

Making forest concessions in the tropics work to achieve the 2030 Agenda: Voluntary Guidelines





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Foreword

Forest concessions have long been used as an instrument for the allocation of rights to harvest and manage public forests in both northern and southern countries. In the context of the 2030 Agenda, forest concessions can be used as policy instruments to regulate production from natural forests consistent with biodiversity conservation and ecosystem service provision, while respecting the rights of indigenous peoples and local communities and providing for livelihoods and sustainable rural development.

In 2015, the Food and Agriculture Organization of the United Nations launched the Forest Concessions Initiative in collaboration with the Center for International Forestry Research, the Centre de Coopération International en Recherche Agronomique pour le Développement, the International Tropical Timber Organization, the World Bank and the Brazilian Forest Service, to assess the lessons learned from forest concessions. It was immediately clear that concession regimes should be revisited in light of existing instruments for improving forest governance, updated knowledge on sustainable forest management – in particular for multiple-use and social forestry – and the requirements of sustainable forest value chains and sustainable landscapes.

These Voluntary Guidelines for forest concessions in the tropics were discussed with technical experts from the public and private sectors and civil society at four regional consultations, held in Africa, Asia-Pacific and Latin America. The guidelines and resulting recommendations presented here can be a practical and relevant reference guide for policy-makers, concessions managers, international organisations, investors, local communities, environment and development inter- and non-governmental organizations, and research and academic institutions. The Self-Assessment Tool provides a starting point for steering concessions towards sustainability, where needed.

I am sure this document will be instrumental in driving progress towards sustainable forest management in the tropics, and enhancing forest contributions to the 2030 Agenda.

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This publication is the result of collaboration between FAO with the European Forest Institute (EFI), and is a product of the Forest Concessions Initiative formed by FAO, with the Center for International Forestry Research (CIFOR), the Centre de Coopération International en Recherche Agronomique pour le Développement (CIRAD), the International Tropical Timber Organization (ITTO), the World Bank and the Brazilian Forest Service.

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Acronyms and abbreviations

ACOFOP Association of Forest Communities of Petén
BAQ Blocs d'Aménagement Quinquennaux
CIFOR Center for International Forestry Research

CIRAD Centre de Coopération International en Recherche Agronomique

pour le Développement

CITES Convention on International Trade in Endangered Species of

Wild Fauna and Flora

CMA Concession management approach
CONAFOR Comisión Nacional Forestal (Mexico)

CONAP Consejo Nacional de Areas Protegidas (Guatemala)

CSO Civil society organization

EIA Environmental impact assessment

EU European Union

FCC Forest concession contract
FCI Forest Concessions Initiative

FAO Food and Agriculture Organization of the United Nations

FMP Forest management plan
FPIC Free, prior and informed consent
FSC Forest Stewardship Council

FSC Forest Stewardship Council
GPS Global Positioning System
HCVF High conservation value forest
ILO International Labour Organization

ITTO International Tropical Timber Organization

MBR Maya Biosphere Reserve

NDC Nationally Determined Contribution
NGO Non-governmental organization
NWEP Non-wood forest product

NWFP Non-wood forest product
PFE Permanent Forest Estate

PPCP Public-private-community partnership

PRF Permanent reserve forest

RAI Principles for Responsible Investment in Agriculture and Food Systems

RIL Reduced Impact Logging SAT Self-Assessment Tool

SDG Sustainable Development Goal SFM Sustainable forest management

SFB Brazilian Forest Service SSFO Small scale forest operator UNFCCC United Nations Framework Convention on Climate Change

UNFF United Nations Forum on Forests

UXO Unexploded ordnance

VPA Voluntary partnership agreement
WWF World Wide Fund for Nature

Executive summary

The importance of forests in helping to achieve global sustainable development has been largely acknowledged by the Sustainable Development Goals (SDGs) and the Paris Agreement. In order to ensure that forests deliver their socio-economic and environmental benefits, it is crucial to expand sustainable forest management (SFM) based on the best available practices. Although some progress towards SFM has been noted, the global proportion of land area covered by forests continues to decline. Loss of forests has mainly occurred in sub-Saharan Africa and Latin America and the Caribbean, while many countries in Asia and the Pacific are still sustaining significant deforestation and forest degradation.

The challenge of improving forest conservation and the expansion of SFM as stated in the 2030 Agenda for Sustainable Development demands that due consideration be given to forest production. Although often associated with deforestation and forest degradation, sustainable forest production can have a positive effect on biomass stocks, besides generating revenues that can increase the value of standing forests, eventually contributing to reduced deforestation. Furthermore, products generated from sustainable harvesting contribute to raising local and national incomes and increasing employment, while harvested wood products that store carbon reduce emissions in other economic sectors. In sum, sustainable forest production can contribute to enhanced rural livelihoods, rural development and low-carbon economies.

Forest concessions are not used uniformly across regions, or even across all tropical regions. In some countries, forest concessions overlap with land concessions and are used as land allocation or land management instruments, with objectives other than those of sustainable forest management. The proposed Voluntary Guidelines focus on promoting SFM in concessions of public natural production forests in tropical regions. They build on the ITTO Voluntary Principles and Guidelines for the Sustainable Management of Natural Tropical Forests, as well as other relevant guidance for good forest governance and SFM, providing practical guidance to new forest concession regimes, or existing ones. The concession guidelines stem from lessons learned in Africa, Latin America and Southeast Asia. In combination with criteria and indicators (C&I) processes, these guidelines provide a framework for implementation and monitoring of concessions to deliver true SFM.

Given the widespread adoption of forest concessions in tropical regions, reviewing and framing them as appropriate forest policy instruments to deliver SFM offers opportunities for turning concessions into effective vehicles to address the Sustainable Development Goals, as well as Nationally Determined Contributions under the Paris Agreement. The multidimensional nature of SFM results in a holistic contribution to the SDGs through interlinkages with other sectors and an intrinsic need for multistakeholder processes and

partnerships. Sustainable forest concessions can make a direct contribution to achieving SDGs 1, 5, 7, 8, 12, 13 and 15, as detailed in Table 1 on page 2.

The Voluntary Guidelines were developed around four dimensions of concessions management: improved governance, economic feasibility, social inclusion and environmental integrity. They were structured under eight principles that call for: (1) coherence with forest and forest-related policies for sustainable landscapes; (2) clear, credible and efficient legal and institutional frameworks; (3) transparent and accountable planning, allocation, implementation and monitoring of forest concessions; (4) technical capacity for management and operation of concession regimes at all levels; (5) long-term economic and financial feasibility; (6) clarity and security of tenure rights; (7) community participation and benefits; and (8) environmental integrity in forest concessions. The framework of principles and guidelines is summarized in Table 6 on page 24. For each principle, guidelines and recommendations were formulated and illustrated according to good practices identified by relevant stakeholders and cleared by the Forest Concessions Initiative Steering Committee. The Self-Assessment Tool contains questions reflecting the guidelines and provides a hands-on instrument for evaluating and developing enabling conditions for both planned and existing forest concessions.

The Voluntary Guidelines are part of FAO's work to support sustainable forest production and unlock contributions to the SDGs and climate change. Application of these guidelines in specific local contexts should help to deliver socio-economic benefits to enhance local livelihoods, while supplying harvested wood products that will contribute to the transformational change needed in order to achieve the 2030 Agenda.



1. Introduction

1.1 BACKGROUND AND RATIONALE

In 2015, the Member States of the United Nations adopted the 2030 Development Agenda, establishing a universal mandate for global progress towards sustainability and resilience. The 17 Sustainable Development Goals (SDGs) and 169 targets of the 2030 Agenda represent an ambitious appeal to governments, the private sector and civil society to combine efforts to reconcile sectoral approaches with the needs of sustainable development. This renewed global commitment to sustainability is rooted in human rights, empowerment – especially of women and girls – and the integrated and indivisible nature of these three dimensions of sustainability. It calls for more integrated partnerships, policies and policy instruments, which can build on their complementarities to enhance their impact.

The challenge of forest conservation and the expansion of sustainable forest management, as stated in the 2030 Agenda, demand due consideration of forest production. Further to the SDGs framework, in 2017, the UN strategic plan for forests has extended the four Global Objectives on Forests agreed by the United Nations Forum on Forests (UNFF) in 2006 to six global forest goals and 26 associated targets, to be achieved by 2030. They aim to contribute to progress on the 2030 Agenda and thus cover the multifaceted range of forest goods and services.

Considering that 72% of all tropical forests are are public (van Hensbergen, 2016), forest concession regimes, if based on sustainable forest management practices, can yield a positive effect on biomass stocks, besides generating revenues that can increase the value of standing forests, eventually contributing to a reduction in deforestation. Furthermore, products and services generated from sustainable harvesting contribute to local and national income, jobs and the production of harvested wood products, which are recyclable and renewable. In sum, sustainable forest production contributes to enhanced rural livelihoods, rural development and lower carbon and material footprints.

The theory of change underlying the development of these Voluntary Guidelines reflects the potential contributions of sustainable forest concessions to the 2030 Agenda, not only to the 17 SDGs, but also to the Paris Agreement on Climate Change. Forest concessions contribute directly to Indicator 15.2.1 (progress towards sustainable forest management), and are relevant to Indicator 15.1.1 (forest cover as a proportion of land). Progress towards proportion of forest area under a longer-term forest management plan and forest area under an independently verified forest management certification scheme can be accelerated if concessions regimes are improved. Data reported under these two indicators reveal that, between 1990 and 2015, loss of forest occurred mainly in developing countries, particularly in sub-Saharan Africa, Southeast Asia

and Latin America, indicating the need for enhanced sustainable forest management in the tropics.

Table 1 and Figure 1 illustrate the potential contributions from forest concessions to the SDGs and to reduce emissions from deforestation and forest degradation (REDD+).

TABLE 1

SDGs and targets to which sustainable forest concessions can directly contribute

	Targets	Forest concessions can contribute to:
1 NO POVERTY	SDG 1: End poverty in all its forms everywhere	
	1.4 By 2030, ensure that all men and women, in particular the poor and the	Delivering basic social services to people in remote, forested areas.
	vulnerable, have equal rights to economic resources, as well as access to basic services,	Securing tenure rights for local communities.
	ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	Empowering local community to efficiently engage in consultation and transparent forest management decisions.
5 GENDER EQUALITY	SDG 5: Achieve gender equality and empower all wo	omen and girls
	5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.	Providing for gender-sensitive planning, contract awarding, allocation, implementation and monitoring processes, as well as ensuring women's inclusion in capacity-building and skills development.
	5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.	Providing for gender-sensitive contract awarding processes and community consultations.
7 AFFORDABLE AND CLEAN ENERGY	SDG 7: Ensure access to affordable, reliable, sustaina	able and modern energy for all
	7.2 By 2030, increase substantially the share of renewable energy in the global	Providing for the sustainable management of forests and access to wood-based energy.
	energy mix.	Using wood residues for wood energy generation.
8 DECENT WORK AND ECONOMIC GROWTH	SDG 8: Promote inclusive and sustainable economic	growth, employment and decent work for all
	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.	Strengthening economic development by adding value to forestry through vertical integration, integrating local enterprises into the value chain of products and services from the concession.

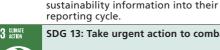
Introduction 3

Table continued

Targets Forest concessions can contribute to: SDG 12: Ensure sustainable consumption and production patterns

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate

Adopting sustainable practices throughout forest value chains and publishing sustainability reports.



SDG 13: Take urgent action to combat climate change and its impacts

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Enhancing resilience and adaptive capacities to climate change through forest management, ecosystem restoration, reduced impact harvesting techniques and silvicultural practices (e.g. tending, thinning).



SDG 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

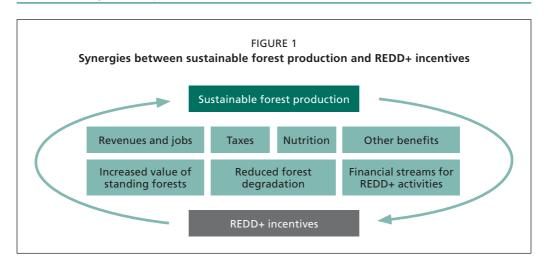
Increasing the value of standing forests and the opportunity cost of deforestation through sustainable forest management.

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

Mainstreaming sustainable forest management in vast tracts of forest by increasing the share of forest area under a forest management plan, including the proportion of forest area certified under an independent forest certification scheme.

15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.

Helping to combat the trafficking of protected tree species, including by controlling the supply of illegal wildlife products.



The decision to develop a set of Voluntary Guidelines for forest concessions in the tropics, in the context of the 2030 Agenda, stems from the need to advance the implementation of sustainable forest management (SFM). In tropical countries, where deforestation rates are decreasing but remain alarming, and public production forests represent a large share of total production forests, the impact of forest concessions as a policy instrument can be significant. They can determine either unsustainable or sustainable behaviour, depending on the commitment and capacity of those implementing the concessions, and the regulatory and economic environment. To date, forest concessions have delivered mixed results, as demonstrated by the various regional studies and reports conducted under the Forest Concessions Initiative (FCI) (see Box 1). It is clear, though, that, well-managed concessions can deliver robust socio-economic and environmental benefits.

BOX 1 Forest Concessions Initiative (FCI)

In 2015, the Food and Agriculture Organization of the United Nations (FAO), the Center for International Forestry Research (CIFOR), the Centre de Coopération International en Recherche Agronomique pour le Développement (CIRAD), the International Tropical Timber Organization (ITTO) and the Brazilian Forest Service (SFB) jointly launched the Forest Concessions Initiative (FCI), in recognition of the relevance of forest concessions and other public-private arrangements to the management of public production forests in tropical countries. In 2016, these institutions were joined by the World Bank's programme on forests.

The main objectives of the FCI are:

- to explore tropical forest concessions as instruments to mainstream best practices of sustainable forest management and the contribution of forests to socio-economic development, biodiversity conservation and carbon sequestration; and
- to assess and promote alternative models to (traditional) concession systems that effectively respond to the needs of local peoples, while ensuring the economic and financial feasibility of sustainable forest management.

The FCI prepared regional reports on the situation of forest concessions in selected countries in Central and West Africa, Southeast Asia and Latin America, as well as a background document providing preliminary recommendations on improving forest concession systems. In 2016, an international workshop was organized in Brazil to share information on experiences and lessons learned with forest concessions.

The FCI has been active in raising awareness and promoting the sustainable management of production forests, providing the groundwork for increased investments and improving rural livelihoods. In addition, discussions within FCI activities have helped to evaluate the potential of private and public policy instruments (i.e. certification, fiscal instruments, and competitive and transparent bidding) to orient and improve forest contracts and alternative allocation models.

Further information is available on the FAO FCI website: www.fao.org/forestry/sfm/92208/en.

The reports are available at www.fao.org/forestry/sfm/92208/en.

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1.2 SPECIFIC OBJECTIVES OF THE VOLUNTARY GUIDELINES

The specific objective of these Voluntary Guidelines is to promote the sustainable management of public production natural forests in tropical countries through forest concessions, thereby fulfilling their potential contribution to the achievement of Agenda 2030. Forest concession regimes are treated here as forest policy instruments, and should be aligned with the sustainable forest management objectives agreed by countries in the UNFF. The current Guidelines are intended to serve as guidance for making forest concessions an effective economic instrument capable of delivering sustainable forest management in all its dimensions, and generating socio-economic benefits to relevant stakeholders.

The sustainable management of public production forests is ultimately the responsibility of governments. While direct management is possible, it is not typical. In its place, instruments are often used to grant harvesting rights or the temporary secondment of management responsibilities. Usually, soft or hard agreements for harvesting production forests, bound or not by contracts, are set up involving private actors or communities. Concessions are one of the legal instruments used, and typically combine a grant of harvesting rights to non-state actors with the secondment of management responsibilities.

Forest concession contracts can have two dimensions: (i) utilization referring to harvesting and/or use rights; and (ii) management referring to management obligations. The concessions discussed in this publication mainly involve contracts that combine both utilization rights and management obligations – a combination that occurs in many countries. Under this arrangement, the concessionaire will carry out utilization and management, while the government will plan and allocate, as well as monitor and enforce the concessionaire's compliance with the legal framework.

The Voluntary Guidelines apply to forest concessions for public production in natural forests in the tropical countries of Africa, Latin America and Southeast Asia. The focus of the Guidelines is natural production forests owned exclusively by the government in the Permanent Forest Estate (PFE),² which are expected to remain forests. The content of the Guidelines is also relevant to forests under customary ownership, where government and communities work together to manage forests and allocate management and harvesting rights to non-state actors. The Guidelines are voluntary in nature and non-binding. Moreover, they should be interpreted and applied in accordance with national legal systems and their institutions. For a full description of the methods and approach used to develop the Voluntary Guidelines, see Annex.

The Voluntary Guidelines are intended for countries and subnational governments implementing new concession regimes or reviewing existing ones. They acknowledge the diversity of national circumstances and state of forest governance. For this reason, the guidelines are conceived to provide guidance on the different dimensions of concession management, and can be used as a whole, or to focus on dimensions of particular interest.

² FAO defines PFE as "forest that is designated to be retained as forest and may not be converted to other land use" (FAO, 2010).

The flexible approach proposed by these guidelines should not hamper the overarching objective of aligning concessions to the 2030 Agenda. Table 2 summarizes the theory of change that underpins these Voluntary Guidelines.

TABLE 2

Pathway for forest concessions to contribute to the sustainable management of the public production of natural forests in tropical countries and achieving the SDGs

What key lessons have been learned from tropical forest concessions?

- Clear policy objectives combined with transparent and inclusive processes increase the capacity of forest concessions to deliver sustainable forest management.
- Clear and consistent policy and legal frameworks facilitate the effective design, implementation and administration of forest concessions, while lack of clarity and inconsistency can lead to the opposite.
- Independent certification contributes to enhanced monitoring and adoption of SFM in concessions.
- A clear national land use policy, developed in coordination with all relevant stakeholders, provides for concessions coherent with national developmental objectives and minimizes conflicts, disputes and overlapping permits.
- Properly designed revenue systems that incorporate incentive mechanisms can enhance the implementation and performance of concessions and their economic feasibility.
- Illegality and bribery are major threats to effective concession regimes. Illegal production represents
 unfair competition with sustainable forest products, while bribery prevents coherence with policy
 objectives, appropriate generation and distribution of benefits, long-term investments and delivery
 of sustainable forest management.
- Clear and secure rights are crucial preconditions for long-term investment in forest concessions.
- Forest concessions and local communities can support one another when the latter are considered as key stakeholders in the design and administration of concessions.
- Multiple use (e.g. timber, non-wood forest products [NWFPs], and ecosystem services) can provide additional revenue streams to concessionaires and benefits to local communities.
- Securing the environmental integrity of managed forests and long-term productive potential requires more investment in silvicultural practices.
- Both private businesses and communities can efficiently manage forest concessions.

What do the Voluntary Guidelines do?

- Systematize guidance for improving forest concession regimes and the sustainable forest management of public production forests.
- Identify links on how forest concessions can contribute to achieving the SDGs and combat climate change.
- Provide recommendations and examples of good practices to improve the design, implementation and administration of forest concessions.

What are the intended outcomes?

- Forest concessions are effective instruments for delivering the sustainable forest management of public production forests.
- Forest concessions deliver sustainable forest production and strengthened forest value chains.
- Forest concessions enhance the provision of ecosystem services, including increased carbon sequestration.
- Forest concessions deliver socio-economic benefits that contribute to rural development and improved livelihoods.
- Forest concessions contribute to gender-sensitive organization and empowerment in rural communities

What are the intended long-term impacts?

• Forest concessions contribute to achieving the SDGs and to climate change mitigation and adaptation.

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1.3 LINKAGES WITH RELEVANT GUIDELINES

The Voluntary Guidelines for forest concessions provide focus on the operationalization of concessions as a policy instrument. They are therefore not intended to replace lessons learned, but to help apply these, as well as recommendations for good governance, sustainable forest management and responsible investments (see Box 2 for a comprehensive list of existing guidance). A note must be made regarding the importance of observing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT), and the Guidelines for the Sustainable Management of Natural Tropical Forests. Chapter 4 includes cross-references to existing guidelines, so as to demonstrate complementarities and linkages.

BOX 2

List of relevant guidelines with implications for the design, implementation and administration of sustainable forest concessions in tropical countries

- Guidelines for land-use planning. FAO Development Series No. 1. Rome, FAO, 1993.
- Guidelines for the management of tropical forests 1. The production of wood. FAO Forestry Paper No. 135. Rome, FAO, 1998.
- Governance principles for concessions and contracts in public forests. FAO Forestry Paper No. 139. Rome, FAO, 2001.
- Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security. Rome, FAO, 2012.
- Principles for responsible investment in agriculture and food systems. Rome, FAO, 2014.
- Guidelines on occupational safety and health management systems. ILO-OSH 2001.
 Geneva, International Labour Office (ILO), 2001.
- Guidelines on labour inspection in forestry. Geneva, ILO, 2005.
- ITTO Guidelines on fire management in tropical forests. Policy Development Series No. 6. Yokohama, Japan, International Tropical Timber Organization (ITTO), 1997.
- Voluntary guidelines for the sustainable management of natural tropical forests. ITTO Policy Development Series No. 20. Yokohama, Japan, ITTO, 2015.
- Criteria and indicators for the sustainable management of tropical forests. ITTO Policy Development Series No. 21. Yokohama, Japan, ITTO, 2016.
- ITTO/IUCN Guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests. ITTO Policy Development Series No. 17. Yokohama, Japan, ITTO/IUCN, 2009.
- Assessing forest governance: A practical guide to data collection, analysis, and use. Washington D.C., PROFOR and FAO, 2014.
- Business principles for countering bribery. Berlin, Transparency International, 2013.



2. Analytical framework

2.1 DEFINITION OF KEY CONCEPTS

A forest concession (also 'concession'), is a contractual arrangement for the temporary allocation of public forest resources by the legal owner of an area (typically the state) to another party (e.g. companies, communities, NGOs [Non-governmental organizations]). It grants rights for the utilization of specified forest resources and services and/or obligations for forest management in a given forest area. In these Voluntary Guidelines, forest concessions refer to concession contracts that define both rights for utilization and obligations for management in public production forests.

A concession contract (also 'concession agreement') is a legal document that systematically identifies and organizes the terms and conditions of the agreement, specifying the rights and obligations for all the parties. The agreement involves at least two parties: a grantor of rights and/or obligations (typically, though not always, a state), and a contractor (also 'concession holder' or 'concessionaire').

Administration of a contract "embraces all relationships between government and the contractor arising from the implementation of the contract". Two key aspects of contract administration are monitoring and enforcement.

A concession regime refers to the concession system as a whole in a country. It includes all the institutions, regulations and procedures involved in designing and administrating concessions.

Sustainable forest management is a key objective to be achieved under forest concessions. There are several definitions (FAO, 2013), reflecting the concept's flexibility and its dependence on the context in which it is applied. These Guidelines apply the definition devised by the United Nations Forum on Forests: "[SFM is 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". A key aspect of SFM is the reconciliation of environmental, economic and social dimensions. The economic dimension considers the need for the generation of socio-economic benefits through economically feasible forest utilization and management. The social dimension acknowledges that forest utilization and management cannot take place at the expense of human well-being, and should therefore equitably benefit local populations and contribute to local development. The environmental dimension recognizes that forests are more than timber, and that they should be utilized and managed with recognition of their inherent ecosystem services. To achieve sustainable management of forests, the economic, social

United Nations. 2008. Non-legally binding instrument on all types of forests. Resolution adopted by the General Assembly on 17 December 2007.

and environmental aspects need to be consolidated through an integrated approach that considers and balances each dimension. SFM also requires a legislative and institutional framework for transparent and accountable governance that supports its implementation.

2.2 SUSTAINABLE MANAGEMENT OF PUBLIC NATURAL FORESTS AND TYPOLOGY OF FOREST CONCESSIONS

The analytical framework of the Guidelines consists of two parts: (i) the dimensions of sustainable management of public natural forests, and (ii) the typology of forest concessions. The first part is based on the expanding literature on the topic, which analyses critical issues or challenges facing the sustainable management of tropical forests, including tropical forest concession regimes and practices (Chan, 2016a; Karsenty and Vermeulen, 2016; McGinley and Cubbage, 2012). Four important dimensions for achieving sustainable management of public production forests in the tropics through forest concessions stem from this literature:

- Improved governance that includes clear policy, legal and institutional frameworks, which enable the transparent, accountable and inclusive design, implementation and administration of forest concessions (Gray, 2002; Amacher, Ollikainen and Koskela, 2012; Azevedo-Ramos, Silva and Merry, 2015; Cerutti et al., 2016; Karsenty and Ferron, 2017).
- 2. Economically feasible forest concessions that, with legal compliance, allow normal levels of profit⁴ to concessionaires and an economic rent⁵ to governments, while also providing fair economic benefits to communities (Gray, 2002; Lambooy and Levashova, 2011; Merry and Amacher, 2005).
- 3. Social inclusion of forest concessions, which through their design, implementation and administration involve and benefit local communities and indigenous peoples, and recognize and respect their rights (Gilmour, 2016; Lescuyer *et al.*, 2015; Purnomo and Mendoza, 2011; Ravikumar *et al.*, 2012).
- 4. Environmental integrity of forest concessions through which the management maintains and enhances and does not compromise the capacity of the ecosystem to produce a sustained flow of environmental goods and services and provide biological diversity and protective functions (Boscolo, Snook and Quevedo, 2009; Cerutti *et al.*, 2011; Edwards *et al.*, 2014; ITTO. 2015).

The four dimensions can be considered in the wider context of sustainable development and improved governance, and will be used to structure the principles and guidelines. Under the four dimensions, it is possible to design and implement sustainable forest concession regimes that can deliver a wide range of socio-economic benefits such as revenue to stakeholders, security of tenure, access to social services, and local development,

⁴ "The level of profit that provides a return on the forest concessionaire's investment in capital and infrastructure, which is just sufficient to keep the forest concessionaire operating in the sector". (Whiteman, 1999).

⁵ "The surplus value created during the production of a good or service, due to the ownership of a factor of production that is in fixed or limited supply". (Whiteman, 1999).

while at the same time applying good forest management practices to maintain and enhance the productive functions of forest resources.

Forest concessions are often considered as homogeneous and static agents, which leads to sweeping generalizations about their use and performance, as well as subsequent recommendations (Pérez et al., 2005). In order to draw up recommendations suited to the various types of forest concessions in all their diversity, it is important to address their variation, which necessitates some categorization (Pérez et al., 2005). Indeed, when the expectations, challenges and opportunities of various concession types are understood, appropriate recommendations and strategies for each of them can be developed. Therefore, before getting to the stage of developing principles and guidelines for forest concessions, it is important to categorize concessions based on a set of criteria, and to use these categories in the development and selection of the guidelines and recommendations.

The following core criteria (and subcriteria) were distilled from an extensive review of the literature (Romero *et al.*, eds. 2015; Lentini, Verissimo and Sobral, 2003), and expert consultations, to construct a typology of active forest concessions in public production natural forests in the tropics:

Forest condition: this criterion influences the utilization and management activities that can take place in a forest concession. ITTO categorizes natural forests into seven groups (ITTO, 2002), but for this typology three characteristic groups relevant to forest concessions were selected: (i) primary forest; (ii) managed primary forest; and (iii) secondary forest and degraded forest land (see the Glossary for complete definitions).

Primary objective(s) of the forest concession: forest concessions are designed for specific objectives to be achieved through utilization and management activities. The government must decide on the primary objective(s) of forest concession, depending on relevant policy objectives. The objectives of forest concessions are grouped into four broad sets: (i) timber production; (ii) production of non-wood forest products; (iii) provision of ecosystem services (mainly carbon storage and sequestration, watershed protection, tourism and biodiversity conservation); and (iv) multiple use, implying any combination of the other subcriteria.

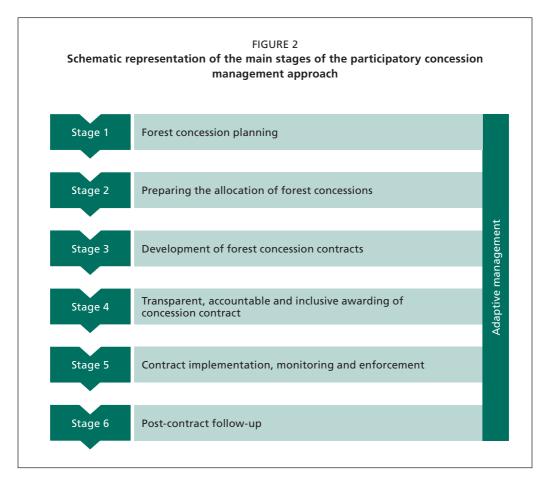
Allocation of rights and obligations: governments, as the owners and administrators of public lands, can allocate rights to different stakeholders. The allocation of rights and obligations is grouped into three categories: (i) private; (ii) community, including community organizations and indigenous peoples; and (iii) a combination of private and community. Following specific contexts, the second subcriterion (community) can also include local forest users, such as organized small-scale loggers, chainsaw millers, NWFP extractors, and small-scale enterprises and associations. In all cases, the public sector is also represented as the administrator of the rights and obligations allocated.

The criteria and subcriteria can be applied in a systematic manner to construct a typology of forest concessions. A matrix can be built to assist the assessment of forest concessions (see the example proposed in Table 3).

TABLE 3

Typology of forest concessions: some typical features

cenarios		tion of obligat			Conce object				Forest onditio	n
	Private	Community	Combination of both	Timber	Non-wood forest products	Services	Multiple use	Primary forest	Managed primary forest	Secondary forest and degraded forestland
Scenario 1: industrial-scale concession	х			Х			Х	Х	х	
Scenario 2: community concessions		х					х	Х	х	Х
Scenario 3: public-private community partnership			х				х	Х	х	Х
Scenario 4: conservation or restoration concessions	Х	Х	Х			Х		Х	Х	Х



2.2 PARTICIPATORY CONCESSION MANAGEMENT APPROACH

The Voluntary Guidelines are meant to be a practical guide to plan, implement and review forest concession regimes. In this context, the principles and guidelines proposed here will be better used if there is clarity on the different management phases of a concession regime. The participatory concession management approach (CMA) is proposed as a tool to facilitate the communication of principles, guidelines, and recommendations by presenting the main stages related to the design, implementation and administration of forest concessions. The CMA has six stages (Figure 2): Stages 1, 2, 3 and 4 concern the planning, allocation and contracting of forest concessions, and Stages 5 and 6 highlight contract implementation, monitoring and enforcement, including post-contract administration. The policy, legal and institutional frameworks are the enablers that set the specific rules, procedures and objectives for designing, implementing and administrating forest concessions.

The CMA can be used as a 'compass' for the management of public production forests through forest concessions, helping to pinpoint the current stage of a particular concession in its development. The stages follow a logical sequence. However, in practice the interaction between stages is not necessarily linear, with lessons learned and experiences gained in one stage influencing processes in the others. Monitoring is conducted continuously throughout CMA, but is most important during implementation (Stage 5). The aspects identified under each stage are neither exhaustive nor detailed, and their sequence may vary according to country and jurisdiction.

Stage 1: Forest concession planning

Important preconditions for a forest concession regime or the allocation of a particular concession include land-use plans and the designation of a forest in accordance with forest zoning. A forest concession can be allocated in areas categorized as public production forests if its main objective is sustainable forest production, but it can also be used for conservation purposes. The same concession instrument may include multiple objectives, as long as there is clarity and consistency between the actual instrument (the contract and relevant institutional arrangements) and the policy objectives. The responsibility for forest concession planning lies with government agencies at national level, but to ensure effective delivery sustainable forest management should be undertaken through a participatory and consultative process. This stage involves exploration and scoping studies, including resource inventories, economic feasibility, and social and environmental impact assessments. Due consideration must also be given to the concession location, access, tenure clarity, presence of local populations, community rights and traditions, and opportunity costs related to ecosystem services, including biodiversity and other potential land uses. If communities are present in the area, consultations should be undertaken to ensure their agreement with the concession planning and area.

Stage 2: Preparing the allocation of forest concessions

This stage focuses on consulting with relevant government agencies (e.g. agriculture, mining and infrastructure), confirming the socio-economic situation in the forest

concession area, evaluating the expected harvesting value of the area, consulting with communities for each specific concession, mapping overlapping uses and assessing exclusive rights and responsibilities, and consulting with local governments and other relevant stakeholders (e.g. finance institutions, forest enterprises, environmental and development NGOs). Consultations at this stage should ensure a gender-based approach, by seeking opportunities to include women and provide equal opportunities for female and male participation.

Stage 3: Development of concession contracts

Responsibility for developing a concession contract lies with the forest administration. This stage focuses on developing contracts based on the results of prior studies and inventories undertaken in Stages 1 and 2. The draft contract for a forest concession should be available for consultation before the contract awarding process commences. It should determine all conditions, rights and responsibilities to be met by the contractual parts (government and concessionaire), and should accommodate further specific rights and responsibilities emerging from the transparent bidding process, for instance, additional benefits proposed by the concessionaire in response to incentives or obligations introduced by the government in response to identified risks. Among other features, the contract should include:

- introductory legal provisions, including the names, legal status and addresses of contract parties, and the location and boundaries of the concession area;
- references to key documents that it is assumed the bidder will have knowledge of prior to issuing a bid;
- any requirements for contractors to develop supplementary documents (such as management plans, resource supply analysis, forest development plans, annual work plans and cutting permits, annual reporting);
- the forest revenue system, including the system structure and level of fees.
- clear timelines and expected investments;
- social clauses, including the relationship with local communities;
- performance incentives and penalties in case of non-compliance;
- provision for monitoring compliance with existing economic, social and environmental regulations;
- contract review criteria and procedures;
- clauses and procedures providing flexibility for contract amendments.

Stage 4: Transparent, accountable and inclusive awarding of concession contract

The process of awarding concession contracts should be competitive and transparent. Experience shows that a competitive concession award process has the potential to increase forest value and revenues for relevant stakeholders (Cerutti *et al.*, 2016), and reduce the risks of corruption compared with administrative contract awards (e.g. direct negotiation). It can also encourage more efficient utilization and management of the forest area by the concession holder. At this stage, independent observation of the awarding

process will increase transparency, equity and confidence in contract awarding. This stage should include:

- a consultation round for the draft documents followed by finalization of the same;
- a competitive contract awarding process that ensures the selection of a technically and financially capable concessionaire;
- prequalification of interested concessionaires, ensuring equal opportunities for male and female contenders;
- use of competitive contract awarding methods such as open auctions, sealed bid auctions, competitive negotiations and auction-negotiation hybrids (see Table 4);
- a transparent process and criteria for selection of the concessionaire.

TABLE 4
Competitive award methods: strengths and weaknesses

Methods	Description	Strengths	Weaknesses	Suitability*
Open auction	All bidders are present either in person or via electronic communication, and are aware of the amount of each bid.	This method is particularly useful when several forest contracts are auctioned at the same time with a large number of bidders gathered.	Collusion among bidders is relatively easy if there are few bidders. This method does not necessarily reveal the amount the winning bidder might have been willing to pay. Technical (pre) selection criteria of concessionaires can be abused by the government. There is a risk of overbidding.	This method is suitable when high levels of competition can be achieved for a contract.
Sealed bid auction	Bids are submitted in writing as sealed bids and opened after the deadline for submission. Bidders are unaware of the amounts of other bids.	This method provides less opportunity for open collusion among bidders. Bidders are inclined to reveal the full price they are willing to pay.	Tacit collusion among bidders is possible. Technical (pre) selection criteria of concessionaires can be abused by the government. There is a risk of overbidding.	This method is suitable when high levels of competition can be achieved for a contract.
Competitive negotiation	Potential contractors are invited to submit proposals that are evaluated on cost or price, and the other terms and conditions of the proposal. The best proposal is then selected from among the qualifying submissions for the negotiation of final terms and conditions.	The government has additional information from the other proposals that it may use in negotiations with the chosen contractor. This method can help to establish a more cooperative government/ contractor relationship that can facilitate administration of the contract over its term.	This method provides opportunities for collusion, bribery, corruption and political favouritism.	This method is suitable when medium to high levels of competition can be achieved for a contract.

Methods	Description	Strengths	Weaknesses	Suitability*
Auction- negotiation hybrid	Negotiation can be used to award contracts for which fully competitive bidding is difficult to achieve. Competitive bidding in areas of the country where there will be competition provides an indication of the true value of the contracts for the negotiation.	Price indication from competitive bidding from other areas strengthens government's negotiation position.	This method provides opportunities for collusion, bribery, corruption and political favouritism.	This method is suitable when no or very low levels of competition can be achieved for a contract.

Table continued

Note: *Suitability in terms of introducing competition. *Source:* Authors' compilation based on FAO (2001).

Stage 5: Contract implementation, monitoring and enforcement

Contract implementation begins from the moment that the concession contract is signed. Before harvesting operations start, the concession holder prepares the relevant supplementary documents, as required in the contract (see Figure 3). Monitoring is carried out to compare "performance against expectation" (FAO, 2001), and commences immediately after the contract is signed, to ensure that obligations are met from the early stages. Enforcement refers to "taking remedial adjustment action to bring performance into line with expectations (terms of contract) in cases where unacceptable deviation has been proven" (FAO, 2001).

- This stage focuses on:

 the development of supplementary documents by the contractor, as required in
- preparation of the area (e.g. demarcation, clear on-the-ground definition of the boundary, security);
- monitoring and inspection by the government/civil society/third parties (see Table 5 for a set of variables measurable through monitoring and inspection);
- forest revenue collection; and

the contract;

• enforcement procedures and penalties for non-compliance in accordance with those stipulated by law and the contract.

TABLE 5
Variables for monitoring forest concessions

Main variables	Subvariables	Monitoring components
Resource management	Mapping, forest and	Forest inventory
inspection	environmental inventory	Forest growth
		Forest removals
		Forest health and fire protection
	Boundary marking and	Boundary marking
	maintenance	Boundary maintenance

Table continues on next page

Table continued

Main variables	Subvariables	Monitoring components
Forest and environment	On-the-ground logging plan	Layout of log landings
management	layout and marking of trees	Layout of skid roads
		Marking of trees
	Harvesting inspections	Annual allowable cut
		Public notification of, and/or participation in, the design of the harvesting operation
		Harvesting times and harvesting area
		Layout of roads, landings and skid roads, and the operation of equipment
		Harvesting only marked trees
		Wood measurement
		Damage to residual trees and soil
		Conditions for protected areas or special management zones (riparian zones, critical habitat, etc.)
		Conditions for cultural or archaeological sites or objects
		Conditions to avoid contamination of soil, air and water by toxic or dangerous chemicals, including fuels and lubricants
		Harvesting areas are deactivated and rehabilitated
	Post-harvest inspection of the	Adherence to silvicultural plan
	cutting area	Damage to residual stand
		Marked trees cut and unmarked trees not cut
		Logs and felled trees salvaged
	Environmental and conservation inspections	Physical damage to plant, or animal communities, or critical habitat
		Disturbing animals or disruption of their normal behaviour (e.g. excessive sound), illegal hunting and fishing, and theft of plants or animals

Table continued

Main variables	Subvariables	Monitoring components
Engineering and road	Engineering inspections	Roads and log landings
		Bridges, major culverts and other stream crossings
		Riverside landings and log dumps
		Storage areas (resource concentration yards or sorting grounds)
		Canals or other waterways
		Dredging, docks, camps
		Maintenance buildings and facilities
		Airstrips
		Power lines and pipelines and power generating stations
	Road planning and construction	Road plans and accompanying maps
		Road layout on the ground, matching layout on the road plan and maps
Others	Financial inspections	Payment of performance bonds
		Payment of deposits
		Payment of forest fees and other payments
	Investment inspections	Sawmills and other processing and manufacturing facilities
		Employment training programmes
		Financial records pertaining to monetary investments
	Non-timber forest resources	Consumptive uses (e.g. forest foods, fruits, medicinal plants)
		Non-consumptive uses (e.g. recreation, scenery, natural beauty)
	Cultural and social inspections	Protection of archaeological and culturally important sites such as burial grounds, ruins, sacred and ceremonial grounds
		Protection of rights to traditional uses of forest products, hunting, fishing and gathering rights
		Protection of villages from disruption or intrusion by contractor's or subcontractor's operations or employees
		Income and wealth of local communities
		Education of local communities
		Cultural stability of local communities

Note: The variables are not comprehensive. Source: Authors' compilation from FAO (2001).

FIGURE 3 Key steps of contract implementation and enforcement in chronological order



Note: The order of steps can vary. Source: Modified from Gray (2002).

Stage 6: Post-contract follow-up

Post-contract follow-up involves management of the concession area after the contract is over or nearing completion. This stage focuses on:

- Evaluation of the concession holder's contract implementation performance and determining the possibility of contract renewal. This should be done according to predefined criteria stipulated in the concession contract and, for increased transparency, by a third party (for long-term concession contracts, at least one mid-period evaluation should be conducted).
- Developing and implementing working systems to manage or pass on expired and rescinded concessions to avoid situations where such concessions are left unmanaged and without control.
- Reflecting critically on all the stages of CMA to evaluate the experiences gained and lessons learned, and modify the stages and relevant processes accordingly.



3. Principles and guidelines

3.1 DESIGNING AND IMPLEMENTING EFFECTIVE FOREST CONCESSIONS

This section suggests principles, guidelines and recommendations to design and implement forest concessions that effectively deliver sustainable forest management (see Table 6 for a list of principles and guidelines). Box 3 presents the definitions of principles, guidelines, recommendations and good practices.

BOX 3

Definitions of principles, guidelines, recommendations and good practices

The *principles* represent key requirements for the sustainable management of public production forests through forest concessions. They need to be respected by all stakeholders during the design, implementation and administration of forest concessions.

The *guidelines* are advisory statements that, when followed effectively, can help stakeholders to uphold the principles.

The *recommendations* constitute more specific actions directed at specific stakeholders, which should be taken to enable them to follow the guidelines effectively.

A *good practice* is one that has proven to work well and produce good results, and is therefore recommended as a model.

Seven principles have been formulated to guide the sustainable management of public production tropical forests though forest concessions:

- Principle 1: Coherence with forest and forest-related policies for sustainable landscapes;
- Principle 2: Clear, credible and effective legal and institutional frameworks;
- Principle 3: Transparent, inclusive and accountable planning, allocation, implementation and monitoring of forest concessions;
- Principle 4: Technical and human capacity for the management and operation of concession regimes at all levels;
- Principle 5: Long-term economic and financial sustainability;
- Principle 6: Clarity and security of tenure rights;
- Principle 7: Community participation and social benefits for all;
- Principle 8: Environmental integrity and sustainable use of forest resources.

All these principles are accompanied by a series of guidelines, each of which has an associated set of recommendations directed at specific stakeholders that, when adopted, will help them to uphold the principles and put the guidelines into effect. The set of principles, guidelines, recommendations and good practices is not exhaustive.

Table 7 presents relevant recommendations specific to each stage of the participatory concession management approach, alongside the overall policy and legal and institutional frameworks, and indicates which guidelines can be considered at each stage of the CMA.

TABLE 6
Framework of principles and guidelines

Principles	Guidelines					
Principle 1: Coherence with forest and forest-related policies for	Guideline 1.1: Build on land-use plans and forest zoning for the holistic management of public production forests					
sustainable landscapes	Guideline 1.2: Enhance the response of forest concessions to development goals through the adoption of a cross-sectoral approach					
	Guideline 1.3: Strengthen political commitment at national and subnational levels					
Principle 2: Clear, credible and effective legal and institutional	Guideline 2.1: Ensure clear and transparent legal and institutional frameworks					
frameworks	Guideline 2.2: Promote consistency among forest and non- forest legal and institutional frameworks					
	Guideline 2.3: Adapt the legal framework to international commitments relevant for the management of public production forests					
	Guideline 2.4: Ensure the presence of credible and accountable institutions to plan, monitor and enforce forest concessions					
	Guideline 2.5: Develop, implement and monitor timely measures to curb bribery and corruption					
Principle 3: Transparent, inclusive and accountable planning, allocation, implementation and monitoring of forest concessions	Guideline 3.1: Plan and allocate forest concessions in accordance with established policy objectives					
	Guideline 3.2: Ensure competitive, transparent and inclusive awarding of concession contracts					
	Guideline 3.3: Encourage independent and voluntary forest certification as well as industrial processes					
	Guideline 3.4: Ensure the effective monitoring and enforcement of concession contracts					
	Guideline 3.5: Ensure transparent and independent mid-term and end-of-cycle evaluations and response measures					
	Guideline 3.6: Design and implement timely measures to manage concession areas post-contract					
Principle 4: Technical and human capacity for the management and operation of concession regimes at all levels	Guideline 4.1: Develop and retain appropriately qualified personnel in government agencies related to policy and legal frameworks, development, implementation, monitoring and enforcement of forest concessions					
	Guideline 4.2: Ensure that continuous technical and operational training in sustainable forest management is available for all relevant stakeholders at all levels					
	Guideline 4.3: Promote capacity-building, skills development and employment of women, indigenous peoples and other minority groups					
	Guideline 4.4: Respect workers' rights and abide by national and international regulations, and guarantee healthy and safe working conditions					

Table continued

Principles	Guidelines						
Principle 5: Long-term economic and financial sustainability	Guideline 5.1: Ensure that the characteristics of forests and the length of the concession contract are consistent with sustainable harvesting potential						
	Guideline 5.2: Ensure that reliable economic information is available and taken into consideration in the design of forest concessions						
	Guideline 5.3: Ensure the financial and technical capacity of concessionaires for operating activities and necessary investments						
	Guideline 5.4: Use financial and fiscal instruments to achieve the expected outcomes of forest concessions						
	Guideline 5.5: Ensure that concessionaires have adequate access to finance						
	Guideline 5.6: Contribute to strengthening local economies through financially and technically viable forest concessions						
	Guideline 5.7: Establish and apply mechanisms for effective and transparent revenue collection, reinvestment and benefit sharing						
	Guideline 5.8: Protect markets from competition with products from illegal forest activities						
Principle 6: Clarity and security of tenure rights	Guideline 6.1: Clarify and respect customary tenure rights in an near concessions						
	Guideline 6.2: Develop and implement cooperation between private sector and community production						
	Guideline 6.3: Design and implement community concessions to recognize customary tenure rights, where appropriate						
	Guideline 6.4: Enable local communities with access to manage the concessions						
	Guideline 6.5: Involve local communities and indigenous peoples in design and implementation						
	Guideline 6.6: Develop and implement conflict resolution and compensation mechanisms						
Principle 7: Community participation and social benefits for all	Guideline 7.1: Engage local communities and indigenous peoples residing in or near the area in implementation and management of the forest concession						
	Guideline 7.2: Contribute to improved social welfare and local livelihoods						
	Guideline 7.3: Develop, implement and monitor transparent, equitable and gender balanced benefit sharing mechanisms that take into account the interests of all stakeholders						
Principle 8: Environmental integrity and sustainable use of forest resources	Guideline 8.1: Develop and effectively implement plans for maintaining and improving environmental integrity and ensuring the sustainable use of forest resources						
	Guideline 8.2: Maintain and improve environmental integrity and ensure the sustainable use of forest resources at the operational stage						
	Guideline 8.3: Develop, implement and monitor the restoration/ conservation of concessions						
	Guideline 8.4: Assess and monitor implementation performance and the achievement of expected outcomes						

TABLE 7
Allocation of relevant guidelines along the stages of participatory concession management approach

Guidelines	Main stages of the participatory Concession Management Approach					on	
	Policy, legal and institutional frameworks	Stage 1: Forest concession planning	Stage 2: Preparing the allocation of forest concessions	Stage 3: Development of concession contracts	Stage 4: Transparent, accountable and inclusive awarding of concession contract	Stage 5: Contract implementation, monitoring and enforcement	Stage 6: Post-contract follow-up
Guideline 1.1: Build on land-use plans and forest zoning for the holistic management of public production forests							
Guideline 1.2: Enhance the response of forest concessions to development goals through the adoption of a cross-sectoral approach							
Guideline 1.3: Strengthen political commitment at national and subnational levels							
Guideline 2.1: Ensure clear and transparent legal and institutional frameworks							
Guideline 2.2: Promote consistency among forest and non-forest legal and institutional frameworks							
Guideline 2.3: Adapt the legal framework to international commitments relevant for the management of public production forests							
Guideline 2.4: Ensure the presence of credible and accountable institutions to plan, monitor and enforce forest concessions							
Guideline 2.5: Develop, implement and monitor timely measures to curb bribery and corruption							
Guideline 3.1: Plan and allocate forest concessions in accordance with established policy objectives							
Guideline 3.2: Ensure competitive, transparent and inclusive awarding of concession contracts							
Guideline 3.3: Encourage independent and voluntary forest certification, as well as industrial processes							
Guideline 3.4: Ensure the effective monitoring and enforcement of concession contracts							
Guideline 3.5: Ensure transparent and independent mid-term and end-of-cycle evaluations and response measures							
Guideline 3.6: Design and implement timely measures to manage concession areas post-contract							

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Table continued

Guidelines Main stag			stages of the participatory Concession Management Approach					
	Policy, legal and institutional frameworks	Stage 1: Forest concession planning	Stage 2: Preparing the allocation of forest concessions	Stage 3: Development of concession contracts	Stage 4: Transparent, accountable and inclusive awarding of concession contract	Stage 5: Contract implementation, monitoring and enforcement	Stage 6: Post-contract follow-up	
Guideline 4.1: Develop and retain appropriately qualified personnel in government agencies related to policy and legal frameworks, development, implementation, monitoring and enforcement of forest concessions								
Guideline 4.2: Ensure that continuous technical and operational training on sustainable forest management is available for all relevant stakeholders at all levels								
Guideline 4.3: Promote capacity-building, skills development and employment of women, indigenous peoples and other minority groups								
Guideline 4.4: Respect workers' rights and abide by national and international regulations, and guarantee healthy and safe working conditions								
Guideline 5.1: Ensure that the characteristics of forests and the length of the concession contract are consistent with sustainable harvesting potential								
Guideline 5.2: Ensure that reliable economic information is available and taken into consideration in the design of forest concessions								
Guideline 5.3: Ensure the financial and technical capacity of concessionaires for operating activities and necessary investments								
Guideline 5.4: Use financial and fiscal instruments to achieve the expected outcomes of forest concessions								
Guideline 5.5: Ensure that concessionaires have adequate access to finance								
Guideline 5.6: Contribute to strengthening local economies through financially and technically viable forest concessions								
Guideline 5.7: Establish and apply mechanisms for effective and transparent revenue collection, reinvestment and benefit sharing								
Guideline 5.8: Protect markets from competition with products from illegal forest activities								

Table continued

Guidelines	Main stages of the participatory Concession Management Approach					on	
	Policy, legal and institutional frameworks	Stage 1: Forest concession planning	Stage 2: Preparing the allocation of forest concessions	Stage 3: Development of concession contracts	Stage 4: Transparent, accountable and inclusive awarding of concession contract	Stage 5: Contract implementation, monitoring and enforcement	Stage 6: Post-contract follow-up
Guideline 6.1: Clarify and respect customary tenure rights in and near concessions							
Guideline 6.2: Develop and implement cooperation between private sector and community production							
Guideline 6.3: Design and implement community concessions to recognize customary tenure rights, where appropriate							
Guideline 6.4: Enable local communities with access to manage the concessions							
Guideline 6.5: Involve local communities and indigenous peoples in design and implementation							
Guideline 6.6: Develop and implement conflict resolution and compensation mechanisms							
Guideline 7.1: Engage local communities and indigenous peoples residing in or near the area in implementation and management of the forest concession							
Guideline 7.2: Contribute to improved social welfare and local livelihoods							
Guideline 7.3: Develop, implement and monitor transparent, equitable and gender balanced benefit sharing mechanisms that take into account the interests of all stakeholders							
Guideline 8.1: Develop and effectively implement plans for maintaining and improving environmental integrity and ensuring sustainable use of forest resources							
Guideline 8.2: Maintain and improve environmental integrity and ensure the sustainable use of forest resources at the operational stage							
Guideline 8.3: Develop, implement and monitor restoration/conservation concessions							
Guideline 8.4: Assess and monitor implementation performance and the achievement of expected outcomes							

Note: 'Dark green' sharing indicates that a guideline typically applies to particular stage(s) of the approach. 'No colour' shading indicates a guideline does not typically apply to particular stage(s) of the approach.



4. Guidelines for sustainable management of public production forests through forest concessions

PRINCIPLE 1: COHERENCE WITH FOREST AND FOREST-RELATED POLICIES FOR SUSTAINABLE LANDSCAPES

Forest concessions are policy instruments designed to promote the sustainable management of public production forests. They should therefore be consistent with forest policy objectives and take into consideration national and subnational policies, acts or processes to achieve sustainable landscapes (see Box 4). Forest policy formulation, land-use planning and forest zoning do not form part of the forest concession planning process, and are ideally undertaken prior to the establishment of concession regimes. However, as recommended by the ITTO (2015), there should be a requirement to define the Permanent Forest Estate (PFE)⁶ to ensure that the forest concession will contribute to the delivery of sustainable forest management.

BOX 4 Sustainable landscapes

FAO defines a landscape as "a mosaic of natural and human-modified land uses/ecosystems (crop, grazing and forest lands, native vegetation, urban areas) with a characteristic topography, vegetation, land use and settlement pattern. Landscape boundaries may be geographic (watershed), or administrative (community, district) or both".

Sustainable landscape approaches embrace a holistic approach to land use. Such approaches consider the different economic, social and environmental objectives and activities in a landscape area, balancing trade-offs between the different objectives, and between development and conservation.

Source: www.fao.org/pollination/resources/glossary/en.

⁶ FAO defines the PFE as "forest area that is designated to be retained as forest and may not be converted to other land use".

GUIDELINE 1.1: Build on land-use plans and forest zoning for the holistic management of public production forests

A key precondition for effective concession regimes is consistency with the long-term vision, landscape policies and development objectives of the forest. Even if the forest concession regime has no mandate to define policies, it should trigger a participatory review of forest and landscape objectives in the context of development goals, in order to ensure coherence between the concession's objectives and sustainable development. This can be achieved by: (i) implementing an iterative, participatory approach involving all relevant stakeholders; and (ii) establishing a cross-sectoral and multistakeholder platform that assesses consistency and provides for incremental improvements. Public production forests are affected by different land uses and policies, such as agriculture, mining, energy, infrastructure development and trade, and therefore need to be seen in the context of a wider land use and policy setting. All such policies need to allow for the conservation and sustainable use of forests as a means to contribute to sustainable development.

BOX 5 One Map in Indonesia

In Indonesia, as in many other countries, land-use planning and management have suffered from fragmentation and lack of transparency and cross-sectoral coordination, leading to overlapping tenures and conflicts. One manifestation of these challenges has been the compilation of different and contradictory maps used by different ministries.

In 2014, Indonesia officially implemented the One Map policy. Its objective is to harmonize all maps and data used by different ministries and subnational governments into one unified map and database, to be publicly accessible online. During the process of harmonization, detected tenure overlaps and conflicts will be identified and resolved. The process should also clarify forest concession boundaries, increase transparency of concession areas to the public, and help make concessionaires accountable for their actions. In Indonesia, One Map has already enhanced the level of mutual trust and coordination among different ministries, and increased transparency of decisions. Myanmar has also launched a One Map initiative.

In relation to forest concessions, the One Map approach can function as a tool to identify, clarify and resolve tenure overlaps. Importantly, it can also build trust among different ministries and facilitate inter-agency collaboration for coordinated land-use planning and allocation.

Source: Chan, B. 2016. Current status of forest concessions in Southeast Asia. Forestry Policy and Institutions Working Paper No. 33. Rome, FAO.

Recommendations

Relevant government agencies and other intended users are advised to:

• observe forest policy objectives and clarify the role of forest concessions as an instrument to deliver sustainable forest management in a participatory manner;

- take action to trigger the formulation of policy and legislative changes that promote long-term development vision and objectives for public production forests and forest concessions when they are absent;
- establish cross-sectoral multistakeholder platforms for consultation and deliberation
 on forest concession planning, and to ensure consistency with land use planning
 and strategies for achieving sustainable landscapes and developmental goals; and
- apply a One Map approach to ensure the alignment of policy objectives and instruments of the forest sector and other agencies relevant to forests at the highest level (see Box 5).

GUIDELINE 1.2: Enhance the response of forest concessions to development goals through the adoption of a cross-sectoral approach

The 2030 Agenda recognizes that sustainable development is not divisible and depends on integrated cross-sectoral action. Rather than proposing policies and measures in isolation, sectors should develop a shared understanding of development challenges, needs and opportunities, and identify synergies and complementarities that can deliver more efficient policy implementation. A cross-sectoral approach recognizes the importance of involving non-state stakeholders, civil society and the private sector in the policy formulation and implementation process. A cross-sectoral approach can also enhance the delivery of sustainable forest management and increase contributions from forest concessions to the different SDGs.

Recommendations

Relevant government agencies at the national level are advised to:

- identify strategic sectors and stakeholders to involve in forest concession planning and implementation;
- review existing multistakeholder platforms and partnerships and build on them to establish platforms for consultation and decision on forest concessions, avoiding the creation of overlapping or unnecessary new structures;
- continuously share information with strategic stakeholders and build on existing long-term visions and developmental objectives to agree on forest concession objectives and plans; and
- promote the participation of women and indigenous peoples, as well as relevant minorities, in cross-sectoral multistakeholder platforms and processes.

Civil society, international organizations and other intended users are advised to:

actively participate in cross-sectoral multistakeholder platforms and processes
and ensure that results are consistently shared and discussed with the respective
constituencies, in addition to gathering and conveying inputs from the constituencies
involved.

GUIDELINE 1.3: Strengthen political commitment at national and subnational levels

Forest concessions are long-term contractual arrangements for the management of public production forests, and often operate over decades. However, abrupt or radical

policy changes, diminished political priority and dysfunctional governance structures can result in ineffective functioning of the arrangement. Governments must recognize the importance of sustaining strong political commitment to forest concessions over the long term, and ensure the timely adoption of corrective and support measures to help advance sustainable forest management. In summary, the framework for concessions should ensure continuity and adapt to societal conditions and unstable markets.

Recommendations

Relevant government agencies at the national level are advised to:

- guarantee the stability of policies and transform them into long-term, future oriented plans and strategies;
- carefully assess the implications of policy changes, especially those that can have implications for the management of public forests through forest concessions and other public-private arrangements;
- ensure the continued availability of financial and human resources for monitoring and enforcement relevant to forest concessions; and
- respect and implement the recommendations of independent observers, where necessary. Civil society, international organizations and other intended users are advised to:
 - help ensure that governments remain true to their political commitments to forest concessions; and
 - plan and implement campaigns to raise public awareness of the multiple functions of public production forests and the benefits for their sustainable use and management through forest concessions and other public-private arrangements.

PRINCIPLE 2: CLEAR, CREDIBLE AND EFFECTIVE LEGAL AND INSTITUTIONAL FRAMEWORKS

A general problem affecting the sustainability of public production forests and forest concessions is a lack of clarity and consistency with regard to legal⁷ and institutional frameworks, and insufficient capacities on the part of relevant agencies to design and administer forest concession contracts. Therefore, clear, credible and effective legal and institutional frameworks are needed to set and operationalize the rules that regulate forest concessions in a country. A legal framework should clearly identify the legal instruments affecting forest concessions, and ensure that they are consistent. It must define the roles and responsibilities of relevant government agencies, and provide for sanctions and compensations associated with contract changes, non-compliance and termination of the contract by the parties to the contract. In addition, it should provide mechanisms for legal security and certainty of the acquired long-term rights, and formalization of the areas, in order to protect continuing investment by a concessionaire, and to avoid encroachment in concession areas.

⁷ The legal framework relevant to forest concessions consists of different legal instruments, and usually includes: international law, a country's constitution, statutory law, presidential and ministerial decrees, forest regulations, operative policies and procedures, and forest concession contracts.

GUIDELINE 2.1: Ensure clear and transparent legal and institutional frameworks

Clarity and transparency of legal and institutional frameworks (and the lack thereof) have profound effects on the monitoring and enforcement of concession contracts, the possibility of arbitrary interpretation of the law by officials and concessionaires, and the accountability of government agencies tasked with administering forest concessions. Transparency through full and mandatory disclosure of documents concerning the public forests can help local communities, civil society and concessionaires to contribute to concession monitoring. For example, such disclosure equips them with knowledge of which forest operations in their local area are legal, and whom to contact in the case of illegal operations. Ensuring a participatory approach to forest lawmaking also promotes transparency, reduces the potential for corruption and ensures greater equity.

Recommendations

Relevant government agencies are advised to:

- draft and/or revise legal and institutional frameworks to ensure they are simple, unambiguous and respond to the long-term policy objectives of forest concessions and relevant international commitments;
- establish participatory consultative processes to ensure that the views and needs of different stakeholders are taken into consideration by the legal frameworks;
- harmonize forest-related legal definitions;
- clarify the mandates of national and subnational authorities regarding the planning, allocation, awarding, monitoring and enforcement of forest concessions and other public private instruments; and
- ensure that regulations are publicized and are easily accessible to citizens.

Civil society, international organizations and other intended users are advised to:

• support and organize seminars, workshops and public hearings to provide information on forest-related rules and regulations to all interested parties.

GUIDELINE 2.2: Promote consistency among forest and non-forest legal and institutional frameworks

The overlapping and proliferation of regulations, as well as lack of coordination in legal and institutional frameworks at national and or subnational levels, can hamper effective management of public production forests. Such overabundance of regulations multiplies the risk of legal inconsistencies, contradictions and overlapping jurisdictions. This, in turn, can result in decisions that are more discretionary and, therefore, increases opportunities for corruption during the allocation, awarding and administration of concessions contracts. A better understanding of the linkages between different government (and non-government) agencies, and a coherent approach to public production forest issues can help to reduce uncertainty and maximize synergies. This requires strong political will and commitment at the highest levels.

Recommendations

Relevant central and provincial government agencies are advised to:

- carry out a comprehensive legal analysis to identify opportunities for simplifying the legal framework, and reduce the number of rules in response to the legal analysis;
- develop and implement coordination among different government agencies relevant for the sustainable management of public production forests at all levels;
- promote legal consistency between forest sector law and laws governing other key sectors (e.g. agriculture, energy and mining); and
- identify and eliminate incentives and subsidies for activities in sectors with potential adverse effects on forests.

Civil society and other intended users are advised to:

- provide decision-makers in the forest sector with evidence of potential cross-sectoral effects and otherwise support cross-sectoral dialogue;
- improve knowledge of ways to address cross-sectoral issues in a comprehensive manner; and
- support cross-sectoral scientific analysis.

GUIDELINE 2.3: Adapt the legal framework to international commitments relevant for the management of public production forests

While governments commit themselves to international treaties and agreements, these are not always reflected in national legal frameworks. Several of these international commitments have direct or indirect implications for the sustainable management of public production forests. These include: the Paris Climate Agreement, the Convention on Biological Diversity, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the United Nations Declaration on the Rights of Indigenous Peoples, Conventions by the International Labour Organization (ILO) and the International Tropical Timber Agreement. Management of public production forests should be in accordance with, and adhere to such international agreements and commitments, and contribute to their achievement.

Recommendations

Relevant government agencies are advised to:

- draft and/or revise legal frameworks so that they respond to the long-term policy objectives of forest concessions and relevant international commitments;
- identify international commitments that have implications for the management and administration of forest concessions;
- ensure that the relevant commitments are integrated or reflected in national law; and
- conduct periodic assessments to ensure that the design, implementation and administration of forest concessions are aligned with relevant international commitments.

Civil society, international organizations and other intended users are advised to:

• ensure that the clauses of all ratified or accepted international treaties, agreements or conventions related to the sustainable management of public forests are respected;

- ensure that relevant international treaties, agreements or conventions and the content therein are known by all stakeholders; and
- ensure that all relevant government agencies are accountable for the implementation of commitments relating to public production forests.

GUIDELINE 2.4: Ensure the presence of credible and accountable institutions to plan, monitor and enforce forest concessions

To help ensure the success of forest concession regimes, forest agencies must strengthen the administrative functions, structure and capacities required to plan, design, monitor and enforce forest concession contracts in a credible and accountable manner. (For more details on the institutional capacities required for a forest concession contract, see Principle 4: Technical and human capacity for the management and operation of concession regimes at all levels).

Forest concession systems also require changes to institutions outside the forest sector, and enhanced (lateral and vertical) linkages and coordination between forest and non-forest agencies. Furthermore, decentralized governance systems rely on strong coordination between the central government, which is often responsible for planning, designing and allocating contracts, and the provincial/local government, which is often responsible for the implementation and supervision of contracts. Lack of coordination between central and provincial/local levels impedes the translation of plans and policy actions into operational economic regimes. Where needed, governments should create transitional institutions between these levels.

Recommendations

Relevant government agencies are advised to:

- conduct an institutional analysis, including revision of the organizational mission, set-up and roles of forest and other agencies, according to a nine-step institutional analysis methodology proposed by FAO (2001), before making the decision to contract out. The nine steps are: (i) review the mission of the government forest agency, and set mid- and long-term goals; (ii) review the forest agency's mission role within the government's institutional structure; (iii) identify the tasks within the forest agency and define staff positions; (iv) create the structure for the organization; (v) design linkages and communication flows within the organization; (vi) design the decision-making system; (vii) assess equipment and infrastructure requirements; (viii) estimate budgets; and (ix) develop an implementation plan;
- assess the capacity of relevant agencies to design, monitor and enforce forest concession contracts, and consider contracting out tasks where government agencies do not have the requisite capacity;
- establish clear roles and responsibilities of forest department personnel and the extent of staff authority (who can sign which documents, who is accountable for which decisions, etc.), as well as the roles of other stakeholders; and

• ensure the transparent and competence-based selection of officers appointed to administer forest concessions and other instruments for the allocation and administration of public production forests.

GUIDELINE 2.5: Develop, implement and monitor timely measures to curb bribery and corruption

Bribery and corruption erode the credibility of any legal and regulatory framework, besides generating pervasive transaction costs that can determine the failure of forest concession regimes. The use of coordinated intelligence across government agencies, situation analysis and technology can contribute to curbing deviations, especially if sanctions are applied in an effective and timely manner.

Recommendations

Relevant government agencies are advised to:

- establish routines to promote the early detection of bribery and corruption, including through the increased use of automatic procedures and electronic documents, the rotation of officers, and analysis of information on financial and volume flows;
- cooperate with other ministries and agencies (e.g. justice, enforcement and anticorruption authorities) to obtain relevant information on suspicious activities;
- ensure provision for immediate sanctions in cases of bribery and corruption; and
- share information with the public and promote campaigns for the eradication of bribery and corruption.

Civil society, international organizations and other intended users are advised to:

 support government in their efforts to eradicate bribery and corruption through complementary transparent and independent governance monitoring, campaigns and awareness-raising activities, etc.

PRINCIPLE 3: TRANSPARENT, INCLUSIVE AND ACCOUNTABLE PLANNING, ALLOCATION, IMPLEMENTATION AND MONITORING OF FOREST CONCESSIONS

This principle lies at the heart of the Voluntary Guidelines. Even assuming that all policy and legal measures outlined in Principles 1 and 2 are in place, the success of forest concessions as an instrument to deliver manifold benefits depends on a transparent, inclusive and accountable forest governance framework, which supports good practices of sustainable forest management and markets for sustainable production. To ensure effective management of public production forests through forest concessions, tropical countries must build the capacity of relevant agencies to plan and allocate concession contracts, evaluate potential concessionaires in a transparent and accountable manner, and carry out robust and periodic on-the-ground monitoring and enforcement.

GUIDELINE 3.1: Plan and allocate forest concessions in accordance with established policy objectives

To help ensure the sustainable management of public production forests, the planning and allocation of forest concessions should be conducted in accordance with the policy objectives of forest and non-forest sectors. This approach will enhance the potential contribution of sustainable forest concessions to the SDGs, which rely on integrated cross-sectoral action to achieve higher impacts.

Recommendations

Relevant government agencies are advised to:

- design and conduct detailed multiresource inventories (e.g. timber, NWFPs, cultural services), based on exploration and scoping studies, to determine the scope and conditions of the proposed forest concessions⁸ (as proposed in ITTO's Criteria and indicators for the sustainable management of tropical forests and Voluntary guidelines for the sustainable management of natural tropical forests);
- appraise the contract area's value and design the forest revenue system, based on the detailed inventories, such that: (i) the system contributes to achieving policy objectives and matches the biophysical conditions of the area; and (iii) relevant agencies are capable of administering revenue collection;
- ensure remote sensing and georeferenced information is used in the planning of forest concessions;
- ensure planning and allocation is conducted in close coordination with relevant government agencies (e.g. agriculture, mining, energy) and other relevant stakeholders at national and local levels, making use of cross-sectoral multistakeholder platforms and processes at national and subnational levels; and
- follow international guidance on free, prior and informed consent (FPIC) during planning and allocation of forest concessions, if the concession lies within or near land occupied or used by indigenous peoples and local communities, and those groups are not themselves concession holders.

All intended users are advised to:

- encourage and support the involvement of an independent observer in the process of allocating concessions; and
- develop and implement a governance monitoring system that helps to ensure all relevant stakeholders, including women, indigenous peoples and other minority groups, have equal chances to participate in decision-making processes and can influence the outcomes.

This creates a level playing field and reduces uncertainty for interested concessionaires, leading to increased interest in the contract. It also enables the revenue system and value of the contract area to be determined, which helps potential concessionaires to assess the contract from an informed perspective.

GUIDELINE 3.2: Ensure competitive, transparent and inclusive awarding of concession contracts

As public production forests are public assets, the process of granting/awarding concession contracts must be wholly inclusive, accountable and transparent (see Box 6), with full public disclosure of all relevant information. Moreover, the awarding of contracts must follow clear and transparent procedures in order to allocate the contract to the most financially and technically capable concessionaire. This can be achieved by:

- developing and implementing clearly set selection criteria, such as financial viability, ownership information and record of accomplishment of the concessionaires in the country (or other countries if that information is available);
- developing and enforcing mechanisms aimed at ensuring compliance with these criteria and ensuring they are not abused or circumvented during the awarding process; and
- promoting the involvement of an independent observer.

Recommendations

Relevant government agencies are advised to:

- design mechanisms and procedures for awarding concession contracts following the principle of competition;⁹
- conduct good quality and recent multiresource inventories of the areas where concessions are tendered, and publish the findings;
- allow bidders to conduct their own multiresource inventories of planned forest concession areas, where relevant;
- publish and advertise concession contracts, including inventory data, to achieve maximum interest in and competition for the contract;
- verify the ability and commitment of concessionaires to concession contracts before the concessions are awarded;
- encourage and support the involvement of an independent observer in the process of planning and awarding concession contracts;
- publish awarded concessionaire rights and obligations, including summaries of the key contract terms, in an accessible and digestible format; and
- disqualify concessionaires with repeated infractions from being awarded new concession contracts.

Civil society, international organizations and other intended users are advised to:

• provide technical and financial assistance for the proper functioning of an independent observer during the awarding of forest concession contracts.

Ompetitive awarding processes can enhance transparency, reduce possibilities of bribery and corruption, and contribute to higher government revenues.

BOX 6 Transparency and social control of Brazilian forest concessions

Transparency is an important feature of the process regulating concessions of public forests in Brazil, with each stage of the process subjected to stringent social control. The main objective of concessions is to conserve natural forest cover through the development of markets for products and services from sustainably managed forests, leading to greater social welfare. Other notable benefits for forests and surrounding communities include strengthening property rights, the formal economy, public services and the State itself. To accomplish this aim, the responsible agencies must rigorously undertake several procedures, ensuring that their actions receive widespread publicity, and enabling thorough monitoring by several other organizations and society. At the federal level, the Brazilian Forest Service (SFB) is the main agency responsible for the process.

The first stage is the **compilation and publication of georeferenced data** about Brazilian public forests. This stage produces the National Public Forest Register, which provides society with a reliable source of maps, figures and databases for forest planning and management, including Protected Areas, and areas designated to indigenous peoples and forest concessions. The register is a key tool for ensuring transparency and social control, since it publicizes fundamental information about tenure and use of all Brazilian public forests. Anyone may, at any point in time, supply information and make contributions to the registry. As such, it operates in a continuous public consultation mode.

The second stage of the process is the **selection of forest areas for concession**. The Annual Forest Concession Plan compiles and describes all public forests that may be conceded in the following year. Naturally, all areas must be included in the register before selection by the Annual Plan. Federal and state agencies responsible for forest concessions submit a draft plan for public consultation. A Public Forest Management Commission must also evaluate this. At the federal level, the Commission is formed by agencies from federal, state and municipal governments, research institutions and civil society organizations with experience in matters regarding forest management, the environment, industry and traditional communities, who must be equitably represented. Meetings are public and their minutes are available on the Internet. After the consultation process, SFB analyses all contributions, makes the necessary adjustments and publishes the plan. The process is repeated each year.

The next stage involves **preparing the public bidding documents for concessions**. These include bidding rules, selection criteria and concession contracts, as well as several annexes with technical information about forest characteristics and inventory, available infrastructure, and specific social and environmental reports. Before publishing a draft of bidding documents for public consultation, local authorities, companies, forest management community councils and other stakeholders are consulted. Afterwards, draft bidding documents become openly available before all public hearings. The government collects contributions through a

Box continues on next page

Box continued

variety of channels, including via email, telephone, post, anonymously completed forms and during the public hearings, which are recorded in video. All meetings' minutes are published on the Internet. After the consultation process, all contributions are answered in detail, and published in a report. Finally, SFB makes the necessary adjustments, publishes the bidding documents and promotes the concession to attract interest from as many parties as possible.

Forest concessionaires must comply with SFM rules fixed in legislation and in concession contracts. Once they are signed, contracts and their addenda are instantly made public. Concession contracts contain a wide set of obligations for concessionaires, including four main criteria used in the public bidding process to select a winner: lowest environmental impact, highest direct social benefit, highest efficiency of forest resource use and highest value-added to timber in the concession area. For each of the criteria, there is at least one indicator. The government evaluates indicators annually.

The Brazilian Forest Service closely monitors all concession contracts, encompassing concessionaires' activities, forest production, financial obligations, and adherence to legislation and to the concession contracts, especially the commitments assumed in the bidding process. Monitoring results are summarized in the Public Forest Management Report, which is published every year, and sent to federal control agencies and to the National Congress.

In order to monitor federal concession contracts, the government uses the following main instruments:

- systems for production control, timber traceability and remote sensing, through satellite images and overflights
- detailed field validation of concessionaires' implementation of SFM practices and forest protection measures
- experimental forest plots to evaluate forest development dynamics and possible impacts on biodiversity
- assessment of environmental, economic and social impacts of forest concessions on their area of influence

One of the main monitoring tools implemented by SFB is the **Chain of Custody System**. The system monitors the timber origin and guarantees the traceability of forest products. This system is also available in English and Portuguese as an app for mobile phones and tablets, allowing anyone to verify timber traceability and access production reports from federal concessions. The main objective of the app is to add another layer of transparency to forest concessions and provide a user-friendly tool to check timber origin by stakeholders and the general public. Concessionaires use the system to show compliance to rules and legal origin of the timber traded, especially to international markets.

Recently, Brazilian forest concessions have also been subject to **independent forest audits** by third party organizations, which must evaluate and qualify forest activities, as well as environmental, economic and social obligations in the concession contracts.

Source: Serviço Florestal Brasileiro (SFB) - Brazilian Forest Service, Brazil

GUIDELINE 3.3: Encourage independent and voluntary forest certification as well as industrial processes

The key benefits of independent forest certification are sustainability and legality. By adopting independent forest certification, concessionaires can, for instance, improve sustainable forest management practices, enhance the cost-efficiency of forest operations, avoid conflicts with customary right holders in and near concession areas, and gain reputational benefits, including healthy and safe working conditions. For governments, sustainability certification and legality verification schemes can function as complementary tools to ensure that concessionaires adhere to SFM and/or comply with the legal frameworks and terms of the contract. Nonetheless, there are technical and financial challenges related to the adoption of independent certification, as technical capacities are not always locally available and not all markets reward certified timber with a price premium. Options to overcome such challenges are available (see Box 7). Independent and voluntary certification also constitutes a direct contribution to the SDGs, since 'Indicator 15.2.1, Progress towards sustainable forest management' incorporates the proportion of forest area under sustainable management plans as a subcomponent.

BOX 7 The Borneo Initiative

The Borneo Initiative is a foundation established in 2008 that promotes the sustainable management of forests in Indonesia. It was established to overcome important challenges related to attaining certification, such as associated costs and technical capacity needs. Its objective is to contribute to the increase of certified natural forest area in Indonesia, prioritizing concessionaires whose management area covers more than 75 000 ha, for reasons of cost-efficiency. The initiative provides financial and technical assistance to concessionaires, linking them to a professional network of experts who can guide them through the certification process. It has already led to an increase of more than 2 million ha of natural forest area certified under the Forest Stewardship Council (FSC).

Source: https://theborneoinitiative.org.

Recommendations

Relevant government agencies are advised to:

• provide incentives to adopt independent certification of sustainable forest management, not just within the forest concession awarding process, but also through procurement policies and other policy instruments.

All relevant intended users are advised to:

• develop mechanisms that allow the transfer of technical capacity to concessionaires, so as to facilitate their certification.

Concessionaires are advised to:

• seek independent sustainability certification and/or legality verification as a means to improve long-term economic feasibility, social acceptance, and the forest and environmental management of forest concessions.

Civil society, international organizations and other intended users are advised to:

• support campaigns on the benefits of sustainable products and independent certification of sustainable forest management.

GUIDELINE 3.4: Ensure the effective monitoring and enforcement of concession contracts

Monitoring and enforcement play an essential role in ensuring that forest concessions proceed in accordance with legal frameworks and the terms of the concession contract. In general, monitoring and enforcement aim to:

- achieve compliance (i.e. activities are carried out on time in a cost-effective manner, and according to the terms stipulated in contracts);
- identify problems during contract implementation to avoid irreversible damage and to take timely remedial actions when required;
- maintain a competitive concession system; and
- enhance the transparency of government decisions.

Comprehensive monitoring and evaluation covering economic, social and environmental aspects can help to reveal the full range of benefits and challenges from forest concessions and ensure that sustainability parameters are met. For more details on key variables for monitoring forest concessions, see Table 6.

Recommendations

Relevant government agencies are advised to:

- design a monitoring system that is cost-effective and aligned with the objectives
 of forest concessions and, where possible, involves key stakeholders in particular
 communities (see Box 10 under Guideline 5.3);
- ensure that monitoring systems cover the operational, economic, social and environmental aspects of forest concessions;
- ensure that monitoring procedures, compliance criteria, frequency of monitoring, logistics for monitoring, and reporting format and processes are predefined within concession contracts;
- ensure that sufficient staff with appropriate expertise in the full range of forest management activities and variables are available for monitoring and enforcement of concession contracts;
- implement mechanisms for effective communication on enforcement systems by relevant government agencies at national and subnational levels, and coordination among these bodies;¹⁰

¹⁰ The major components of enforcement systems comprise legislative bodies, legal instruments, enforcement agencies and courts.

- incorporate mechanisms for dealing with corruption into the monitoring and enforcement system at all levels;
- ensure that penalty provisions and incentives to promote compliance are fully developed, clear and understandable;
- involve communities, civil society and independent observation in monitoring, inspection and enforcement reporting; and
- devise and implement mechanisms to ensure that outcomes from monitoring and enforcement are used to improve forest management practices, contract management and monitoring systems.

Civil society and international organizations are advised to:

- promote independent forest monitoring visits to strengthen official controls and audits (see Box 8); and
- conduct education and training of concessionaires and communities in contract obligations, laws and regulations, and compliance.

Concessionaires are advised to:

• prevent bribery and corruption, for example, by observing Transparency International's Business Principles for Countering Bribery or ISO 37001;¹¹

BOX 8 Independent Observer of forest infractions in Cameroon

In 2001, the Government of Cameroon appointed the first Independent Observer for the forest sector. The Independent Observer is a civil society organization that monitors forest infractions and exploitation, in cooperation with the forestry administration. It contributes to monitoring and observing different phases of forest law enforcement in Cameroon, thereby enhancing objectivity and transparency. The Independent Observer is appointed and recognized by the Government and has access to relevant data collected by the forestry administration. The application of independent monitoring has improved forest governance in Cameroon, both in terms of transparency and public information disclosure. This, in turn, has heightened the sense of accountability of authorities. The activities of the Independent Observer have drawn attention to forest law violations, such as illegal logging.

In contexts characterized by a lack of transparency, the appointment of a credible and independent third party (such as a civil society organization) as an Independent Observer can help government administrations to monitor forest law compliance. It can also enhance transparency and accountability in the implementation and administration of forest concessions.

Source: Topa, G., Karsenty, A., Megevand, C. & Debroux, L. 2009. The rainforests of Cameroon: experience and evidence from a decade of reform. Washington, D.C., World Bank.

¹¹ ISO 37001:2016 specifies requirements and provides guidance for establishing, implementing, maintaining, reviewing and improving an anti-bribery management system. For more details, see www.iso.org/standard/65034.html.

- conduct periodic monitoring and reporting of the forest management implementation progress; and
- provide, upon request, a summary of monitoring results (while respecting confidentiality of information).

GUIDELINE 3.5: Ensure transparent and independent mid-term and end-of-cycle evaluations and response measures

Mid-term and final evaluations play a critical role in ensuring effective adaptive management of forest concessions. They enable early detection of challenges, opportunities and lessons from the implementation of sustainable forest management and concession contracts, and the systematic review of results from the concession against its established objectives.

Recommendations

Relevant government agencies are advised to:

- include the obligation for independent mid-term and final evaluations and response measures in forest concession contracts;
- incorporate independent mid-term evaluations into the management and monitoring
 of the concession contract, including the implementation of response measures by
 responsible stakeholders;
- provide response measures to the independent final evaluation for implementation by responsible stakeholders; and
- publish the results of both the mid-term and final independent evaluations.

Concessionaires are advised to:

• take the independent mid-term and final evaluations seriously, and collaborate with evaluators regarding the results and any necessary corrective measures.

Civil society, international organizations and other relevant intended users are advised to:

• take note of the external evaluation results, distil and share the lessons learned, and support the adoption of corrective measures.

GUIDELINE 3.6: Design and implement timely measures to manage concession areas post-contract

Sustainable forest management is a continuous process and assumes that areas under a forest concession are capable of supporting a new harvesting cycle, while conserving their environmental integrity. Any absence of authority or actual management following the termination of a concession contract can leave forests vulnerable to illegal logging, encroachment and conversion to other uses such as agriculture. Countries must therefore have effective mechanisms and procedures in place to manage or transfer forest concessions, which ensure that the forest is unaffected during the post-contract period.

A formal system and procedures are needed for situations where: (i) the contract is rescinded and will be awarded to a new concessionaire; (ii) the contract is rescinded

but the area must be restored before it can be awarded once more; (iii) the contract has expired and will be awarded to a new concessionaire; (iv) the contract has expired but the area must be restored before it can be awarded again; and (v) the contract has expired and will be renewed. In the last scenario, it may be advantageous to subject the renewal to a satisfactory implementation performance following an independent evaluation.

Recommendations

Relevant government agencies (in collaboration with civil society, international organizations and other interested stakeholders) are advised to:

- conduct a participatory resource assessment or inventory to ascertain the condition, biodiversity and values of the remaining forest areas;
- design mechanisms and procedures to award rescinded and expired concessions to new concessionaires, including in the case of the abandonment of concession by a concessionaire;
- implement the restoration of degraded concessions drawing on ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests;
- design concession contracts with performance-based contract renewal conditions; and
- ensure an unbiased and independent audit to evaluate the performance of a concessionaire, and extend the contract if the renewal conditions are met.

PRINCIPLE 4: TECHNICAL AND HUMAN CAPACITY FOR THE MANAGEMENT AND OPERATION OF CONCESSION REGIMES AT ALL LEVELS

In most tropical countries, there is a significant gap between the need for and supply of skilled and trained personnel within forest agencies, private companies and communities. Lack of available qualified personnel at all levels in the public and private sectors, and among communities, has led to shortcomings in planning, awarding, management and administration, and functions as a powerful constraint on forest concession performance. This issue affects both the implementation of sustainable forest management plans and concession contracts for forest operations.

To improve the situation, governments, together with international organizations, civil society and the private sector, should take a long-term view by investing in continuous training and educational systems at all levels, to provide managers and workers with the knowledge and skills demanded by forest management and operations. Training should incorporate capacity-building in all dimensions of sustainable forest management and include not only technical training, but also in the areas of commercial and community SFM, traditional knowledge, private and community interests and activities, conflict resolution and rights. The Malaysian state of Sarawak provides an example of this approach (see Box 9).

BOX 9 **Building and maintaining technical competency in SFM**

A certain level of technical competency is needed by all stakeholders: from those planning and awarding forest concessions to those awarded and operating forest concessions. Professional skilled and trained personnel are vital if sustainable forest management is expected from forest concessions.

Skill capital has to be built up and maintained by continuous training, as labour mobility will deplete such capital over time. Skills development must be an ongoing exercise in order to retain suitably qualified personnel. The issue of capacity is critical, and the scale of need is enormous, but appreciation of the problem is low. Over the years, countless capacity-building and training projects have failed to close the skills gap.

A novel and unique approach appears to be working in the Malaysian state of Sarawak. In 2006, the Sarawak Timber Association (STA) launched a training programme with Lincoln University of New Zealand to deliver a Postgraduate Diploma in sustainable tropical forest management. The partnership was the result of growing recognition at STA of existing deficiencies in training, and the potential of teaching expertise in vocational courses offered by Lincoln University.

The course trains staff in relevant skills to undertake sustainable management of forests in the tropics. It is delivered in blocks spread over two years to accommodate working managers. Initially, the course covered six subjects but is updated periodically to address current issues: (i) Forest Economics and Policy, (ii) Sustainability – Theory and Practice, (iii) Tropical Forest Biology and Silviculture, (iv) Forestry in Sarawak, (v) Tropical Forest Planning and Harvesting, and (vi) Tropical Forest Utilization.

Entry level for the Postgraduate Diploma is a basic university degree. The course consists of lectures and tutorials, practical exercises, assignments and examinations. The lectures are delivered by Lincoln University teaching staff, as well as locally recognized experts with hands-on experience. The diploma can be articulated into a Master's degree with supplementary research and two short papers. The course takes a 'hands-on' approach, often missing from a general forestry degree.

To date, three cohorts of 50 students, all of whom work in private timber companies in Sarawak, have graduated from this course, and the fourth cohort is currently under training. The success of this course is due to the realization by timber companies of the need for appropriately trained personnel in order to carry out SFM. In addition, the companies jointly fund the training programme.

This Postgraduate Diploma course can be replicated in other countries by customizing the subjects to fit local situations. The fundamentals of SFM remain similar, but local laws, forestry sciences and other enabling conditions must be addressed through the course work.

More information: http://www.lincoln.ac.nz/Study/Study-Options/Forestry-Management-in-Sarawak/ and http://sta.org.my/index.php/subsidiary-company/sta-training-sdn-bhd/training/management-training

Source: Barney Chan, Independent consultant, Sarawak, Malaysia

GUIDELINE 4.1: Develop and retain appropriately qualified personnel in government agencies related to policy and legal frameworks, development, implementation, monitoring and enforcement of forest concessions

Policy, legal and institutional frameworks regulating forest concessions require qualified civil servants for development, implementation, monitoring and enforcement. This calls for long-term, robust capacity development programmes for relevant personnel in forest agencies, to help them obtain, improve and retain the skills and knowledge needed to do their jobs competently.

Recommendations

Relevant government agencies are advised to:

- build partnerships with the private sector, civil society and international organizations to establish one or more training centres for sustainable forest management, focused on management and operations, and including practical knowledge;
- partner with educational institutions and education authorities to develop and strengthen forestry and land use curricula, with the inclusion of disciplines needed to support practical sustainable forest management in tropical forests, including community traditional knowledge;
- conduct on-the-job training for forestry and forest concession staff;
- invest in multidisciplinary training of personnel and ensure trained staff are allocated to the management of forest concessions; and
- promote training on issues related to the relationship between forest concessions and local communities.

The private sector, civil society, international organizations and other relevant stakeholders are advised to:

• encourage and support the participation of governmental staff in national and international seminars and workshops on public-private partnership, SFM, forest and environmental law and policy, etc.

GUIDELINE 4.2: Ensure that continuous technical and operational training on sustainable forest management is available for all relevant stakeholders at all levels

There is increasing recognition of the close link between skilled and qualified personnel, operational efficiency and reduction of damage to the environment. Implementation of SFM in tropical forests requires continuous training in the application of recent techniques on low-impact logging as well as multiple use of forests. Training for personnel engaged in forest concessions or community management should cover not only long-term academic training, but also the short-term needs of technical workers such as chainsaw operators, truck drivers and mechanics. Capacity-development programmes for sustainable forest management should be available continuously and offered through a basic programme complemented by a flexible offer of shorter training sessions based on identified needs. Capacity development is also a tool for empowerment and will

contribute to more knowledge-based decisions on the overall management and operation of forest concession regimes.

Recommendations

Relevant government agencies are advised to:

- in partnership with the private sector and local communities, identify needs for long-term and short-term training and develop capacity-building objectives;
- in partnership with the private sector, civil society and international organizations, establish one or more training centres on sustainable forest management, with a focus on management and operations, and including traditional knowledge;
- partner with educational institutions and education authorities to develop and strengthen
 forestry and land-use curricula to include disciplines required to support practical
 sustainable forest management in tropical forests, including traditional knowledge;
- in partnership with the private sector, civil society and international organizations, promote and support demonstration programmes for training and extension in sustainable forest management.

Concessionaires (along with civil society and international organizations) are advised to:

- develop and implement extensive training for all new and existing employees, refresher and proficiency training programmes for all staff at different working levels and positions, and mentorship programmes that allow senior workers to transmit their knowledge to younger working generations;
- partner with local schools and colleges to introduce younger generations to the possibility of a career in forest operation before they finalize their career path; and
- build and motivate personnel involved in sustainable forest management and forest operations, and provide competitive salaries as well as performance-based rewards.

GUIDELINE 4.3: Promote capacity-building, skills development and employment of women, indigenous peoples and other minority groups

The inclusion and empowerment of disadvantaged groups is key to effective sustainable forest management. Ensuring access of women, indigenous peoples and other minority groups to capacity-building and skill development activities is crucial for the creation of a more equitable and efficient forest concession regime. Access depends not only on the availability of training, but also on training formats shaped to address the needs of specific groups, such as the time and location of training sessions, a curriculum attractive to specific groups, and targeted language or communication tools and techniques.

Recommendations

The relevant government agencies are advised to:

• in partnership with concessionaires and civil society, ensure that capacity-building programmes and academic curricula are gender sensitive and inclusive of indigenous peoples and other minority groups.

The relevant government agencies, concessionaires, civil society and international organizations are advised to:

- disseminate information on training and skills development programmes through women's, indigenous peoples' and other minority groups' networks;
- facilitate the participation and access of women, indigenous peoples and other minority groups in training initiatives;
- promote the inclusion of traditional knowledge and issues specific to women, indigenous peoples and other minority groups in capacity-building programmes and specific training courses; and
- follow up and update the skills of women, indigenous peoples and other minority groups, and ensure their inclusion in professional activities within forest concession regimes.

Women, indigenous peoples and other minority groups are advised to:

- engage in capacity development programmes and training activities; and
- liaise with capacity development leaders to incorporate traditional knowledge into regular training courses.

GUIDELINE 4.4: Respect workers' rights and abide by national and international regulations that guarantee healthy and safe working conditions

Many forest workers are underpaid and have no formal work contracts, leaving them without legal rights to social security. Often, employees have to work in poorly planned and organized conditions, exposing them to accidents or risks of accidents. In addition, they may need to stay overnight in forest camps that lack proper conditions for accommodation, basic supplies and sanitary facilities.

Forest concessionaires should provide all workers with a work contract, abide by minimum wage regulations and assume responsibility for all social security charges required by national law. Workers should also have the right to organize and voluntarily negotiate with their employer (ref. ILO conventions 87 and 98). In addition, concessionaires should ensure that working conditions are well organized, that workers are trained for safe operations and have the necessary safety equipment at their disposal, and that forest camps are adequately equipped.

Recommendations

The relevant government agencies are advised to:

- require under the concession contract that concessionaires respect all applicable labour laws and regulations on occupational health and safety, and implement adequate controls;
- take into consideration the economic burden of labour costs and arrangements related to safe working conditions and forest camps when setting the contract prices for land, goods and services;
- promote relevant forest certification schemes, including requirements and guidelines to ensure security at work;
- disseminate occupational safety and health concepts in forestry education and training;
- update and increase awareness of existing safety regulations for wood harvesting among logging companies and workers; and

- apply the ILO Guidelines for Labour Inspection in Forestry, where necessary. The concessionaires are advised to:
 - ensure that the concession abides by all labour laws, including the relevant ILO conventions;
 - apply the ILO Guidelines on Occupational Safety and Health Management Systems;
 - develop and implement a policy for occupational health and safety;
 - plan and organize forest work in a manner that reduces health and safety risks to the maximum extent possible;
 - provide workers with training in proper working techniques and accident prevention;
 - develop and implement a permanent career development plan for workers; and
 - furnish forest camps with the necessary amenities for drinking water, meals, accommodation and personal hygiene.

PRINCIPLE 5: LONG-TERM ECONOMIC AND FINANCIAL SUSTAINABILITY

High revenue collection expectations on the part of the state, and costs borne by the application of SFM practices and legal compliance can challenge the long-term economic and financial sustainability of forest concessions. It is a common concern that the market prices of timber, non-timber products and services may not cover the costs of sustainable concession management. It is therefore critical to put in place instruments to ensure that forest concessions deliver sustainable forest management, including economic viability and expected socio-economic benefits.

GUIDELINE 5.1: Ensure that the characteristics of forests and the length of the concession contract are consistent with sustainable harvesting potential

Concessionaires can face significant economic and profitability challenges if the concession is unable to provide a steady source of income throughout the contract period. Therefore, while identifying and planning concession areas, it is important to balance the area's size, the natural properties of the forest and harvesting capacity (e.g. growing stock, biodiversity and accessibility), as well as products and services considered within the concession contract and the contracting period. This should allow the concessionaire to have profitable long-term business opportunities, without compromising the area's sustainable harvesting potential, regeneration capacity and environmental integrity.

Recommendations

The relevant government agencies are advised to:

- design and implement concession areas consistent with sustainable harvesting potential throughout the whole concession period;
- ensure that forests destined for concessions can count on economically feasible access and infrastructure for operations; and
- ensure that forests destined for concessions can meet economic, environmental and social regulations in a cost-effective manner.

GUIDELINE 5.2: Ensure that reliable economic information is available and taken into consideration in the design of forest concessions

Inaccurate and missing or non-disclosed information on planned concession areas may provide an unrealistic picture of the business opportunities and costs. Economic information on volumes, prices, costs for compliance with regulation, infrastructure, etc. should inform the calculation of minimum prices, fees and royalties, and should be made available to all potential concessionaires to facilitate proper due diligence.

Recommendations

The relevant government agencies are advised to:

- ensure that the minimum prices, royalties and fees to be paid by concessionaires are based on realistic economic information; and
- as part of competitive bidding processes:
 - include information supporting the estimations of expected financial and economic results in the tender dossier;
 - distribute additional information requested by any bidder to all bidders who have shown interest in the concession area;
 - require potential concessionaires already involved in the bidding and/or contracting phase to address and commit to complying with all obligations and conditions identified in the information provided.

The concessionaires or concessionaire candidates are advised to:

- perform proper due diligence, based on the information provided in the tender dossier prior to submission of a bid; and
- ask for additional information if the datasets provided seem inadequate.

GUIDELINE 5.3: Ensure the financial and technical capacity of concessionaires for operating activities and necessary investments

Awarding contracts to concessionaires that lack adequate financial resources, technical skills or equipment can result in losses in revenue collection for administrations, local service providers and other enterprises involved directly or indirectly in managing the concession. There is also a significant risk that improper concession operations will result in deterioration of the natural environment.

Business plans are key elements for the financial evaluation of potential concessionaires. The plans should describe the financial capacity of the concessionaire to operate the concession and make the necessary investments. Potential concessionaires should be able to demonstrate clearly that their technical and economic capacity is sufficient, and in line with the objectives of their concession implementation plan.

Once concession management is in the operational stage, the government is expected to conduct systematic and periodic monitoring of the concessionaire's technical capabilities. Monitoring of the concessionaire's technical capacity could be integrated into performance monitoring of the concession management.

Recommendations

The relevant government agencies are advised to:

- share in a transparent manner all relevant economic information on the concession area with potential concessionaires for an economic and financial viability analysis;
- request the concessionaire to provide a business plan and an economic feasibility
 evaluation, which should be taken into consideration during the concessionaire
 selection process, irrespective of whether competitive bidding or direct contracting
 is applied;
- request the concessionaire to present recent financial statements in support of its business plan;
- require financial guarantees to back up the concession contract;
- incorporate systematic and periodic financial and technical assessment into the overall performance monitoring of the concessionaires; and
- consider providing candidates with assistance to access financial resources, technical support and capacity-building, in particular when the allocation of concessions targets non-profit organizations, communities or small and medium-sized enterprises.

The concessionaires or concessionaire candidates are advised to:

- prepare a business plan that allows for appropriate economic and technical analysis; and
- establish reliable economic and financial controls for concession operations, available for periodic monitoring.

Civil society, international organizations and other relevant stakeholders are advised to:

- provide support for capacity-building of forest concessions operations, including proper economic and financial management; and
- provide support, where necessary, to enable transparent monitoring of economic and financial capacity and performance.

GUIDELINE 5.4: Use financial and fiscal instruments to achieve the expected outcomes of forest concessions

Governments are encouraged to actively use policy, finance and fiscal instruments to contribute to the achievement of the concession's expected outcomes. These outcomes may be direct (contractually binding) or indirect (contractually non-binding changes in the operational, ecological or social environment). The selection of an appropriate instrument depends on the objective of government intervention. Examples of such instruments include:

- the use of incentives to support concessionaires who invest in product diversification, optimization of biomass use, and production or processing capacities that draw on the principles of sustainable forest management;
- tax relief or other incentives for concessionaires who have managed to improve their economic, environmental and/or social performance (e.g. reduced waste production, made positive contributions to local economies, achieved improvements due to successful application of forest certification or legality verification schemes), in accordance with objective and transparent criteria and related performance assessments;

- protection of new and innovative timber processing by granting temporary log quotas for the industry line;
- financial conditions for the improvement of production, and environmental and social performance (e.g. increased production efficiency, restoration of degraded areas or construction of infrastructure in villages); and
- procurement policies supporting sustainable forest products.

While government steering instruments may prove effective in addressing a specific issue, they may also have adverse consequences. For example, more efficient use of raw materials may reduce the availability of timber and fuelwood to communities. Therefore, it is important to acknowledge the impacts of instruments on the economic, ecological and social environment.

Recommendations

The relevant government agencies are advised to:

- actively use policy, finance and fiscal instruments to enable or improve conditions, in order to achieve the expected outcomes of concession management (see Box 10); and
- ensure proper application of policy, finance and fiscal instruments and prevent corrupt practices, by periodically reviewing results and adopting corrective measures as appropriate.

The concessionaires are advised to:

- develop remedial actions or seek other solutions in cooperation with the government, which may include the application of specific steering instruments to boost the effectiveness or efficiency of planned actions; and
- inform the relevant government body of any fraudulent use of government steering instruments by officials, private sector actors or other parties.

Civil society, international organizations and other relevant stakeholders are advised to:

- support and conduct research and development on product diversification (added value), biomass use optimization and multiple product utilization for stakeholder benefits; and
- facilitate partnerships with like-minded buyers to support and maintain good practices, enhanced industrial performance and the implementation of SFM.

GUIDELINE 5.5: Ensure that concessionaires have adequate access to finance

Management of concessions requires long-term capital investments. Such investment needs can be significant, especially in the pre-operational stage and at the beginning of the operational stage. In addition, operational activities can require considerable financial resources. Many concessionaires are likely to need external capital to finance contractually obliged long-term investments at different stages of the concession management approach. Limited access to finance can thus be a major dilemma for many technically capable concessionaires.

BOX 10

Forest policy reform in DRC - Transition to value added exports

From colonial times, the forest sector in the Democratic Republic of Congo (DRC) had been governed by the Royal Decree of 11 April 1949, where the method of allocating forest concessions was by negotiation. The guarantee of supply was the document issued by the ministry in charge of forests, which gave the concession holder the right to possession of the forest concession for a period of time, renewable every 25 years.

With the evolution of science and technology, this law was no longer adapted to the current political, economic, social and environmental context. That is why in 2002, the Forest Code was introduced. The code is a legal instrument of the DRC's national sustainable forest management policy, aiming to promote the rational and sustainable management of forest resources to increase their contribution to the economic, social and cultural development of present generations, while preserving forest ecosystems and biodiversity for the benefit of future ones.

The Forest Code is a set of provisions governing the status, management, conservation, exploitation, monitoring and control of forests and forest lands. The main measures are as follows:

- three categories of forests are provided (unlike the old law): classified forests, protected forests and permanent production forests (these are subtracted from protected forests following a public inquiry);
- the creation of a forest cadastre at the level of the central and provincial administrations;
- the establishment of a National Advisory Council and Provincial Forest Advisory Councils:
- the allocation of forest concessions by auction (however, this measure does not concern the old forest titles that have been converted into a forest concession contract):
- the signing of a forest concession contract (CCF) to replace the supply guarantee;
- the sustainable development of natural resources, introducing two concepts: forest inventory and forest management;
- the signing of social clause agreements between the forest concessionaire and local communities located within a five-year development block (Blocs d'Aménagement Quinquennaux, BAQ) whose operating life is 5 years – this means that after 5 years the forest concession holder signs new agreements in a new BAQ, and with other local communities;
- the establishment of a forest taxation policy to guarantee sustainable management of
 the forest resource, an incentive for good forest management practices, and conciliation of forest management objectives, development of the forest industry and the
 growth of forest revenues.

Box continued

Forest sector reform

The application of the Forest Code led to the reform of the forestry sector. It began by suspending the allocation of new forest concessions, known as the Moratorium for new concession contracts. The aim was to take stock of all 156 forest concessions to evaluate those in operation for which taxes are paid, and whose processing units are functional. At the end of this process, 81 forest titles were deemed convertible. Of these, 66 had signed forest concession contracts (FCC), 21 concessions had been surrendered, 3 were suspended concessions and 57 were owned by forest concessionaires. Currently, there are other buyers who want to take on some returned concessions. Forest concessionaires have now begun the process of developing their forest concessions.

The Forest Code is currently under revision in order to address some of the weaknesses noted, and the continued evolution of the country's forestry sector.

Source: Pépé Dungu Nteke, Direction de la Gestion Forestière (DGF) – Ministère de l'Environnement et Développement Durable (MEDD), DRC

Recommendations

The relevant government agencies are advised to:

- survey the economic and financial needs of concessionaires;
- in partnership with the private sector, international organizations and civil society, develop funding instruments to support the improved performance of forest concessions:
- ensure that concession investments are in line with good practices, and respect the principles of good corporate governance and responsible investments (see Box 11); and
- consider multiple use of forests in the design of forest concessions to strengthen their economic performance.

The concessionaires are advised to:

• actively explore options for enhanced finance.

GUIDELINE 5.6: Contribute to strengthening local economies through financially and technically viable forest concessions

Forest concessions can act as an effective boost for local economies, if this aspect is clearly included in the expected outcomes. Concessions can have a remarkable influence on local economies by providing job opportunities for the local labour force; purchasing services from local enterprises (e.g. contractors for the actual concession operations and other service providers), and integrating local enterprises into the value chain of products and services from the concession (e.g. further processing, development of new products and services, marketing).

Partnerships with local enterprises can prove beneficial for concessions by increasing and diversifying their economic activities and stability. Forging links with strong local

BOX 11

FAO's Principles for Responsible Investment in Agriculture and Food Systems

FAO's Principles for Responsible Investment in Agriculture and Food Systems (RAI) acknowledge that the starting point for defining the contribution of responsible investment in agriculture, forests, fisheries and food systems to socio-economic elevation is recognition and respect for human rights.

RAI consists of a set of 10 principles that apply to all types and sizes of agricultural investment, including fisheries, forests and livestock. They address all stakeholders and apply to all stages of the value chain. The 10 principles and guidelines are globally applicable and include actions to address a range of environmental, social and economic issues. The 10 principles are:

- 1. Contribute to food security and nutrition
- 2. Contribute to sustainable and inclusive economic development and the eradication of poverty
- 3. Foster gender equality and women's empowerment
- 4. Engage and empower youth
- 5. Respect tenure of land, fisheries and forests, and access to water
- 6. Conserve and sustainably manage natural resources, increase resilience and reduce disaster risks
- 7. Respect cultural heritage and traditional knowledge, and support diversity and innovation
- 8. Promote safe and healthy agriculture and food systems
- 9. Incorporate inclusive and transparent governance structures, processes and grievance mechanisms
- 10. Assess and address impacts and promote accountability

Source: FAO. 2014. Principles for responsible investment in agriculture and food systems. Rome, Committee on World Food Security, FAO. Rome (available at http://www.fao.org/3/a-au866e.pdf).

or provincial partners who, for instance, are responsible for regional or national sales of products from the concessions, can play a valuable role in counterbalancing turbulence on international markets.

Developing or using existing national funds to channel revenues from concessions to boost local forest development can also help to ensure that concessions contribute to increasing the value of standing forests and forest protection, while also supporting poverty alleviation and rural development.

Recommendations

The relevant government agencies are advised to:

• in partnership with the private sector, local communities and local governments, promote close linkages between concession operations and local businesses and the workforce;

- closely integrate forest concessions in programmes to develop rural areas, in consultation with the private sector and local communities, and in collaboration with local governments; and
- in partnership with the private sector, local communities and local governments, create or use existing benefit distribution mechanisms, such as forest funds, to channel revenues from forest concessions to local forest development.

The concessionaires are advised to:

- seek opportunities to add value to the local value chain, including by engaging local businesses and developing innovations;
- build partnerships for investment in capacity-building of the local labour force and service providers; and
- participate in the development of infrastructure at local and provincial levels.

Local governments and civil society are advised to:

- collaborate on and discuss opportunities and actions for enhanced sustainable forestry through multistakeholder platforms and economic fora; and
- assess and monitor the performance of sustainable forest value chains, including by developing sustainability indicators and proposing action plans.

GUIDELINE 5.7: Establish and apply mechanisms for effective and transparent revenue collection, reinvestment and benefit sharing

The main objective of forest concessions is to deliver equitable socio-economic benefits through effective sustainable forest management of public production forests. Mechanisms for revenue collection and distribution are critical to the achievement of this objective, and legitimize the allocation of state property for private or communal use.

Transparency in revenue collection and distribution is a key element for building trust in government systems, and preventing corruption and other illegalities. Up-to-date information on revenue collection and distribution should be easily accessible to all interested parties.

Recommendations

The relevant government agencies are advised to:

- ensure access to reliable data on production quantities or sales of services, and use
 the data to determine payments (e.g. government officials measure harvested logs
 or use external service providers to obtain the measurements), making use, where
 possible, of certified electronic information and documents;
- apply transparent and effective benefit distribution systems for collected fees, taxes, royalties, etc., with agreed shares distributed to the different stakeholders;
- monitor the functioning of the benefit sharing system; and
- regularly publish information on revenue collection and distribution, and/or make available up-to-date information on the Internet (public domain). Where possible, make information available at the level of individual concessions.

The concessionaires are advised to:

- observe Transparency International's Business Principles for Countering Bribery or ISO 37001;
- inform the relevant designated body of any attempts to improperly collect fees, taxes or other charges; and
- regularly publish reports, including information on payment of fees, taxes and other payments to the government and other parties (e.g. affected communities).

GUIDELINE 5.8: Protect markets from competition with products from illegal forest activities

Illegal logging, unauthorized clearing of forests for other land use, and other illicit uses of forest resources represent serious threats to the maintenance of forest cover, and cause losses in income generation for landowners and those with legal use rights. Compliance with regulation for sustainable forest management requires substantive investment, which is not borne by illegal producers. Illegal forest products introduce a downward trend on markets, as they do not reflect the real production costs of forest products. The economic sustainability of forest concessions is fundamentally affected by competition with illegal products. Furthermore, forest concessions can be targets for illegal activities, with the forest resources of a concession subject to unauthorized utilization, causing economic losses to the concessionaire.

Recommendations

The relevant government agencies are advised to:

- in partnership with local governments, the private sector, civil society, local communities and international organizations, include the problem of illegal forest activities in multistakeholder discussions on the development of rural areas (e.g. land-use planning, community development, education, job creation), setting up a common agenda to curb illegality;
- assess the risk of illegal forest activities prior to the allocation of concessions;
- encourage concessionaires to implement the most recent available technology to monitor and trace production;
- ensure that law enforcement units have sufficient capacity and resources to effectively prevent illegal activities on the ground;
- encourage the adoption of independent certification of forest production; and
- encourage businesses to require proof of legality in their respective supply chains, including through certification.

The concessionaires are advised to:

- allocate adequate resources and implement measures to prevent illegal forest activities from taking place within the concession area;
- adopt independent voluntary certification and use the certification process to outline measures to combat illegal forest activities;
- share lessons learned to ensure legality and curb illegal activities; and
- implement the most recent available technology to monitor and trace production.

PRINCIPLE 6: CLARITY AND SECURITY OF TENURE RIGHTS

Tenure uncertainty often leads to situations where the allocation and implementation of concessions negatively affect the livelihoods, uses and rights of communities, ultimately resulting in conflicts. Tenure uncertainty also discourages concessionaires from investing in the kind of silvicultural activities required to make tropical forest management sustainable, affecting the social, economic and environmental sustainability of forest concessions.

GUIDELINE 6.1: Clarify and respect customary tenure rights in and near concessions

Forest concessions planned and allocated without due consideration for existing rights and uses in the area face high risks of conflict with communities, and prevent fair and equitable development, while generating insecurity regarding long-term investments. To ensure that forest concessions deliver sustainable development, customary tenure rights need to be mapped, clarified and respected in and near forest concessions (see Box 12).

Recommendations

Government users are advised to:

- revise legislation related to forest and land titles;
- identify existing formal and informal forest tenure rights in the proposed concession area (see Box 12);
- conduct socio-economic inventories and mapping as part of national land-use planning, as well as at the concession planning stage or during implementation, if not completed previously;
- assess any possibility of overlapping and/or conflicting uses and rights, and avoid allocating concessions to forest lands with overlapping and/or conflicting uses and rights until the conflicts are resolved;
- consider participatory community-based planning and mapping to clarify tenure uncertainties (see Box 13);
- apply the FAO manual on *Free*, *Prior and Informed Consent* (FPIC)¹² if the concession lies within or near land occupied or used by communities, and those communities are not themselves concession holders;
- clarify the different economic activities that can be performed by various stakeholders in the area;
- implement measures to ensure that concession boundaries are maintained, and that no encroachment into the concession takes place; and
- consider the role of remote sensing and georeferenced information as part of the process to clarify formal and informal tenure at local level.

Civil society, international organizations and other relevant stakeholders are advised to:

• organize and implement programmes aimed at raising awareness and disseminating information on rights and obligations to all stakeholders, including communities.

¹² For more details on the FAO manual on FPIC, see www.fao.org/3/a-i6190e.pdf.

GUIDELINE 6.2: Develop and implement cooperation between private sector and community production

Forest concessions are often allocated to companies in areas that have existing customary uses and users, such as communities. While efforts should be made to ensure that pre-existing uses and users are not harmed, there can also be potential for synergies. These can take the form of a Public-Private-Community Partnership (PPCP), where all stakeholders develop and implement a form of collaboration that ensures mutual benefits. The objective is to align the needs and activities of companies and communities in a way that ensures that they complement – and do not contradict – each other. To

BOX 12 An agroforestry concession model in Lao PDR

FAO's Principles for Responsible Investment in Agriculture and Food Systems (RAI) acknowledge that the starting point for defining the contribution of responsible investment in agriculture, forests, fisheries and food systems to socio-economic elevation is recognition and respect for human rights.

Depending on who owns the land, the company negotiates the concession agreements either with the Government, the villages or with individual households. The basic concept behind the agreements is to cultivate fast-growing timber species, but villagers are allowed to cultivate agricultural crops between the fast-growing species for 1-2 years after tree planting. Local people are provided with opportunities for cash employment, and the companies clear the plantation sites of unexploded ordnance (UXOs) – unexploded weapons left over from the Vietnam War – and make contributions to village development funds.

The planted area is still small, a total of about 3 000 ha, but the arrangement appears beneficial to both the companies and the local people. Surveys suggest that livelihoods have improved as a result of the plantation in the communities involved. There are also indications that improved livelihoods are encouraging farmers to reduce their shifting cultivation area. Eventually, this will contribute to increasing forest cover.

It is crucial for the success of the model that opportunities for cultivation of agricultural crops and employment are offered on a continuous basis. This can be achieved if there is a rotation of plantation sites within each village, so that trees can be planted each year. In this manner, there will always be young plantations where agricultural crops can be cultivated, and employment on the plantations will be steady.

The Government of Lao PDR is now considering applying the model to restore degraded forests inside Production Forest Areas. As part of the arrangement, the companies have indicated that they would be willing to increase their direct contribution to the expansion of natural forest cover by planting indigenous trees on 10 percent of the concession area, and protecting the natural forests on steep slopes and buffer zones that account for an average 20 percent of the concession area.

Source: Burapha and Stora Enso Lao, in collaboration with the Department of Forestry, Cambodia.

BOX 13 Participatory community-based mapping in the Congo Basin

Community-based mapping has been an effective tool to clarify tenure rights, increasing the participation and empowerment of communities. Participatory community-based mapping has been conducted in the Congo Basin since 2000, starting with Cameroon and expanding to the Central African Republic, the Democratic Republic of Congo, Gabon and the Republic of Congo. This approach has involved the use of Global Positioning System (GPS) tools by communities to map their customary uses in the local forests. More than 2 million ha of land have been mapped in this way. The process has helped to reveal how and where forest concessions overlap with customary tenure. Although such mapping itself does not automatically lead to recognition of customary tenure, it is an important step and tool in the process to clarify tenure rights. Additionally, a Congolese logging company, Congolaise Industrielle des Bois (CIB), has employed community-based GPS mapping to clarify customary rights in its concession areas, and to adjust management and logging operations accordingly.

Source: www.mappingforrights.org/index.

this end, PPCPs can also function as a way to resolve conflicts arising from overlapping tenures. Moreover, PPCPs can capitalize on the capacities of one stakeholder to compensate for a lack of capacities among other stakeholders, as well as promoting optimized and efficient land use. The form of potential collaboration depends on the circumstances, which is why there is no generally applicable partnership model. To promote PPCPs that are equitable, the presence of the state or a third party is desirable, so as to facilitate dialogue between the company and the community, identify mutually beneficial opportunities, and mediate when there is disagreement. It is also possible to form PPCPs where the community is the concession holder.

Recommendations

Relevant government agencies are advised to:

- map customary uses and users in forest concession areas during the design phase and explore options for allocating rights; and
- ensure consultation with all relevant stakeholders on products and services to be included in the concession contract and potential joint access to the area by the concessionaire and customary users.

Governments, civil society organizations or international organizations are advised to:

- act as mediators and facilitators to ensure that PPCPs are equitable to all parties; and
- provide training and technical support to communities.

Concessionaires are advised to:

• in consultation with the relevant stakeholder community, assess the potential for PPCPs, taking into consideration the local context and circumstances; and

• in consultation with other relevant stakeholders, identify existing barriers to PPCPs and ways to overcome them.

Governments, civil society organizations or international organizations are advised to:

- act as mediators and facilitators to ensure that PPCPs are equitable to all parties; and
- provide training and technical support to communities.

GUIDELINE 6.3: Design and implement community concessions to recognize customary tenure rights, where appropriate

In many tropical countries, communities hold customary rights to forests that they have historically inhabited. However, these rights are often not formally recognized and do not provide legal title or status to communities. This situation has led to the lack of recognition and inclusion of customary tenure in land-use planning, and subsequently to overlapping tenures and negative impacts on communities' livelihoods. Acknowledging and legally recognizing customary tenure of communities in their areas of historical influence by awarding them forest concessions can improve the situation. Such community concessions can grant communities exclusive rights to utilize and manage forest in the concession area. Providing this security of tenure to communities can contribute to improving their livelihoods and to achieving SFM (see Box 14).

Recommendations

Relevant government agencies are advised to:

- assess the role and potential of community concessions as a means to clarify, recognize and grant legal tenure rights to communities;
- launch policy and legislative processes aimed at designing and implementing community concessions;
- in cooperation with communities and other relevant stakeholders, conduct participatory mapping of customary tenures (see Box 13);
- assess the interests and capacities of communities for their sustainable management of concessions; and
- implement capacity-development programmes where the capacities of communities are found to be lacking, to ensure they have adequate skills for the entire forest value chain (forest management, harvesting, processing, marketing and business management).

GUIDELINE 6.4: Enable local communities with access to manage the concessions

Forest concessions can be awarded not just to private companies, but to communities as well. Granting community access to forest concession regimes depends not only on adjustments in the regulatory framework (see Box 15), but also on ensuring that they will have the necessary resources to efficiently manage the concessions. It is vital to recognize that community concessions: (i) must have accountable and transparent concession management bodies; (ii) demand specific forms of capacity-building; and (iii) require different management plans from those of commercial concessions.

BOX 14

State recognition of community forest concessions in Guatemala

Concessions in Guatemalan state-owned forests are granted to communities and companies for both timber and non-timber products. Guatemala is one of the few countries in the world where communities can bid on concessions under a scheme that differs from the one operating for industry, and in fact make up the majority of concession-holders. More than 500 000 ha of concessions have been designated in the 2.1-million-ha Maya Biosphere Reserve (MBR) established in 1990 in the northernmost part of Petén. Administration of the MBR was assigned to the National Council of Protected Areas (Consejo Nacional de Areas Protegidas – CONAP). With the support of various non-profit organizations and the US and German Governments, CONAP began developing a dual forest concession system for conservation and sustainable development. By 2016, the system was actively functioning on 485 122 ha (91 percent) of the 533 045 ha granted.

Legal and administrative aspects

Determining concession location and area. In the mid-1990's, CONAP began a public consultation process to define concession units for communities based on traditional forest uses. More remote forest blocks not easily accessed by roads were offered for bidding by industry, with two manufacturers winning concessions that they still manage today.

Most concessionaires were identified prior to the concession bid, as the exercise involved recognizing that long-term inhabitants of the MBR had an inherent right to the resource, and were best positioned to protect it and promote sustainable development. Criteria used to ensure a successful concession included: a professional management plan, an agreed area without major conflicts, adequate volumes of commercial species for each annual harvest, agreement of community members, and a documented ability to pay the bond. A unique aspect of the Guatemalan community concessions is that agricultural lands and protected areas are included in the grant area as long as the PFE is not reduced and is managed according to CONAP guidelines.

Concession contract period. Contracts are renewable and last for 25 years, with annual field inspections made prior to extensions. Once a community concession area is approved, a timber inventory must be conducted, followed by a management plan and environmental impact assessment (EIA) using standardized methods. The plan proposes three uses for different parts of the concession: timber production, strict preservation, and agriculture. It also defines the cutting cycle, annual allowable cut, commercial species, and silvicultural treatments.

Concessionaire and Government rights & obligations. CONAP establishes the rules, oversees concession granting, and supervises compliance in the Multiple Use Zone, where concessions are allowed. While a concession does not grant land title, communities do gain rights to all resources within the area as long as they follow regulations.

Performance monitoring. Monitoring and technical assistance are provided by independent organizations, which are funded by income generated from the concessions and donor

Box continues on next page

Box continued

organizations. This delegation and distribution of roles minimizes dependence on the Government and reduces opportunities for corruption.

Rescission of contract. Concession agreements may be revoked if the community does not follow the management plan, lacks operating capacity, stops operations without just cause, or declares bankruptcy. Cancellation of the concession has occurred within three communities that failed to comply.

Financial and fiscal aspects

Communities pay a one-time fee (less than half a US dollar per hectare for agricultural and forest lands) over a 10-year period, a performance bond of 1 percent of the total bid, and standard production-based taxes for timber and non-timber products. Concessionaires are required to pay annually and do not receive approval for harvest or log transport if they do not comply with the payment schedule. While concessionaires do not receive state incentives, many have received subsidies from aid agencies and non-profit organizations.

Organizational aspects

Seeking to address environmental and social problems, Petén communities formed the Association of Forest Communities of Petén (*Asociación de Comunidades Forestales de Petén* – ACOFOP), a second-tier lobbying organization. ACOFOP comprises 23 rural organizations, representing 30 communities and 2 000 families.

Another key entity is FORESCOM, a company owned by 9 Forest Stewardship Council-certified communities with 220 000 ha of productive forests. FORESCOM provides management, logging, wood processing, marketing and finance services to its owners for a fee. The company has become a viable enterprise that develops products from a wide range of species and provides kiln drying, milling and planning services.

Main successes

- Consistent performance (i.e. an average of 12 consecutive harvests per concession)
 coupled with FSC certification have resulted in banks providing finance to communities for forestry activities since risk is reduced, a track record is evident, and harvest plans can serve as collateral.
- After 17 years of active production, processing and selling of wood products, Petén's
 concessionaires exhibit strong business acumen. They take out loans and pay them
 back, manufacture products to international standards, negotiate with clients, and
 distribute profits in line with their members' directives. Commercial relationships have
 evolved from simple 'buyer-seller' deals to more collaborative 'we are in this together'
 synergies, where long-term buyers maintain an on-the-ground presence.
- Solely based on export earnings for the 10-year period from 2003-2013, the concessions earned more than USD 50 million (USD 5 million per year) from 43 888 m³ drawn from 14 species. Over a 7-year period through 2013, the concessions generated an

Box continues on next page

Box continued

estimated 16 000 jobs. All 340 members of one community concession received a share of the profits, which from 2008 to 2013 averaged USD 410 000 per year, or USD 1206 per family. These figures relate exclusively to profits and are irrespective of salaries earned by many community members (average gross domestic product per capita for Guatemala in 2014 was USD 7 063).

Main weaknesses

- Few communities maintain adequate capital in reserve to finance harvest operations.
 Some concessions distribute profits per family, while others invest in community projects.
 With some exceptions, many are forced to accept upfront payments at high interest rates, or with deep discounts incorporated into them. As a result, few concessionaires invest in newer machinery. Logging, trucking and roadbuilding equipment is old and of low quality, resulting in high operating costs.
- There is an economic overdependence on mahogany which only represents 50 percent of the harvested volume each year, but from 2003 to 2013, represented more than 92 percent (USD 45.9 million) of the total amount of wood exported over that period (USD 50.1 million).
- In terms of products, 98.3 percent of the exports are lumber, with decking providing only 1.2 percent, and an assortment of other products accounting for the remainder.

Success factors

- Strong early political support due to the government advocating rational forest management as a tool for rural development.
- State recognition of the validity of providing long-term rights to communities with historic forest use.
- Public consultation among resource users, governmental agencies, and non-profit
 organizations built a diverse array of supporters working to address problems linked
 to agriculture, forestry, tenure and protected areas.
- The Guatemalan Government allocated considerable funds and in-service support, and offered strong political support for CONAP by establishing it as an independent conservation agency.
- Long-term, well structured and constant financial support from development agencies was channeled into a multifaceted project that was well designed by a mix of local and international experts.
- A balanced mix of local Guatemalan 'champions' committed to building a new paradigm despite adversity worked in non-profit organizations, companies and government institutions.
- As a requirement for maintaining a concession, FSC certification had a positive economic impact on wood prices, particularly for mahogany producers.

Source: Gretzinger, S. 2016. Latin American Experiences in Natural Forest Management Concessions. Forestry Policy and Institutions Working Paper No. 35. Rome, FAO

BOX 15

Creating opportunity for community forest concessions in DRC

In 2014, the Government of the Democratic Republic of the Congo (DRC) signed a decree recognizing the right of communities to secure concessions for up to 50 000 ha of forest in perpetuity. This constituted a major achievement for customary rights in the country. This decree was followed by Ministerial Order 0/25, which stipulated the management rules and regulations for effective implementation of community concessions. Through this process, DRC joined Cameroon and Gabon in recognizing local communities as active partners in forest management.

As a result, local communities in DRC now have exclusive rights to the production of timber and other natural resources. The decree states that the community concession will be clear of all rights, to avoid the overlapping of concessions with the community forestry concession. To ensure that the management concession is accountable to the whole community, the decree stipulates that members of concession management bodies will be appointed by community election.

Source: Vermeulen, C. & Karsenty, A. 2017. Towards a community-based concession model in the DRC. International Forestry Review, Vol.19.

Recommendations

Relevant government agencies are advised to:

- ensure that personnel with expertise in cooperatives, producer associations or other types of community business actors are involved in the planning, design and implementation of forest concessions;
- ensure a proper legal framework is in place to enable cooperatives, producer associations or other types of community business actors to participate in concession regimes (see Box 16); and
- implement or promote capacity development programmes where the capacities of communities are found to be lacking, to ensure that they have adequate skills for the entire forest value chain (forest management, harvesting, processing, marketing and business management).

Civil society, international organizations and other relevant stakeholders are advised to:

• provide incentives and technical support for communities engaged in managing forest concessions.

GUIDELINE 6.5: Involve local communities and indigenous peoples in design and implementation

The participation of communities residing in or near concession areas should be a key consideration in the planning, allocation, implementation and monitoring of concessions. For communities, this provides an opportunity to negotiate and influence the design and administration of a forest concession, including social obligations, community participation and local development. It also allows the concession holder to incorporate

the well-being of forest dependent communities living in or near the concession area as one of the management objectives of the concession. This will strengthen local acceptance and support for forest concessions, and their commitment to sustainable development.

BOX 16 Concessions to small-scale associations in Ghana

In Ghana, small scale forest operators (SSFOs) – mostly wood carvers and collectors of non-timber forest products – have long been part of the sector. However, in the past two to three decades operators have emerged who use chainsaws to process timber *in situ*, on both farmlands and forest reserves, without any permit from the Forestry Commission of Ghana. Their activities are therefore in contravention of the country's forest laws. It is estimated that these artisanal millers supply about 80 percent of the total lumber demand of some 600 000 m³ for the domestic market, exploiting an estimated 2.5 million m³ across the country, including forest reserves. Their activities therefore threaten the sustainable management of Ghana's forests, since most of the matured trees not given out in harvesting yields to concession holders are eventually stolen by illegal operators. Over the years, Government reaction had involved enacting legislation to outlaw the operation, setting up military patrols to enforce legislation. However, these responses have so far yielded few effective results. Most of the artisanal millers have been helped to form various associations to champion the interest of their members.

Ghana's signing of a Voluntary Partnership Agreement (VPA) with the European Union (EU) among others sought to make the supply of timber to the domestic market legal. Consequently, a number of EU-funded initiatives targeting illegal chainsaw activities, including projects managed by FAO and implemented by civil society organizations (CSOs), piloted different artisanal milling operational models. These results showed that artisanal millers can operate legally when given access to timber resources, and in all cases where legal timber was made available to them, illegal chainsaw activities in the forests either ceased or declined to negligible levels. Such projects built the capacity of artisanal millers to use efficient machinery in timber processing, as well as helping them to register as business entities and register for property marks, which are required in order to bid for concessions and to acquire other timber rights permits. In principle, these associations can now gain access to legal timber for their operations that include salvage permits rights and purchase of confiscated timber. They can also take part in any competitive bidding for timber rights. However, none of them has yet been successful in acquiring long-term timber rights, such as the normal Timber Utilisation Contract.

A CSO-supported policy proposal for the supply of legal timber to the domestic market, proposed for the identification and allocation of raw materials to artisanal millers through an appropriate administrative and legal framework, has been accepted by the Ministry of

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Box continued

Lands and Natural Resources. A legislative instrument was recently passed, making provision for small-scale timber rights that can be accessed by registered artisanal millers to gain legal access to timber for their operations to supply the domestic market. This ensures that the artisanal millers are not crowded out by the larger timber companies. In effect, this new instrument will facilitate implementation of the domestic timber policy.

Source: Samuel Kwabena Nketiah (Tropenbos), Ghana

Recommendations

Relevant government agencies, civil society and other relevant intended users are advised to:

- develop or revise procedures for the participation of communities in the planning and allocation of concessions;
- involve communities based on their interests and capacity, and adhere to free, prior and informed consent, where necessary;
- assess the capacity of communities for full engagement, and provide training and support as needed; and
- ensure that concessionaires consult communities, where necessary.

Concessionaires are advised to:

- establish systematic channels for the involvement of communities during the implementation of forest concessions; and
- develop a corporate social responsibility policy, and clarify its objectives and strategies with regard to collaboration with local communities and indigenous peoples.

GUIDELINE 6.6: Develop and implement conflict resolution and compensation mechanisms

Communities need a trusted way to voice and resolve concerns linked to forest concessions, and companies need an effective way to address the concerns of communities. Effective, credible company—community dispute resolution mechanisms can prevent and address community concerns, while reducing risks and creating positive social transformation. A dispute resolution mechanism is a structured process that addresses disputes or grievances that arise between two or more parties engaged in business, legal, or societal relationships (e.g. between a company and a community).

Recommendations

Relevant government agencies are advised to:

 develop dispute transformation mechanisms with clear 'procedures and road maps' for resolving and transforming conflicts involving communities through a participatory approach;

- clarify the roles and responsibilities of different stakeholders to ensure the impartial design and implementation of a dispute resolution mechanism;
- implement mechanisms for the negotiation of rights and compensations;
- ensure the implementation of appropriate procedures that consider cultural differences, such as the attitudes of communities towards direct or indirect negotiation, conflict, status, concept of time management, etc.;
- apply the FAO manual on Free, Prior and Informed Consent;
- support and permit third parties, independent participation and verification in dispute resolution mechanisms; and
- promote the use of mediation by third parties and civil society groups, which may
 introduce values relating to human rights, gender and social justice, seek rationally
 motivated consensus for the disputants, offer benefits to all involved in the process
 and highlight workable win-win solutions.

Concessionaires are advised to:

• create channels and mechanisms for the early identification of concerns and settlement of disputes with communities.

Private sector, communities and civil society are advised to:

• promote the involvement of communities and companies in the design of dispute resolution and compensation mechanisms.

PRINCIPLE 7: COMMUNITY PARTICIPATION AND SOCIAL BENEFITS FOR ALL

Forest concessions can provide for fairer and more equitable rural development. Creating an enabling environment for a positive relationship between forests concessions, local communities and indigenous peoples (referred to hereafter as communities) is essential, if concessions are to function as true instruments of sustainable forest management capable of contributing to the SDGs. To enhance the social inclusion, concession holders should address real economic opportunities for communities, contribute to local development and collaborate with communities in forest management, respecting and integrating their traditional knowledge and recognizing and respecting their rights.

GUIDELINE 7.1: Engage local communities and indigenous peoples residing in or near the area in the implementation and management of the forest concession

The participation of communities residing in or near concession areas should be a key/mandatory consideration in the planning, allocation, implementation and monitoring of concessions (see Box 17). For communities, this provides an opportunity to negotiate and influence the design and administration of a forest concession, including social obligations and local development. The concession holder should therefore incorporate the well-being of communities living in or near the concession area as one of the management objectives of the concession. Furthermore, the extent to which these social obligations are met should be the subject of periodic monitoring, and penalties in the case of non-compliance.

BOX 17

Collaboration of a forest concession with communities in Indonesia

Collaboration between the company PT Suka Jaya Makmur (SJM) with four villages in and surrounding the concession areas started in 2002, when the villages agreed to support the company to stop illegal logging. At the time, illegal logging was very prevalent, including in the SJM concession, threatening the livelihoods of the people living in those areas.

SJM engaged some villagers to conduct patrols aimed at deterring illegal logging activities, as well as at protecting the local community forest. The village people also formalized an agreement with SJM to help stop other illegal activities, such as mining and poaching. Based on this accord, the local community established a group named Pam Wil or the Community-based Protection Unit. In 2010, the World Wide Fund for Nature (WWF) provided assistance to strengthen the capacity of the unit members on aspects such as forest regulations, species identification and conservation, as well as to strengthen the legalization of the unit. In 2014, Pam Wil renewed the agreement with SJM.

SJM also collaborated with WWF on a project to support livelihoods in several villages and to implement the Education for Sustainable Development programme, which seeks to integrate environmental and conservation issues into school curricula.

The objective of these livelihood programmes is to increase the income of communities, in order to reduce people's dependence on forest resources. Based on local potential, the company is working with WWF to support the development of quality honey bee production, including post-harvest management and marketing.

In addition, SJM has collaborated with The Nature Conservancy, Fauna & Flora International Indonesia and the USAID-funded Indonesia Forest and Climate Support on a high conservation value forest programme and a community development programme.

Source: I.B.W. Putra, Alas Kusuma Group, Indonesia

Recommendations

Relevant government agencies are advised to:

- develop or revise procedures for the consultation and participation of communities in the planning, allocation, implementation and administration of concession contracts;
- involve communities, based on their interests and capacity, and adhere to FPIC¹³ if the concession lies within or near land occupied or used by communities, and those communities are not themselves concession holders;
- assess the capacity of communities for full engagement, and provide training and support as needed;
- promote relevant independent certification schemes, which include requirements and guidelines to ensure a participatory approach to communities with regard to forest management decisions;
- in partnership with the private sector, civil society and international organizations, conduct training, education and workshops to disseminate social rights and the obligations of parties to the concession contract to all stakeholders; and
- ensure that concessionaires consult communities and seek their active participation, and monitor their compliance.

Concessionaires are advised to:

- encourage the participation and engagement of communities present in and near the concession areas in the implementation and administration of forest concessions; and
- inform the communities, local authorities and all interested parties about the signing of the concession agreement, the opening of the provisional cutting area, and the roles of concessionaires and communities in social inclusion.

GUIDELINE 7.2: Contribute to improved social welfare and local livelihoods

The management of public production forests has to provide social benefits and improve the living conditions of local populations. Such contributions to the development of social welfare are especially important in areas that are remote and/or where the state does not have the capacity to deliver the necessary public services.

Forest concessions could promote local social development in various ways. These include:

- developing and providing social services that the state may not be capable of delivering, such as educational and medical facilities, transport infrastructure development and maintenance, and provision of water and electricity;
- creating small and medium-sized enterprises related to its forest activities, as well as subcontracting activities;
- facilitating the dissemination of new production methods (techniques, crop varieties and equipment) to communities;
- opening up rural areas, in conjunction with the state's efforts to extend road networks; and
- recognizing within the concession that communities can have specific rights to certain natural resources and formally endorse the exercise of those rights.

¹³ www.fao.org/3/a-i6190e.pdf

However, situations where a concessionaire becomes a surrogate provider of public services should be avoided. Rather, the concessionaire should complement the state in the provision of basic services that are ordinarily the responsibility of the government.

Recommendations

Relevant government agencies are advised to:

- integrate local social development into the long-term goals and contracts of concessions where appropriate;
- conduct social impact assessments in planned concession areas;
- ensure that concessionaires comply with contractual social responsibilities and obligations to provide social services to communities, including those mandated by provincial or national law;
- promote the application of relevant voluntary certification verification schemes for improved performance and the demonstration of compliance with social development requirements; and
- prepare and disseminate procedures for the negotiation of social agreements, community forestry regulations, regulation on third party access and use rights in concession areas.

Concessionaires are advised to:

develop and implement detailed plans on contributions to social development;

- contribute to the basic education of local communities present in and near the concession area, in accordance with the established contractual provisions consistent with national norms; and
- respect fundamental principles and rights at work, as defined in the ILO core conventions.

GUIDELINE 7.3: Develop, implement and monitor transparent, equitable and gender balanced benefit sharing mechanisms that take into account the interests of all stakeholders

An important aspect of social inclusion is the distribution of benefits accruing from forest concessions. A benefit sharing mechanism has two dimensions: the vertical distribution of benefits between national and local stakeholders, and the horizontal sharing of benefits within a single community and between communities. The benefits could be monetary or non-monetary.

A benefit sharing mechanism should be tailored to local conditions and needs. It should also: (i) allow all social groups in the community to have the same conditions of access to the benefits and/or the infrastructure that was constructed using forest revenue (distributive equity); and (ii) enable the participation/involvement of stakeholders, including so-called minority groups (e.g. indigenous peoples, women) in decision-making processes (procedural and contextual equity). Most importantly, the mechanism must work along the entire value chain, so that the community not only receives benefits from standing wood or roundwood, but also from any value added. This requires improvement of governance practices through the establishment of a participatory

financial monitoring, reporting and verification system, and the distribution of benefits in more productive forms (i.e. non-cash development options) that can contribute more effectively to sustained local development and livelihoods. Finally, the benefit sharing mechanism should acknowledge traditional knowledge on decision-making about benefit sharing.

Recommendations

Relevant government agencies are advised to:

- adopt a multistakeholder approach to identifying actual and potential risks from the country's own experience in the redistribution of revenues during the design of the benefit sharing mechanism, taking into consideration the needs and experiences of women, indigenous peoples and other minority groups;
- improve governance practices through the establishment of a participatory financial monitoring, reporting and verification system;
- involve all relevant stakeholders, including women, indigenous peoples and other
 minority groups, in negotiating equitable shares and appropriate ways of providing
 benefits, and acknowledge traditional knowledge on decision-making about benefit
 sharing;
- design payment methods that ensure transparency and favour minimal transaction costs; and
- encourage the independent observation of benefit sharing.

Concessionaires, civil society, national and international NGOs and other intended users are advised to:

- contribute to the development of a benefit sharing mechanism that reverts concession revenues to local economies and forest dependent communities, while addressing the needs of women, indigenous peoples and other minority or disadvantaged groups; and
- contribute to the implementation and monitoring of transparent and equitable benefit sharing to and within communities.

PRINCIPLE 8: ENVIRONMENTAL INTEGRITY AND SUSTAINABLE USE OF FOREST RESOURCES

The management of a forest concession is expected to maintain and enhance – and not to compromise – the capacity of the ecosystem to produce a sustained flow of environmental goods and services, and provide biological diversity and protective functions. In line with international criteria and indicators for SFM, the use of forest resources for the production of goods and the provision of services should be sustainable, and ensure that biological diversity is appropriately conserved, that the high conservation values of forests are maintained and that adverse environmental impacts on the actual production areas are minimized. The application of traditional and scientific knowledge and best practices is central to achieving the environmental and sustainability objectives of concessions.

GUIDELINE 8.1: Develop and effectively implement plans for maintaining and improving environmental integrity and ensuring the sustainable use of forest resources

If not well planned and exercised, the extraction of timber and non-timber products, or the use of forests for making commercial or non-commercial services available, can cause severe damage to the ecosystem and its capacity for regeneration. Worldwide, tropical regions contain vast areas of degraded forests that have permanently lost their natural characteristics due to over-intensive and otherwise inappropriate, uncontrolled exploitation. The design of forest concessions should cover long-term plans capturing the whole contracting period, and short-term plans for operations. In addition, medium-term plans may outline targets and operations for 5–15 years.

Forest management plans (FMPs) are long-term instruments that define the authority and responsibilities of concessionaires and serve as key roadmaps, guiding the implementation of SFM within the whole concession area. FMPs are expected to draw on surveys and inventories of forest resources, biodiversity, soil characteristics, topography and infrastructure, as well as on socio-economic information, within and surrounding the concession area. FMPs should indicate land uses within the concession area and provide an operational framework for the production of goods and services. In addition to the FMPs, annual forest management plans should provide information on the specifics of operations in the concession over the short term. Annual operational plans should be based on detailed inventories for the area to be managed during the period, and should indicate all relevant interventions and volumes.

Recommendations

The relevant government agencies are advised to:

- develop transparent norms for sustainable forest management in forest concessions, observing the ITTO Voluntary guidelines for the sustainable management of natural tropical forests;
- ensure consistency with national, regional and local biodiversity strategies, plans and regulations that are based on local priorities (see Box 18);
- ensure capacity is available for the timely evaluation and approval of FMPs and annual forest management plans, according to transparent norms for sustainable forest management;
- ensure that only operations backed by approved FMPs and annual operational plans are conducted; and
- provide concessionaires with guidance on the planning and implementation of environmental management and the sustainable use of forest resources, including through targeted training.

The concessionaires (or the relevant government agencies if the planning process and preparation of plans are the responsibility of government) are advised to:

 assess the capacity of the workforce at all levels, and implement continuous human capacity-building programmes, where the capacities of the workforce are found to be lacking;

- build their own capacity on environmental planning and the sustainable use of forest resources and, where necessary, use commercial service providers to ensure the quality of plans; and
- apply operational controls and safeguards to ensure that their own operations comply with the plans, and that unauthorized operations by others do not take place.

BOX 18

Forest management practices for the conservation of biodiversity

Forest management practices aim to conserve biodiversity in the tropical forest areas under production, and are compiled in a manual produced through the Biodiversity in Production Forests and Certified Markets project funded by the Global Environment Facility, the National Forestry Commission of Mexico and the United Nations Development Programme.

Currently, Mexico's Comisión Nacional Forestal (CONAFOR) provides economic support to owners and holders of forest lands for the preparation of a study required by the Ministry of Environment and Natural Resources to authorize timber harvesting. This study must include management practices for the conservation of biodiversity.

The studies are produced according to the Mexican norm for the elaboration of timber forest management programmes, and include sections on the conservation of biodiversity. The manual clarifies the practices that can be carried out during the forest management programme for the purposes of reference only.

The manual was developed at workshops with the participation of experts, who also supported the revision and validation of the document. The manual is available in Spanish here: www.gob.mx/cms/uploads/attachment/file/185986/Manual_de_mejores_practicas_de_manejo_forestal_para_la_conservacion_de_la_biodiversidad_en_ecosistemas_tropicales_de_la_region_sureste_de_Mexico.pdf

Good practices are currently being planned and implemented in southeastern Mexico in communities (that have tropical ecosystems) carrying out sustainable forest management.

Source: Comisión Nacional Forestal (CONAFOR) – National Forestry Commission, Mexico

GUIDELINE 8.2: Maintain and improve environmental integrity and ensure the sustainable use of forest resources at the operational stage

Maintenance of environmental integrity is always a key priority. Forest concessions should be able to retain the capacity of forests to provide goods and environmental services for present and future generations. The practical actions involved depend on the management goals (e.g. production of timber and non-timber products, ecotourism, conservation/restoration, carbon sequestration) and characteristics of the concession area, and can encompass a significant number of measures varying from land-use planning to operational control.

The sustainable use of forest resources aims to maintain a rate of utilization of timber and non-timber products that will allow for an equivalent supply in the next production cycle, or the use of forest areas in a manner that ensures a sustainable yield of products. Achieving this target may require the application of silviculture measures (e.g. tending advanced growth, the release of desired natural regeneration, enrichment planting) that revitalize the production capacity of the soil and vegetation, and limit forest activities in restricted areas (e.g. to meet the needs of ecotourism).

Operational plans, practical guidelines and standard operating procedures, competent staff and sufficient supervision are all crucial for the successful implementation of concession management operations.

Recommendations

The relevant government agencies are advised to:

- prepare, in line with legal requirements and best practices, guidelines for the operational management of production areas. These may include:
 - minimum diameters (dbh)¹⁴ of trees that can be harvested, and the minimum number of large trees that must be left for natural regeneration;
 - the annual allowable cut:
 - the maximum number and volume of trees by species or group of species that can be harvested;
 - protected species that must be excluded from harvesting;
 - specific areas that must be set aside for habitat protection (e.g. areas around springs), erosion control (e.g. steep slopes), water protection (e.g. buffer zones alongside water courses), protection of livelihoods and the cultural values of communities (e.g. areas with fruit bearing trees or sacred sites) or for other purposes (see Box 19);
 - harvesting methods and techniques to be applied to minimize damage to vegetation, soil and water;
 - post-harvest measures.
- organize advice and training for concessionaires on operational control measures;
- play an active role in operational controls (in cooperation with the concession staff);
- contractually require the application of reduced impact logging or equivalent systems in areas allocated for timber production; and
- promote the application of voluntary certification and legality verification schemes for improved performance and demonstrate compliance with the requirements.

The concessionaires are advised to:

- build their own operational control capacity by training ground personnel and their supervisors;
- prepare standard operating procedures (and more detailed work instructions, where necessary) in line with legal requirements and government procedures;

¹⁴ Diameter at breast height.

- apply the ITTO *Voluntary guidelines for the sustainable management of natural tropical forests* and/or forest management standards of forest certification schemes (or alternatively legality verification schemes), and certify the management system to ensure adequate quality of performance;
- apply the ITTO/IUCN Guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests; and
- apply the ITTO Guidelines on fire management in tropical forests to implement fire prevention and management measures.

BOX 19

High conservation value forests to protect and conserve significant species and cultures

High conservation value forests (HCVFs) as defined by the Forest Stewardship Council are forests of outstanding and critical importance due to their high environmental, socio-economic, biodiversity or landscape values. The HCVF concept has received growing attention as a tool for promoting biodiversity conservation, and complements the implementation of SFM practices. The identification of HCVFs has profound consequences on forest management options and is of critical importance in the formulation of forest management plans. In the Malaysian context, sound management and protection of HCVFs is an important criterion in the assessment of permanent reserve forests (PRFs) in relation to SFM compliance standards.

To date, a total of 22 HCVFs have been established within PRFs in forest management units in Peninsular Malaysia for *in situ* conservation of various unique flora species, water catchment areas, seed production areas, pristine virgin jungle reserves, lowland dipterocarp forest and customary burial ground, covering an area of 2 649 ha.

Source: Forestry Department, Peninsular Malaysia

GUIDELINE 8.3: Develop, implement and monitor the restoration/ conservation of concessions

In tropical countries, an increasing number of public production forests have been badly degraded, and continue to be so, due to extensive poor logging and management practices and other economic activities. In some cases, such degraded/overlogged concession areas are left without active management. In this situation, it is not uncommon to see such degraded areas converted to other land uses or further exploited for the remaining timber. To restore, manage and rehabilitate the damage caused by bad logging activities, countries can design and implement restoration and/or conservation concessions. Such concessions can have as their objective the restoration of degraded concession areas and the generation of revenue to relevant stakeholders from this ecosystem service. Where appropriate, relevant stakeholders can explore the role of conservation/restoration concessions in overlogged forests, even with the objective of establishing timber

production in the long term, rather than restoring overlogged concessions by planting monoculture crops. Governments should collaborate with domestic and international private sector and financing institutions to generate a steady flow of income to maintain restoration efforts.

Recommendations

The relevant government agencies (and/or in partnership with private sector and national and international NGOs) are advised to:

- conduct an extensive assessment of the socio-ecological/conservation value of the overlogged forest and evaluate carbon stocks, biodiversity values and other forest ecosystem services;
- launch policy and legislative processes aimed at designing and implementing restoration/conservation concessions for overlogged forests;
- implement the restoration of degraded concessions, drawing on the ITTO Guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests; and
- implement appropriate silvicultural treatments to accelerate the succession cycle of these forests.

International organizations are advised to:

• in partnership with governments, private sector and civil society, compensate for the gap in technical and financial capacity needs by supporting the implementation and monitoring of restoration/conservation concessions in degraded/overlogged concession areas.

GUIDELINE 8.4: Assess and monitor implementation performance and the achievement of expected outcomes

Systematic and periodic monitoring of concession activities plays a critical role in assessing: (i) proper implementation; (ii) economic, environmental and social performance; and (iii) the achievement of expected outcomes. Monitoring thus has two distinct dimensions – assessing actions taken and their compliance with plans, and the impacts or consequences of those actions.

If the performance is considered to be inadequate (or if there is a need to amend the expected outcomes), then adjustments should be made to the plans and implementation practices. Since the contract periods of forest concessions are long, the operating environment can alter drastically over time, and needs and expectations may likewise change. It is, therefore, reasonable, in cooperation with the contract parties, to assess plans, operational practices and expected outcomes periodically, and where necessary, make adjustments.

Recommendations

The relevant government agencies are advised to:

• ensure that concession contracts include provisions for systematic monitoring and assessment, and that the expected outcomes are clearly spelled out in the contracts;

- plan the monitoring and assessment activities to address the necessary resources, frequency, methodology, reporting and corrective actions;
- develop performance indicators and related thresholds for the monitoring and assessment methodology;
- where necessary, use specialized external service providers for monitoring and assessment;
- consider the use of information collected by external parties in monitoring and assessment (e.g. the findings of certification bodies and independent forest monitors);
- actively use monitoring and assessment results to steer the management of concessions and, where necessary, require corrective actions and/or revise objectives and expected outcomes; and
- publish monitoring and assessment results (or, preferably, the whole monitoring and assessment report).

The concessionaires are advised to:

- maintain up-to-date versions of plans and procedures, and records on operational controls for monitoring purposes;
- internally monitor the implementation of plans (e.g. ensure that the use of forest resources is consistent with the allocated quota, and that payments to the government are consistent with production and compliance with requirements for environmental performance);
- implement corrective actions if monitoring reveals deviations from the plans, improper operations or inadequate progress related to expected outcomes;
- apply forest certification schemes or legality verification schemes to help plan and implement internal monitoring, and demonstrate compliance with requirements; and
- use reporting practices that facilitate smooth monitoring by the government, including the regular submission of required reports.



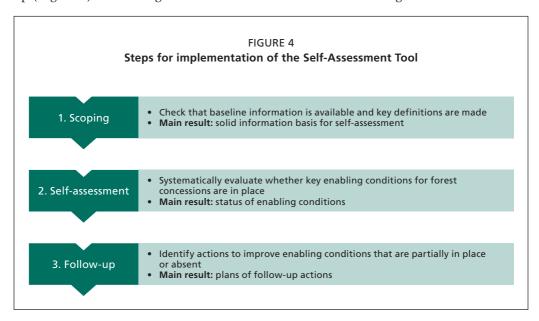
5. Self-Assessment Tool

5.1 OVERVIEW

The Self-Assessment Tool (SAT) aims to help decision-makers at the planning and operational/management levels and stakeholders to: (i) identify whether the necessary conditions are in place to enable the effective and sustainable management of public forests through concession arrangements; and (ii) develop, where applicable, measures to attain or make improvements to achieve those conditions. The SAT is designed to assist with the evaluation and development of enabling conditions for both planned and existing forest concessions. In the case of new concessions, the objective is to support the establishment of a solid and fair environment for creating or facilitating the right conditions for forest concessions. In the case of existing concessions, the SAT results can be used to implement improvements needed to the operating environment and, where necessary, provide evidence for contractual amendments.

The structure of the SAT follows the key stages of the concession management approach, introduced in Chapter 3.1, and draws largely on a series of questions that are used to determine whether the enabling conditions are: (i) in place, (ii) partially in place, or (iii) absent.

The SAT process consists of three steps: (i) scoping, (ii) self-assessment, and (iii) follow-up (Figure 4). These stages are discussed further in the following subsections.



5.2 STEP 1: SCOPING

The scoping stage is a rapid check to verify that there is adequate, comprehensive baseline information available about the operating environment covering the policy, institutional and legislative frameworks, and the forest resources and socio-economic conditions relevant to the concession area concerned. This information establishes a solid foundation for the performance of a successful self-assessment. The scoping stage is not used to conduct a deep analysis of the quality of this information. Table 8 can be used to guide the scoping stage.

TABLE 8
Self-Assessment Tool for scoping

Name of concession:

Name of concession.						
Location of concession:						
Other identification information:						
Key enabling conditions for exercis	ing successful self-assessment					
Information area Question Yes/						
Operating environment	Are policies on land-use and forest sector development identified?					
	Have key regulatory and supervising institutions, as well as laws and other legislative acts regulating forest concessions, been identified?					
	Is there adequate information available about the forest resources, their production possibilities and potential economic return, and environmental characteristics?					
	Is there adequate information available about the socio-economic conditions?					
Concession area	Is the primary objective of management clearly defined?					
	Are the expected outcomes clearly defined?					
Concessionaire	Is the profile of the concessionaire described or known?					
	Are the eligibility criteria for concessionaire available?					

In the event that essential information is missing, efforts should be made to gather additional existing information and ensure that the relevant definitions related to the concession area and the concessionaire are known prior to the actual self-assessment. Extensive new surveys or studies are not recommended at the scoping stage.

The outcome of the scoping stage is meant to steer the planning of new concession areas, identify information restrictions for self-assessment, and probable gaps that may need to be filled in the follow-up stage.

5.3 STEP 2: SELF-ASSESSMENT

Self-assessment is a systematic evaluation of the enabling conditions identified in Table 8. It combines analysis of a country's policy, legal, institutional and governance frameworks and forest operations, and the social, environmental and economic characteristics of

individual concessions and their surroundings. The Self-Assessment Tool can be applied by anyone interested in or with adequate knowledge of concession management and the related regulatory and institutional frameworks (see Box 20). However, cooperation with relevant national and/or international NGOs is recommended in the performance of self-assessments.

BOX 20 Tips for Self-Assessment Tool application

Where resources are not available for a full assessment, or other reasons exist to narrow down the assessment scope, users can carry out an assessment using selected parts of the SAT. Such limited assessments may be appropriate if a stakeholder group intends to focus exclusively on specific issues related to the allocation and management of concessions. For example:

- Civil society organizations may want to ensure that effective mechanisms are in place
 for local communities to participate in the decision-making process at different stages
 of the concessions management approach (e.g. the design of concessions, selection
 and contraction of the concessionaire) and to control the fulfilment of social obligations when the concession is operational.
- Concessionaires may plan to develop or apply new methods and techniques for forest operations, and want to ensure that the methods and techniques are acceptable to the relevant government agencies, and are consistent with existing legislation.

The self-assessment constitutes a deep analysis of enabling conditions (see Table 10). Accordingly, adequate time and resources should be allocated for the process. The assessment is expected to result in enhanced knowledge of the status of conditions considered essential to the effective management of forest concessions. Results of the self-assessment are categorized based on whether the conditions are in place, partially in place or absent. Table 9 provides guidance for choosing the most appropriate category in the Self-Assessment Tool.

TABLE 9
Guidance for choosing an appropriate category for self-assessment results

Category	Guidance for choosing an appropriate category		
Category 2: in place	Legislation exists, necessary mechanisms/guidelines/procedures are prepared and applied; organizations are adequately trained and resourced; evidence is available on a large scale; and on-the-ground implementation has taken place.		
Category 1: partially in place	Lapses have been detected in one or more of the followings aspects: legislation; mechanisms/guidelines/procedures; capacities or the resources of organizations; or on-the-ground implementation.		
Category 0: absent	No relevant legislation or mechanisms/guidelines/ procedures exist, and the capacities or resources of organizations, or implementation on the ground, are inadequate.		

TABLE 10
Self-Assessment Tool for the analysis of enabling conditions

Location of con	cessio	n:	
Other identifica	ation i	nformation:	
Key enabling co	onditio	ons for effective and sustainable concession management	
Concession management approach	No	Key questions	Presence category
Land-use and	1	Do land-use policies and related land-use plans address public	

Land-use and
forest policy
objectives

Name of concession:

- Do land-use policies and related land-use plans address public production forests and forest concessions?
- 2 Are long-term visions and objectives for public production forests and forest concessions identified in forest sector polices and related plans/ programmes?
- Are there adequate safeguards in place for ensuring long-term commitment to forest polices, including contracts of forest concessions, at national and provincial levels?

Legal and institutional frameworks

- Is legislation specific to forest sector aligned internally and with the land-use policies and legislation of other sectors (e.g. agriculture, mining, livelihoods of communities) that are competing for the same land and resources?
- 5 Is legislation specific to forest sector aligned with other relevant national legislation (e.g. taxation, contracting, labour, dispute and grievance, rights to compensations, criminal)?
- Does legislation specific to the forest sector enable the compliance of forest management with key international treaties (e.g. on biological diversity, rights of indigenous people, rights of workers) and the principles of SFM (e.g. voluntary forest management standards and guidelines)?
- 7 Does legislation specific to the forest sector allow for concessions with different management objectives (e.g. production of timber, nontimber products and services, restoration, carbon sequestration)?
- 8 Does legislation specific to the forest sector define rules for the allocation of forest concessions, including the responsibilities of government and eligibility criteria for concessionaires?
- 9 Does legislation specific to the forest sector define rules for the planning of forest concessions and the management of concession areas?
- Does legislation specific to the forest sector define and provide possibilities to alter fees and other charges related to concessions, and procedures for their payments to the state, affected communities and other possible parties?
- 11 Does legislation specific to the forest sector define administrative penalties for violations of laws on allocation, planning and management of concession areas?
- 12 Are institutions responsible for the design, control and monitoring of forest concessions defined, adequately resourced and operational?
- 13 Are institutions for law enforcement related to forest concessions defined, adequately resourced and operational?
- 14 Do the above institutions have functioning organizational structures and management systems, and defined authorities and responsibilities for personnel?

Table continued

rable continued		
Forest concession planning and allocation	15	Are concessions planned in accordance with policy objectives (e.g. land-use, forest sector development) and in cooperation and coordination with the authorities responsible for local development programmes?
	16	Is the planning of concessions based on sufficient baseline information on the socio-economic structures, characteristics of forest resources and infrastructure of the area and its vicinities?
	17	Are local communities, private sector actors and other relevant stakeholders consulted on the establishment of forest concessions and given genuine possibilities to influence their operation?
	18	Are the management objectives and expected outcomes of concessions defined through a participatory process?
	19	Are concessions designed and the related fees and other financial contract provisions determined based on the economic and technical feasibility of concession management?
	20	Are potential concessionaires provided with adequate information on planned concessions, their characteristics, and the fees and obligations involved (e.g. for economic and technical evaluations)?
	21	Are the qualification criteria for concessionaires defined and applied during the evaluation of candidates?
	22	Are potential concessionaires required to demonstrate their technical and financial capacity, and present a business plan (or equivalent scheme)?
	23	Can the good track records of potential concessionaires positively affect contract awarding results or can poor track records disqualify potential concessionaires?
	24	Are concessions awarded following a transparent process and transparent procedures?
	25	Is the involvement of independent observers allowed during the contract awarding process?
	26	Is public consultation included in the process for the awarding of concession contracts?
	27	Can stakeholders report alleged wrongdoings in the process of awarding concession contracts?
	28	Are there effective mechanisms in place to reliably monitor the contract awarding process to ensure it is carried out in accordance with rules and procedures?
Contract implemen- tation, monitoring and enforcement	29	Is concession management based on formal contracts that clearly stipulate exclusiveness, comprehensiveness, duration, transferability, rights to benefits, quality and security of title, and other authorities and responsibilities of the concessionaire?
	30	Do the contracts stipulate all technical, development, administrative, legal, risk and financial and interpretative requirements?
	31	Do the contracts include incentives for performance and/or outcomes exceeding the contract provisions?
	32	Do the contracts include provisions for imposing sanctions if the requirements are not met?
	33	Are monitoring methods and related compliance criteria, frequencies, responsibilities and reporting requirements defined in the contracts?
	34	Do the contracts include provisions for amendments, premature termination and extension and/or renewal?

Table continued

Plans and sustainable production or other operations	35	Are long-term forest management plans (or equivalent plans) drawing on surveys and inventories of forest resources, biodiversity, soil characteristics, topography and infrastructure, as well as socioeconomic conditions, required and prepared for land-use planning and the establishment of operative schedules on a sustainable basis?
·	36	Are short-term operative plans (which should be detailed and aligned with forest management plans) required and prepared?
	37	Are operative plans based on detailed inventories of extractable resources?
	38	Do operative plans set limits for the allowable extraction of resources?
	39	Are operative plans required and prepared for non-extractive activities (e.g. production of services, restoration)?
	40	Is the construction of infrastructure required and implemented?
	41	Are silvicultural measures required and applied?
	42	Are operating procedures required and applied?
	43	Does the government carry out operational controls?
	44	Does the government ensure the accuracy of payments of fees and other charges based on quantities of extractive products?
	45	Are workers trained, supervised and provided with safety equipment and amenities for accommodation, drinking water, meals and personal hygiene?
	46	Are post-operation inspections required and implemented?
	47	Are operational plans required to include set-aside areas, as well as methods and techniques to minimize damage to soil, water and vegetation?
	48	Is adequate protection of the high conservation values of forests required and implemented in concession areas?
Environmental sustainability	49	Is restoration of degraded forests required and implemented in concession areas?
	50	Is the use of hazardous chemicals and substances controlled?
	51	Are appropriate waste management practices required and applied?
Social sustainability	52	Are the rights of local communities and other relevant parties identified and respected within and in the vicinity of concession areas?
	53	Are there mechanisms in place and applied for compensating local communities and other relevant parties for losses related to their customary or other rights?
	54	Are there mechanisms in place and applied for sharing the benefits of concessions with local communities and other relevant parties?
	55	Are the obligations of concessionaires to develop local economies, infrastructure and services defined and implemented?
	56	Are concessionaires required to employ local workers and service providers?
	57	Are there mechanisms in place and applied for disputes and grievances?
Illegal forest	58	Is risk assessment of illegal forest activities required and conducted?
activities	59	Are measures to combat illegal forest activities required and implemented?

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Table continued

Monitoring and assessment	61	Is systematic and periodic monitoring of concessions required and implemented?	
	62	Does monitoring cover production, and economic, environmental and social performance?	
	63	Does monitoring address the achievement of expected outcomes?	
	64	Are monitoring results assessed and, where necessary, used to determine corrective actions?	
Enforcement	65	Do the relevant government authorities carry out inspections related to compliance with legal requirements?	
	66	Are there effective procedures in place and applied for stakeholders to inform authorities about suspected breaches of law?	
	67	Are penalties effectively applied for detected violations?	
Post-contract follow-up	68	Are there procedures in place and applied to approve completed concession management and terminate concession contracts?	
	69	Are measures defined and implemented for actions that must be taken after the termination of concession contracts?	
	70	Is the implementation of post-contract actions controlled and monitored?	

Since the number of enabling conditions may be high, it can be difficult to establish an overview of the self-assessment results rapidly, or communicate them to a wider public. For this reason, it might be advisable to sort and categorize the data (see Box 21).

BOX 21 Tips for communicating self-assessment results

There are many ways to present an overview of the self-assessment results, depending on the desired message.

For example, if the results indicate that the necessary legislation is in place, but that the laws and regulations have not been properly implemented, one option is to present the shares of laws that are fully implemented, partially implemented and not implemented for the following categories:

- All laws assessed
- Laws assessed in groups (e.g. environmental laws and social laws)

Alternatively, if the aim is to communicate the rate of compliance by elements of sustainable forest management, an option is to present the results as shares of the categories in place, partially in place and absent in appropriate groups, for the following categories:

- Laws, mechanisms and factual participation of local communities in the design and allocation of concessions
- Laws, guidelines, controls and implementation of measures for maintaining environmental integrity

Self-assessment results indicating that there is still room for improvement (i.e. enabling conditions that are absent or partially in place) will be subjected to follow-up actions. It is therefore vital to inform the relevant parties about the self-assessment result, and involve them in the follow-up stage of the SAT process.

5.4 STEP 3: FOLLOW-UP

Follow-up actions respond to gaps identified in the self-assessment stage. Whereas the tool for self-assessment can, in principle, be applied by anyone, it is recommended to plan follow-up actions in close cooperation with the relevant stakeholder and responsible government bodies. The procedures for follow-up actions should involve the following steps:

- Review each self-assessment finding carefully, paying specific attention to the related legislative and regulatory frameworks, the practices applied, and the capacities and resources of the relevant bodies.
- Establish taskforces to develop plans for follow-up actions. Depending on the capacity of the taskforce, it may cover just one or several follow-up actions.
- Plan follow-up actions that specify:
 - the issue;
 - the means to address the issue (e.g. amendment of laws, development of operational measures, use of incentives or government steering instruments, capacity-building);
 - the responsibilities;
 - timelines.
- Submit plans for the implementation of follow-up actions to the relevant decision-making bodies.



6. Avenues for further work

These Voluntary Guidelines are intended to provide practical guidance for the management of public production forests in the tropics via forest concessions. They highlight what is most relevant for transforming concessions into an instrument for delivering environmental and socio-economic benefits. As such, the guidelines contribute to defining the framework for the business of sustainable management of natural forests, which has come under severe scrutiny by the international community. Finding ways to ensure that sustainable forest management is fully implemented in the tropics will allow forests to play a comprehensive role in achieving sustainable development. The rationale of this document is that timber production in natural forests can be reconciled with the needs of the environment, and can deliver fair and equitable economic development, alongside other forest activities, but that conditions stand. It provides guidance to public and private actors, as well as forest communities, to realize this potential and deliver results that are compatible with long-term sustainability.

In this context, the document should be considered a first step in accessing forest production from natural forests in a changing environment. Of the 3 695 million ha of natural forests in the world, 1 712 million ha are located in the tropics, and of these almost 123 million ha are under forest concessions. In many cases, concessions have been poorly managed and have resulted in areas that, although still considered forests, have seen their production potential depleted. Forest restoration has become an important need, even in areas still under concession.

PROMISING PATHWAYS

- Further work on forest typologies. Guidelines for forest concessions in natural forests should consider the condition of these forests, before defining the type of management and contract that can deliver sustainability. This is due not only to premature degradation or deforestation, but also to the different biomes, yields, human presence, access and other conditions. This document suggests the need to work further on typologies, and assess how the different guidelines could be implemented in the different scenarios.
- Economic assessment of SFM in the tropics. Following up on these guidelines would involve more rigorous assessment of the economics of SFM in the tropics, and the way it influences the business of sustainable forestry and sustainable forestry value chains. The market for wood products has experienced many changes; recent technological innovations have broadened the range of products, with increased importance for panels, veneers, and other highly processed products. In addition, the costs of sustainable forest management are not fully absorbed by the markets.

- Costs and benefits of individual guidelines. It is reasonable that the costs and benefits of putting into practice a given guideline will differ from one guideline to the next. Implementation will require resources (including in terms of money, time, and political capital), and will also differ depending on the local policy, institutional, social and environmental context. It should be noted that failure to implement guidelines also carries costs. For example, lack of a clear and transparent legal and institutional environment means that investments in forestry are considered high risk. Attempts to mitigate risk may include corrupt, short-sighted, and forest degrading behaviours. Therefore, the 'cost-effectiveness' of a given guideline will be important to inform decision-making relating to the most appropriate concession model for a given context. While the pertinence of individual guidelines to specific contexts may vary, the principles are fundamental in ensuring sustainability of the concession model, as well as its development and implementation.
- Self-Assessment Tool for directing improvements to concessions. Understanding the natural forest value chains, and identifying the business structure that can generate financial results compatible with the environmental and social needs of sustainable forest management, is critical for successful forest concessions. The Self-Assessment Tool included in the Voluntary Guidelines can provide a roadmap to improve concession results, since forest concessions are one option for delivering sustainable forest management in many, but not all, contexts. If applied in a participatory manner, it provides an opportunity for stakeholders to engage in a process of dialogue that can lead to a prioritization of areas of work, and identification of the most cost-effective actions towards sustainability.

These Voluntary Guidelines and the Self-Assessment Tool can also offer the basis for developing a monitoring framework for forest concessions, and can be even more beneficial when combined with criteria and indicators for sustainable forest management and assessments of sustainability of forest value chains. In sum, the application of these Voluntary Guidelines in combination with other existing guidance will create enabling conditions for a sustainable forest economy, and effective contributions to the 2030 Agenda.



Glossary

Agenda 2030/Sustainable Development Goals (SDGs) (Transforming our world: the 2030 Agenda for Sustainable Development): a programme for sustainable development agreed upon by the United Nations Member States in 2015. This builds on the Millennium Development Goals, which expired in 2015, and guides the global development agenda until 2030. It consists essentially of 17 goals that cover and reconcile economic, social and environmental sustainable development.

Company: any sole proprietorship, organization, firm, association, corporation, utility, partnership, venture, public franchise, franchisor, franchisee or its wholly owned subsidiary that exists for profit-making purposes or otherwise to secure economic advantage.

Degraded forest land: former forest land severely damaged by the excessive harvesting of wood and/or non-wood forest products, poor management, repeated fire, grazing or other disturbances, or land uses that damage soil and vegetation to a degree that inhibits or severely delays the re-establishment of forest after abandonment.

Landscape: fundamental attributes of a particular geographical region, including its land cover and land use patterns, and biological and physical characteristics.

Local community: a group of individuals belonging to the same community residing within or in the same vicinity of a particular parcel, property or natural resource. The community members are co-owners who share exclusive rights and duties, the benefits of which contribute to community development.

Managed primary forest: primary forest in which sustainable wood and non-wood harvesting (e.g. through integrated harvesting and silvicultural treatments), wildlife management and other uses have changed the forest structure and species composition from the original. All major goods and services are maintained.

Multiple-use forest: "forest area designated primarily for more than one purpose and where none of these alone is considered as the predominant designated function" (FAO, 2010).

Primary forest: forest which has never been subject to human disturbance, or has been so little affected by hunting, gathering and tree-cutting that its natural structure, functions and dynamics have not undergone any changes that exceed the elastic capacity of the ecosystem.

Production forest: "forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products" (FAO, 2010).

Public forest/public ownership: "forest owned by the State; or administrative units of the Public Administration; or by institutions or corporations owned by the Public Administration" (FAO, 2010).

Secondary forest: woody vegetation regrowing on land that was largely cleared of its original forest cover (i.e. carried less than 10 percent of the original forest cover). Secondary forests commonly develop naturally on land abandoned after shifting cultivation, settled agriculture, pasture or failed tree plantations.

Paris Agreement: an agreement aimed at combating climate change embedded in the United Nations Framework Convention on Climate Change (UNFCCC), agreed upon at the UNFCCC's 21st Conference of the Parties (COP 21) in 2015. A key objective of the agreement was to keep the global temperature rise below 2 degrees Celsius above pre-industrial levels during this century. Signatories have to prepare so-called Nationally Determined Contributions (NDCs) that present national level commitments to implementing the agreement.



References

- Amacher, G.S., Ollikainen, M. & Koskela, E. 2012. Corruption and forest concessions. *J. Environ. Econ. Manage.*, 63: 92–104.
- Azevedo-Ramos, C., Silva, J.N.M. & Merry, F. 2015. The evolution of Brazilian forest concessions. *Elem. Sci. Anthr.*, 3: 48.
- Boscolo, M., Snook, L. & Quevedo, L. 2009. Adoption of sustainable forest management practices in Bolivian timber concessions: A quantitative assessment. *Int. For. Rev.*, 11: 514–523.
- Cerutti, P.O., Tacconi, L., Nasi, R. & Lescuyer, G. 2011. Legal vs. certified timber: Preliminary impacts of forest certification in Cameroon. For. Policy Econ., 13: 184-190.
- Cerutti, P.O., Ngouhouo, J.P., Karsenty, A., Eba'a Atyi, R. & Nebmbot, F. 2016. The technical and political challenges of the industrial forest sector in Cameroon. *Int. For. Rev.*, 18(1): 26–39.
- Chan, B. 2016a. Southeast Asian forest concessions: Small steps forward. Int. For. Rev., 19(S2)
- Chan, B. 2016b. Current status of forest concessions in Southeast Asia. Forestry Policy and Institutions Working Paper No. 3. Rome, FAO (available at www.fao.org/forestry/45022-0f557d8566880c29ada8b134400e42c4e.pdf).
- Edwards, D.P., Tobias, J.A., Sheil, D., Meijaard, E. & Laurance, W.F. 2014. Maintaining ecosystem function and services in logged tropical forests. *Trends Ecol. Evol.*, 29(9): 511–520.
- FAO (Food and Agriculture Organization of the United Nations). 2001. Governance principles for concessions and contracts in public forests. FAO Forestry Paper No. 139. Rome (available at www.gbv.de/dms/goettingen/337852596.pdf).
- **FAO.** 2010. *Global forest resources assessment 2010: Main report.* FAO Forestry Paper No. 163. Rome (available at http://www.fao.org/docrep/013/i1757e/i1757e.pdf).
- **FAO.** 2012. Voluntary guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security. Rome (available at http://www.fao.org/docrep/016/i2801e/i2801e.pdf).
- FAO. 2013. *Implementing the Non-legally Binding Instrument on All Types of Forests*. Rome, Food and Agriculture Organization of the United Nations (available at http://www.fao.org/docrep/019/mi749e/mi749e.pdf).
- FAO. 2014. Principles for responsible investment in agriculture and food systems. Rome, Committee on World Food Security, FAO. Rome (available at http://www.fao.org/3/a-au866e.pdf).
- FAO. 2015. *Global forest resources assessment 2015*. Desk reference. Rome (available at http://www.fao.org/3/a-i4808e.pdf).
- FAO. 2016. What future for forest concessions and alternative allocation models for managing public forests? Porto Velho, Brazil. 13–16 September 2016 (available at http://www.fao.org/forestry/45025-04f08cdc6e3b2005700b8ee001b4373bf.pdf).

- Gilmour, D. 2016. Forty years of community-based forestry: A review of its extent and effectiveness. FAO Forestry Paper No. 176. Rome, FAO (available at www.fao.org/3/a-i5415e.pdf).
- Gray, J. A. 2002. Forest concession policies and revenue systems: Country experience and policy changes for sustainable tropical forestry. World Bank Technical Paper No. 522. Washington, D.C., World Bank.
- Gretzinger, S. 2016. Latin American Experiences in Natural Forest Management Concessions. Forestry Policy and Institutions Working Paper No. 35. Rome, FAO (available at http://www.fao.org/forestry/45023-0707f17f1cce86c7e4f4e870bf4edd2f0.pdf)
- ITTO (International Tropical Timber Organization). 2002. ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests. ITTO Policy Development Series No. 13. Yokohama, Japan, International Tropical Timber Organization.
- ITTO. 2015. Voluntary guidelines for the sustainable management of natural tropical forests. ITTO Policy Development Series No. 20. Yokohama, Japan.
- Karsenty, A. & Vermeulen, C. 2016. Toward "Concessions 2.0": Articulating inclusive and exclusive management in production forests in Central Africa. *Int. For. Rev.*, 18: 1–13.
- Karsenty, A. & Ferron, C. 2017. Recent evolutions of forest concessions status and dynamics in Central Africa. *Int. For. Rev.*, 19(S2): 1–17.
- Lambooy, T. & Levashova, Y. 2011. Opportunities and challenges for private sector entrepreneurship and investment in biodiversity, ecosystem services and nature conservation. *Int. J. Biodivers. Sci. Ecosyst. Serv. Manag.*, 7: 301–318.
- Lentini, M., Verissimo, A. & Sobral, L. 2003. Fatos florestais da Amazonia [Forest facts in the Amazon]. Belem, Brazil, Imazon.
- Lescuyer, G., Mvongo-Nkene, M.N., Monville, G., Elanga-Voundi, M.B. & Kakundika, T. 2015. Promoting multiple-use forest management: Which trade-offs in the timber concessions of Central Africa? *For. Ecol. Manage.*, 349: 20–28.
- McGinley, K.A. & Cubbage, F.W. 2012. Governmental forest policy for sustainable forest management in Costa Rica, Guatemala, and Nicaragua: Regulation, implementation, and impact. *J. Sustain. For.*, 31: 355–375.
- Merry, F.D. & Amacher, G.S. 2005. Forest taxes, timber concessions, and policy choices in the Amazon. *J. Sustain. For.*, 20: 15–44.
- Pérez, M.R., De Blas, D.E., Nasi, R., Sayer, J.A., Sassen, M., Angoué, C., Gami, N., Ndoye, O., Ngono, G., Nguinguiri, J.C., Nzala, D., Toirambe, B. & Yalibanda, Y. 2005. Logging in the Congo Basin: A multi-country characterization of timber companies. *For. Ecol. Manage.*, 214: 221–236.
- **Purnomo, H. & Mendoza, G.** 2011. A system dynamics model for evaluating collaborative forest management: A case study in Indonesia. *Int. J. Sustain. Dev. World Ecol.*, 18: 164–176.
- Ravikumar, A., Andersson, K., Mwangi, E., Guariguata, M.R. & Nasi, R. 2012. Towards more equitable terms of cooperation: Local people's contribution to commercial timber concessions. *Int. For. Rev.*, 14: 157–176.
- Romero, C., Guariguata, M.R., Putz, F.E., Sills, E.O., Lima, G.R., Papp, L., Voigtlaender, M. & Vidal, E., eds. 2015. The context of natural forest management and FSC certification

References 103

in Brazil. CIFOR Occasional Paper No. 148. Bogor, Indonesia, Center for International Forestry Research.

- Topa, G., Karsenty, A., Megevand, C. & Debroux, L. 2009. The rainforests of Cameroon: experience and evidence from a decade of reform. Washington, D.C., World Bank.
- van Hensbergen, B. 2016. Forest concessions past, present and future? Forestry and Institutions Working Paper No. 36. Rome.
- Vermeulen, C. & Karsenty, A. 2017. Towards a community-based concession model in the DRC. *Int. For. Rev.*, Vol.19, 2017.
- Whiteman, A. 1999. Economic rent from forest operations in Suriname and a proposal for revising Suriname's forest revenue system. Rome, FAO (available at www.fao.org/3/a-x6827e.pdf).



Annex



Annex

Developing the Voluntary Guidelines – methods and approach

The development of the Voluntary Guidelines drew on an extensive, four-step information gathering process: (i) literature review; (ii) multilingual online survey; (iii) targeted interviews with experts; and (iv) stakeholder consultations in selected countries.

The literature review analysed positive impacts, main challenges and key lessons related to tropical forest concessions. It encompassed earlier work of the Forest Concessions Initiative (FCI), scientific journal articles, project reports and publications, policy briefs and other guidelines relevant to the management of natural forests (see Box 2). Themes covered included governance, land use and forest policy, tropical forest management and economics, and social inclusion in forestry in Africa, Latin America and Southeast Asia. The literature review clarified and helped to refine the scope of the Voluntary Guidelines, produced an analytical framework and a draft concession management cycle, and the first proposal of principles, guidelines, recommendations and Self-Assessment Tools.

Building on the literature review, a multilingual online survey was developed using the QuestionPro tool during April and May 2017. The main objective was to gather a broad range of expert and practitioner insights and opinions, and address information gaps identified during the literature review. The survey was available in English, French and Spanish, and consisted of both open-ended and closed questions. The questions invited responses on the following areas: (i) the proposed principles and guidelines; (ii) the contribution of forest concessions to local development; (iii) Self-Assessment Tools; (iv) the rights and needs of local communities; and (v) the environmental integrity of forest concessions post-contract. In total, 71 out of 378 invited respondents completed the survey. Participants included representatives from government organizations, forest enterprises, international organizations, civil society organizations and academia. The principles, guidelines and recommendations were revised following analysis of the online survey results.

The online survey was complemented by a series of targeted interviews with selected policy-makers, forest entrepreneurs, international organizations, steering committee members of FCI, and authors of regional reports prepared under FCI. The objective was to gain additional, in-depth knowledge of selected key issues and topics. During May 2017, the researchers conducted 17 interviews by phone or Skype, which included open-ended questions. The resulting information helped to further enrich the draft Principles and Guidelines.

The draft Guidelines were presented, discussed and further developed at four regional stakeholder consultations held in Gabon, Indonesia, Mozambique and Peru from June to July 2017. The consultation meetings brought together some of the region's key stakeholders from governments, the private sector, communities and the financial sector, as well as technical experts.

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Making forest concessions in the tropics work to achieve the 2030 Agenda: Voluntary Guidelines

Sustainable wood products and their value chains can play a fundamental role in achieving the objectives stated in the 2030 Agenda and the Paris Agreement, delivering a wide range of benefits to populations in remote forest areas as well as to local, regional and global society. Generation of income and employment, disaster risk reduction, and reduction of the material and carbon footprint of the planet are some of the direct contributions sustainable forest products can provide to the SDGs and the climate change commitments. Furthermore, sustainable management of natural forests reduces forest degradation and forest production can increase the opportunity cost for deforestation, while generating revenues for conservation strategies.

These Voluntary Guidelines for forest concessions focus on concessions as a forest policy instrument for the delivery of sustainable forest management in the tropics, building on lessons learned from success and failures in implementing forest concession. The guidelines offer a practical participatory management approach to support forest concession regimes to be reliable sources of sustainable wood and non-wood forest products and contribute to realizing the full contribution of forestry to the 2030 Agenda.





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