with the majority of targets related to year 2020 with the exception of the Zero Land Degradation Goal of the CCD (also called Land Degradation Neutral Goal) set for 2030 and the past MDGs targeted at year 2010.

The earlier ITTO target of tropical timber trade based on sustainable forest management by year 2000 which was agreed upon in 1990 has been maintained and “expanded” by legality in the ITTA, 2006 but without a target date. Legality is implied by SFM but its addition to the goal of the Agreement reflected the political priorities prevailing during the last decade which also led to the emergence of the FLEGT/FLEG initiatives. Dropping the target date was necessary as achieving SFM in the tropics proved to be more complex and time-consuming than originally thought.

The second Global Objective on Forests is the only target which focuses on social and economic benefits of forests together their environmental contributions. The third Global Objective on Forests calls for increase in protected forest areas but it is not included in the Aichi Targets although Target 11 is closely related, the latter being broader in scope (all terrestrial ecosystems). MGD 7 also included protected areas as one indicator.

The extent of forest cover as a target is included in the indicators in several instruments (GOFs, ITTA, LBA, Aichi Targets 5 and 11, REDD+, and MDG 7). This has been driven by the objective to curb deforestation which is the focus of the FAO Illegal Deforestation Challenge requiring information on whether a change in forest land use was in compliance with national legislation or not.

Several targets have been set for forest restoration and rehabilitation (Aichi Targets 14 and 15, Land Degradation Neutrality of UNCCD, and GPFLR/Bonn Challenge). They have somewhat different interpretations but for practical purposes their harmonization would be useful. Prevention of forest degradation is not articulated in these targets but is present in the objectives of REDD+. Conceptually, restoration is one of the SFM activities. While recognizing the need to restore degraded forests and rehabilitate degraded forest lands which have lost forest cover, there is a need for a balanced approach through SFM targeted at prevention of degradation, not least because of cost-efficiency considerations.

The link between food security targets and forests is through SFM (or forests as part of sustainable land management or sustainable natural resources management) by means of provision of forest-based food supplies, maintenance of the growing conditions in agricultural land as well as indirectly through provision of fuelwood and charcoal for cooking, income and various ecosystem services necessary for the livelihoods of rural populations.

**Qualitative and quantitative targets and their possible indicators in the forest-related international instruments**

|  |  |  |  |
| --- | --- | --- | --- |
| **Instrument** | **Target**[[10]](#footnote-9) | **Date** | **Possible indicators** |
| MDGs | 7. To ensure environmental [sustainability](http://en.wikipedia.org/wiki/Sustainability) | 2010 | Proportion of land area covered by forest[CO2 emissions](http://en.wikipedia.org/wiki/CO2_emission), total, per capita and per $1 GDP (PPP)Proportion of terrestrial and marine areas protectedProportion of [species threatened](http://en.wikipedia.org/wiki/Threatened_species) with extinction |
| NLBI | GOF 1.Reverse forest cover loss, SFM | N.a. | Forest area and sustainably managed forest area  |
| GOF 2. Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people | N.a. | Quantity and quality of forest-based products and services Number of forest-dependent people |
| GOF 3.Increase protected areas | N.a. | Area under protection status at two points of time |
| GOF 4.Reverse ODA to SFM | N.a. | Bilateral and multilateral ODA flows at two points of time |
| ITTA | Expansion and diversification of tropical timber trade from, sustainably managed and legally harvested forests | N.a. | Volume and composition of trade of sustainably and legally produced timer and timber products |
| Aichi Targets | 5. Halving the rate of loss of all natural habitats (minimum) | 2020 | Area and quality of natural forests 2010-2020 |
| 6. Production areas managed sustainably | 2020 | Production forest areas sustainably managed |
| 11. 17%terrestrial areas conserved and equitably managed and integrated into landscapes | 2020 | Area of protected and conserved forests in relation total forest area |
| 14. Essential ecosystems restored and safeguarded | 2020 | N.a. |
| 15. Ecosystem resilience enhanced and 15% of degraded ecosystems restored | 2020 | Area of degraded and restored ecosystems in 2010-2020 |
| REDD+ | Slow, halt and reverse forest cover and carbon loss | N.a. | Change in forest cover and forest carbon stocks and flows |
| UNCDD | Zero Net Land Degradation | 2030 | Change in area of degraded and restored/rehabilitated land in 2030 |
| UN Zero Hunger Challenge | * + 1. 100% access to adequate food all year round
		2. Zero stunted children less than 2 years
		3. All food systems are sustainable
		4. 100% increase in smallholder productivity and income
		5. Zero loss or waste of food
 | N.a. | 1. Number of people with inadequate nutrition
2. Number of stunted children
3. Number of food systems
4. Change in smallholder productivity and income
5. Volume of food waste
 |
| FAO Zero Il-legal Defo-restation Challenge  | Elimination of illegal deforestation | N.a. | Area of illegally deforested forest  |
| GPFLR/Bonn Challenge | 150 million ha restored | 2020 | Area of restored deforested and degraded lands in 2010-2020 |

**Annex 3**

**Links between the objectives of international instruments and forests**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instru- ment** | **SFM** | **Fo-rest co-ver** | **Food secu-rity** | **Po-verty** | **Socio- econo-mic asp.** | **Pro-duc-tion** | **Pro-tec-tion** | **Resto-ration** | **Bio-diver-sity** | **Climate mitigat. & adapt.** | **All env. ser-vices** | **Ener- gy** | **Sustain- able con-sumpt.** | **Trade & invest- ment** | **Policy & legal frame-work** | **Gen- der** |
| MDGs | X | X | X | XX | XX | XX | XX | X | XX | XX | XX | XX | X | XX | XX | XX |
| GOFs | XX | XX |  | XX | XX | XX | XX | X | XX | XX | XX |  | X | XX | XX |  |
| ITTA | XX | XX |  | X | XX | XX | X |  | XX | XX | XX |  | XX | XX | XX |  |
| LBA (draft) | XX | XX |  |  | XX | XX | XX | XX | XX | XX | XX |  |  |  |  |  |
| CBD |  | X | X | X | X |  | X | X | XX | X | X |  |  | X | XX |  |
| Aichi | X | X | X |  | X |  | X | X | XX | X | X |  | X | X | XX | X |
| UNFCCC |  |  |  |  |  |  |  |  |  | XX |  | XX | X |  | XX | X |
| REDD+ | XX | XX | X | X | X |  | XX | XX | X | XX | X |  |  |  | XX | X |
| UNCCD | SLM | X | X | X | X |  | XX | XX | X | X | XX |  |  |  |  |  |
| Zero Hunger |  |  | XX | XX | X | X |  |  |  |  |  |  | XX |  |  |  |
| FAO GGs/SOs | SNRM |  | XX |  | XX | X | X |  | X | X | X |  | XX |  | X |  |
| Zero Ille-gal Defor. | X | XX |  |  |  |  |  | XX |  |  |  |  |  |  |  |  |
| GPFLR | X | X | X |  | X |  | X | XX |  | X | X |  |  |  |  |  |
| CITES |  |  |  |  |  |  |  |  | XX |  |  |  |  | XX |  |  |
| FLEGT | XX |  |  |  |  | X |  |  |  |  |  |  | XX | XX | XX |  |
| UNEP-GE | (SNRM) |  |  | X | XX | XX | X |  | X | XX | X | XX | XX | XX | XX |  |
| SCP | X |  |  |  | X | XX | X |  | X | XX | X | XX | XX | XX | XX |  |

Key: SFM - sustainable forest management, SLM - sustainable land management, SNRM - sustainable natural resource management

 XX = among key objectives/themes, X = identified objective/theme (note that the absence of X does not mean that the area is not covered in practice)

Note: Common cross-cutting themes such as capacity building, international cooperation, and financing are not included in the table.

1. Members of the Collaborative Partnership on Forests (CPF) that have endorsed this paper are: the Food and Agriculture Organization of the UN (FAO); the International Tropical Timber Organization (ITTO); the International Union for the Conservation of Nature (IUCN); the International Union of Forest Research Organizations (IUFRO); the Global Environment Facility (GEF); the UN Convention on Biological Diversity (UNCBD); the UN Convention to Combat Desertification (UNCCD); the UN Development Programme (UNDP); the UN Environment Programme (UNEP); the UN Framework Convention to Combat Climate Change (UNFCCC); the UN Forum on Forests Secretariat (UNFF); the World Agroforestry Centre (ICRAF); and the World Bank. [↑](#footnote-ref-1)
2. Members of the Collaborative Partnership on Forests (CPF) that have endorsed this paper are: the Food and Agriculture Organization of the UN (FAO); the International Tropical Timber Organization (ITTO); the International Union for the Conservation of Nature (IUCN); the International Union of Forest Research Organizations (IUFRO); the Global Environment Facility (GEF); the UN Convention on Biological Diversity (UNCBD); the UN Convention to Combat Desertification (UNCCD); the UN Development Programme (UNDP); the UN Environment Programme (UNEP); the UN Framework Convention to Combat Climate Change (UNFCCC); the UN Forum on Forests Secretariat (UNFF); and the World Agroforestry Centre (ICRAF); and the World Bank. [↑](#footnote-ref-2)
3. Developed countries fulfill their commitments to the Convention and Protocol by reporting and accounting for their forest related emissions and removals (through their annual greenhouse gas inventories (GHG) and reporting of the Land Use, Land Use Change and Forestry (LULUCF) sector, as part of their National Communications and National Inventory Reports to the Convention and Protocol, and their Biennial Reports). It is the commitment of all Parties to the UNFCCC in Art 4.1(d) to promote sustainable management and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all GHGs, including forests. The implementation of LULUCF activities under the Kyoto Protocol shall be consistent with the objectives and principles of the Convention. [↑](#footnote-ref-3)
4. The identification of targets and indicators drew on the following instruments relevant to forests:

	* **The Millennium Development Goals.**
	* **Forest-sector instruments:** Global Objectives on Forests, the Non-Legally Binding Instrument on All Types of Forests (Forest Instrument) and the seven thematic elements of SFM agreed by the United Nations Forum on Forests; International Tropical Timber Agreement and criteria and indicators of SFM (C&I) and ITTO’s strategic priorities; Draft legally binding agreement on forests in Europe (working title) and the C&I of Forest Europe; Montreal Process and its C&I.
	* **Rio Conventions:** Rio Dialogues; Convention on Biological Diversity and the Strategic Plan for Biodiversity 2011–2020, including five goals and 20 Aichi targets; UN Framework Convention on Climate Change, the Kyoto Protocol and decisions on reducing emissions from deforestation and forest degradation in developing countries (REDD+); UN Convention to Combat Desertification and the Rio+20 embraced concept on land degradation neutrality.
	* **Food, agriculture and land:** UN Zero Hunger Challenge; FAO’s Global Goals, Strategic Objectives and Zero Illegal Deforestation Challenge; Global Partnership on Forest Landscape Restoration and its Bonn Challenge of Restoration.
	* **Trade and economic development:** Convention on International Trade in Endangered Species of Wild Fauna and Flora; Forest Law Enforcement, Governance and Trade Action Plan of the European Union and the Forest Law Enforcement and Governance initiative; UNEP Green Economy Initiative and 10-Year Framework Programme on Sustainable Consumption and Production. [↑](#endnote-ref-1)
5. In 2007, GA adopted the Non-Legally Binding Instrument on Forests in 2007. This instrument defines SFM. [↑](#footnote-ref-4)
6. Art 4.1(d) of the Convention [↑](#footnote-ref-5)
7. Article 2, sub-paragraphs 1(a) (ii) and (iii) [↑](#footnote-ref-6)
8. Article 12 of the Protocol [↑](#footnote-ref-7)
9. CPF Advisory Group on Finance. 2012 study on forest financing. [↑](#footnote-ref-8)
10. See full text in Annex 1 [↑](#footnote-ref-9)