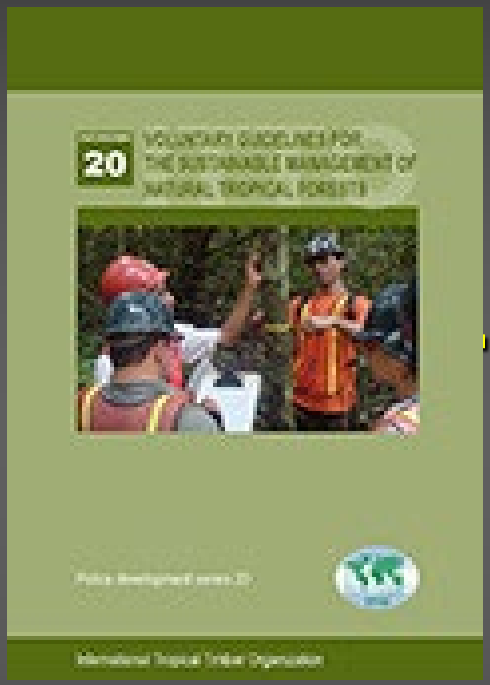
ITTO International Tropical Timber Organization

Sustaining Tropical Forests

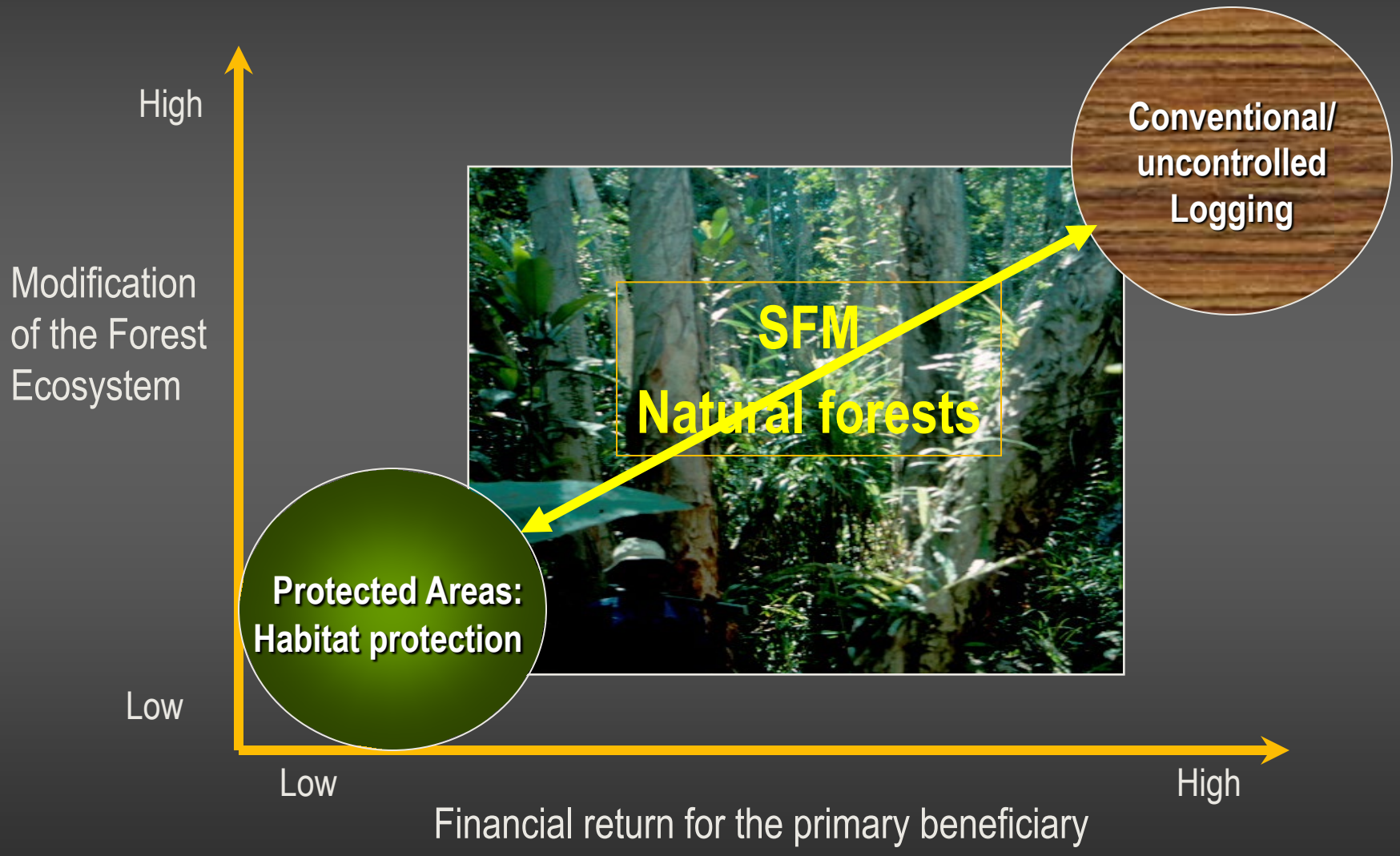


ITTO Voluntary Guidelines for the Sustainable Management of Natural Tropical Forests

Juergen Blaser

Port-of-Spain-Feb 2024

Multipurpose/adaptive: what is meant?



Multipurpose forest management

- Growing demand for goods and services from tropical forests
- Create the conditions to diversify forest use, broaden forest productivity and provide incentives to maintain forests (in community forests and forest concessions)
- Forest managers need to learn to continually balance various management objectives that inevitably will change over time as economic and societal needs and values change



What constitutes sustainable forest management? (page 12, amended)

A strategy for sustainable forest management must reflect on a variety of issues in the broader context of development:

- continuously satisfying needs for goods and environmental services from forests;
- ensuring the conservation of forest soils, water and carbon stocks;
- conserving biodiversity;
- sustaining the resilience and renewal capacity of forests, including carbon storage;
- supporting the food-security, cultural and livelihood needs of forest-dependent communities;
- ensuring an equitable sharing of responsibilities in forest management and of the benefits arising from forest use.

Adaptive Management (page 14)

Learning by doing, managing (future) risks

- involves the use of science to support best practices, planning, monitoring results against expected outcomes and then adapting the practices to improve outcomes based on the original expectations (Blaser and Thompson 2010).
- encourages active participation by all stakeholders to improve the effectiveness of management interventions providing a flexible and responsive way to deal with uncertainty and change (IUFRO/WFSE 2010).
- considers and link both, the scientific as well as the traditional knowledge for practical forest management implementation (for instance, to stratify and classify local forest types, lesser-known tree species, regeneration and restoration practices, knowledge on NTFP management, etc.)

→ Adaptive management is a process by which forest managers adjust their strategies for meeting forest management objectives as conditions change

Issues for SFM in natural tropical forests (pages 14-19)

- SFM in the context of landscape management
- SFM in ("primary") natural tropical forests
- Forest degradation and restoration
- SFM natural forests and biodiversity conservation
- Protective functions of forests
- REDD+
- SFM and extra-sectoral forces affecting forests

Restoring degraded natural forests

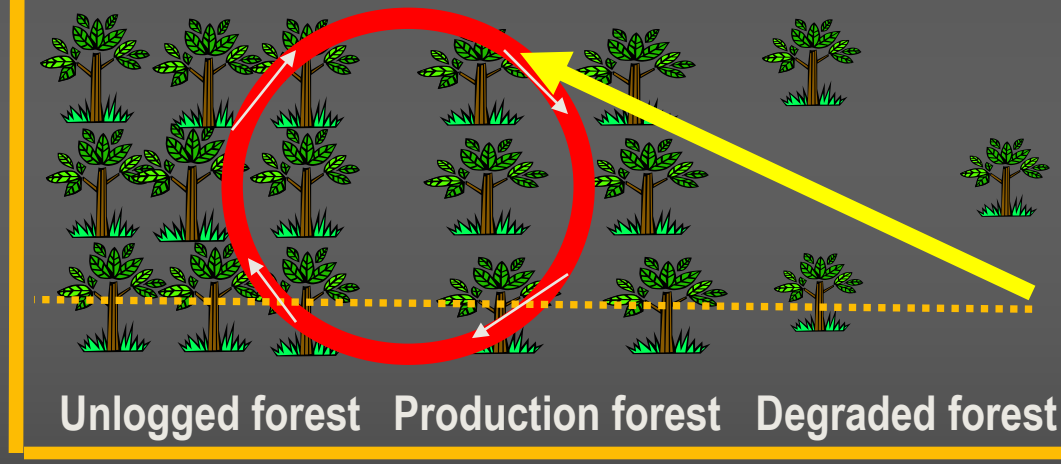
Timber, carbon +++ → +

Protective functions +++ → +

Biodiversity +++ → +

Deforestation (land-use change)

100 tC/ha → 65 tC/ha → 25 tC/ha



Forest Degradation

Forest Restoration Process

Sustainable Forest Management

Forest Restoration is carbon sequestration in forested areas , an SFM approach

Structure/organization of the document

- Chapter 2 introduces the context in which the guidelines were developed.
- Chapter 3 provides an overview of the principles and their relationships with the ITTO C&I for SFM
- Chapter 4 set outs the guidelines for each of the principles, as well as an open-ended list of suggested actions for each guideline
- A tailor-made glossary, list for further research and extended reference list

→ voluntary; a framework guide; adaptable to specific conditions

Framework of the voluntary guidelines SFM objectives for natural tropical forests

1. Providing the enable conditions for SFM
2. Ensuring forest ecosystem health and vitality
3. Maintaining the multiple functions of forests to deliver products and environmental services
4. Integrating social, cultural and economic aspects to implement SFM

SFM Objectives and Principles

1. **Providing the enabling conditions for SFM**
   - Principle 1: Forest governance and security of tenure
   - Principle 2: Land-use planning, permanent forest estate and forest management planning

2. **Ensuring forest ecosystem health and vitality**
   - Principle 3: Ecological resilience, ecosystem health and climate-change adaptation

3. **Maintaining the multiple functions of forests to deliver products and environmental services**
   - Principle 4: Multipurpose forest management
   - Principle 5: Silvicultural management

4. **Integrating social, cultural and economic aspects to implement SFM**
   - Principle 6: Social values, community involvement and forest-worker safety and health
   - Principle 7: Investment in natural forest management and economic instruments.

Principles, guidelines and recommended actions

Pages 22 to 26 of the document:
7 principles for managing natural tropical forests and the 60 related guidelines:

1 Forest governance and security of tenure (13)

2 Land-use planning, permanent forest estate and forest management planning (6)

3 Ecological resilience, ecosystem health and climate-change adaptation (8)

4 Multipurpose forest management (5)

5 Silvicultural management 13)

6 Social values, community involvement and forest-workers safety and health (10)

7 Investment in natural forest management and economic instruments (5)

Objectives and Principles of SFM and their relationship to C&I

Page 23 of the document:

4 objectives listed that summarize 7 principles of SFM.

Objectives and principles directly relate to the 7 criteria to monitor and report on progress towards SFM (C&I).

Objective	Principles for managing natural tropical forests		Relationship with ITTO C&I for SFM
	Principle	Observations	
1. Providing the enabling conditions for SFM	**Principle 1: Forest governance and security of tenure**	Political commitment, supportive national policies, strong institutions, laws and regulations, appropriate governance, security of forest tenure and clearly defined access and use rights, including customary and traditional rights, are necessary conditions for SFM	Criterion 1: Enabling conditions for SFM
	Principle 2: Land-use planning, permanent forest estate and forest management planning	Managing tropical forests sustainably requires that land allocation and spatial planning within and outside forests maintain or enhance the economic, social and environmental values of forests at a landscape scale. This requires the adoption of a forest planning framework at the national, subnational or landscape scale	Criterion 1: Enabling conditions for SFM (planning framework) Criterion 2: Extent and condition of forests
2. Ensuring forest ecosystem health and vitality	**Principle 3: Ecological resilience, ecosystem health and climate-change adaptation**	Resilience is a key tenet of SFM in natural tropical forests; it is essential to maintain or enhance it to reduce risks to sustainability. Climate change is likely to affect tropical forests and the people who depend on them. It is essential to identify, prevent, monitor and manage threats to forests and to protect them from destructive agents and stresses	Criterion 3: Forest ecosystem health
3. Maintaining the multiple functions of forests to deliver products and environmental services	**Principle 4: Multipurpose forest management** **Principle 5: Silvicultural management**	The role of natural tropical forests as providers of multiple goods and environmental services should be safeguarded by the application of sound planning and management practices that maintain ecosystem functions and the potential of the forest to yield the full range of benefits to society. In timber production forests, it is essential to have an approved management plan with clearly stated objectives and the silvicultural measures to help meet those objectives	Criterion 4: Forest production Criterion 5: Biodiversity Criterion 6: Soil and water protection
4. Integrating social, cultural and economic aspects to implement SFM	**Principle 6: Social values, community involvement and forest-worker safety and health** **Principle 7: Investment in natural forest management and economic instruments**	SFM needs to accommodate forest-based production (particularly of timber), environmental protection and local development concerns. Natural tropical forests perform a wide range of socioeconomic and cultural functions, which must be recognized and maintained	Criterion 7: Economic, social and cultural aspects

Providing the enable conditions for SFM

Principle 1:
Forest Governance and security of tenure (pages 27-33)

Political commitment, supportive national policies, strong institutions, laws and regulations, appropriate governance, secure forest tenure, and clearly defined access and use rights, including customary and traditional rights, are all necessary for SFM.

Principle 1: Forest Governance and security of tenure

Rationale

- Political commitment
- Forest policy
- Governance
- Legislation and forest law compliance
- Institutional arrangements
- Forest concession as a form of forest tenure
- Gender equity
- Integrating emerging issues

What needs to be addressed under Principle 1

Illegal logging

Politics
Bureaucracy
Practice of law

Advantages:
- Natural product
- Long-term
- Valuation
- Manufacturing

Opportunities:
- Productivity
- Innovation
- Income

Shortage in logistics and infrastructure

Low level of education

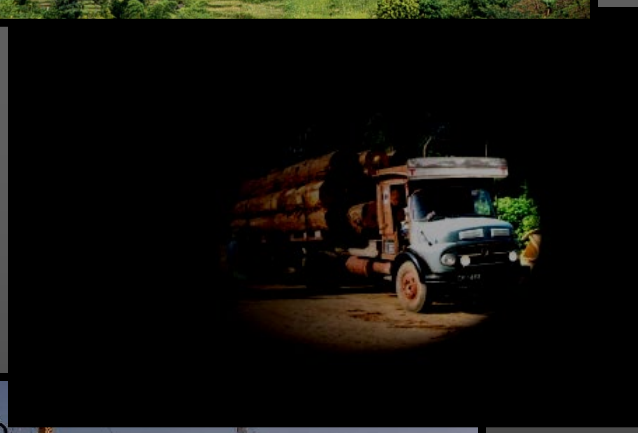



Illegal activities

Corruption involving officials and other stakeholders

Illegal activities of operators

- Illegal timber harvesting of various forms
- legal, but unsustainable forest management
- movement / trade of wood products without authorization (national, regional, international)
- avoidance of payment of taxes or charges



Corruption* of officials

- **Grand corruption**
  - companies supporting political fractions for concession allocations, harvesting approvals, changes of rules, avoiding prosecution etc.
  - politicians, high ranking military, government officials using their status for personal enrichment
  - companies bribing local communities
- **Petty corruption**
  - companies bribing low ranking officials to falsify declarations of volume, species, avoiding prosecution for non-compliance etc.

* The World Bank defines corruption as "the abuse of public office for private gain"

Illegal activities in the forests...

Allocation of forest tenures

- corruption in the bidding process for concessions,
- allocation of extractive activities in protected areas

Management planning/inventory

- lack of, or insufficient management plans
- irregular inventories
- Irregular reporting

Timber harvesting

- Cutting: protected species, under-oversized trees, above allowable cut, logging in protected areas
- Timber theft

Other aspects

- Illegal hunting, poaching
- Illegal gathering of NWFP
- Dumping of waste...
- Illegal crops in forests

...Illegal activities: commodity chain

Transportation of timber

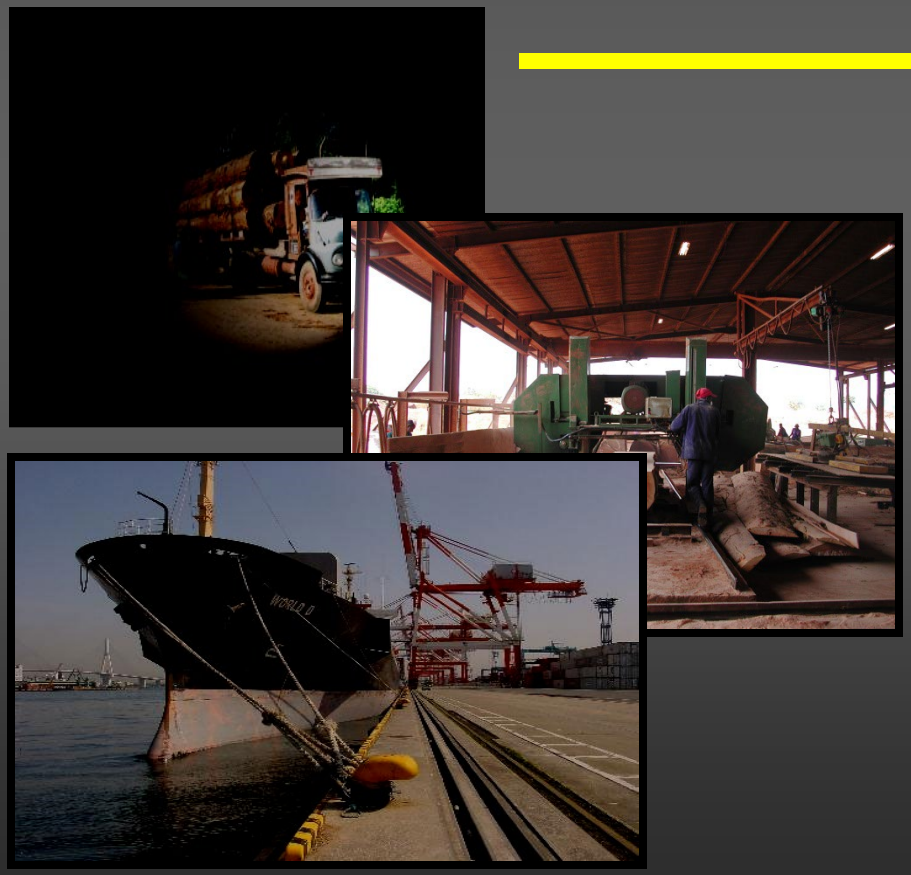
No permits, falsifying documents, etc.

Processing

- Without license
- Undocumented timber
- Not meeting requirements

Reporting

- False declaration
- Under grading, under-valuing



Export and Import (timber smuggling)

- No respect of CITES regulations
- Against national laws
- Export illegally harvested
- Export volumes in excess of documented export
- Unauthorized movement across borders

Factors contributing to illegal activities (operators)

- Tenure issues, e.g. length of timber concessions
- Economic issues, e.g. provision of resources at below-market prices
- Scale of forestry/forest industry activities
- Quality of in-company processes

- **However now: International scrutiny and national commitments to tackle the problem: FLEG, FLEGT, EUDR**

Principle 1: Forest Governance and security of tenure

Guidelines (1-6)

1.1 Reaffirm political commitment and strengthen and implement effective policies and strategies to promote SFM

1.2 Establish coherence, effective linkages and coordination of policies and laws between different levels of governance

1.3 Formulate regulations and procedures for forest law enforcement

1.4 Recognize that it is essential to have appropriate and capable institutions with effective linkages between them

1.5 Transfer authority or responsibility from the central government to subnational governments and empower the private sector, communities and civil-society institutions and women to collaborate efficiently in SFM

1.6 Identify and analyze the impacts that the policies and laws of other sectors may have on SFM

Principle 1: Forest Governance and security of tenure

Guidelines (7-13)

1.7 Foster accountability/transparency and establish mechanisms for stakeholder participation and involvement in SFM

1.8 Identify and integrate relevant emerging issues related to SFM, capture synergies and address possible tradeoffs with existing objectives of forest management

1.9 Recognize the implications for SFM of legally and non-legally binding intergovernmental agreements at the regional and global levels

1.10 Put in place effective formal systems for ensuring the security of forest tenure

1.11 Recognize the importance to SFM of clear rights to forest access and use

1.12 Ensure that traditional use rights are clear and respected

1.13 Make sure that concession/logging rights are clear and transparent.

Example: Principle 1, Guideline 1.1 and suggested actions under the guideline

Principle 1: Forest governance and security of tenure			
Guidelines		**Suggested actions**	**Indicative stakeholder groups**
1.1	**Reaffirm political commitment and strengthen and implement effective policies and strategies to promote SFM**	Develop a formal forest policy statement that includes a shared vision of and shared goals for SFM and sets out strategies for their achievement	Government and legislators, jointly with all stakeholders in the forest sector and in other sectors with a strong influence on forests
		Revise or update periodically the forest policy and allow flexibility in the methods to be used	
		In revising forest legislation, observe the following: avoid legislative overreaching; avoid unnecessary or superfluous licensing and approval requirements; enhance provisions for transparency and accountability; and enhance the role of stakeholders	Government and legislators, forest managers, private sector, civil society, research and education institutions
		Provide avenues for engagement among stakeholders to allow the continuous adaptation of the forest policy and its implementation	

Providing the enable conditions for SFM

Principle 2:
Land-use planning, permanent forest estate and forest management planning (pages 34-37)

Land allocation to different uses and spatial planning within and outside forests must ensure that the economic, social and environmental values of forests are maintained or enhanced at a landscape scale. This requires the adoption of a forest management planning framework at the national and/or landscape scales.

Principle 2: Land-use planning, permanent forest estate and forest management planning

Rationale

- Land-use planning
- Permanent forest estate
- Adaptive management
- Research and education
- Continuous forest assessment
- Communication, transparency and public awareness

Principle 2: Land-use planning, permanent forest estate and forest management planning

Guidelines (1-6)

2.1 Implement national and subnational land-use planning

2.2 Establish a PFE by laws that define its demarcation, use and management strategies

2.3 Carry out periodic national or subnational forest resource assessments to provide reliable data at the landscape scale

2.4 Prepare and implement a national forest management planning framework

2.5 Support research and education in natural tropical forest management

2.6 Monitor progress in SFM, including through clear and open communication with the public

Example: Principle 2, Guideline 2.2 and suggested actions under the guideline

Principle 2: Land-use planning, permanent forest estate and forest management planning			
Guidelines		**Suggested actions**	**Indicative stakeholder groups**
2.2	**Establish a PFE by laws that define its demarcation, use and management strategies**	Allocate sufficient and suitable land, whether public or private, to be kept under permanent forest cover as the PFE	Government, private sector, civil society, research and education institutions
		Encourage the use of remote sensing, geographic information systems (GIS) and other up-to-date techniques for forest mapping and zoning to support decision-making	
		Based on initial plans for zoning the PFE at the landscape scale, consult with local people, taking into account their present and future needs for agricultural land and their customary uses of the forest	
		Determine areas of the PFE to be maintained and managed primarily for the protection of soil and water and for other purposes	
		Consider allocating, to the PFE, land for which the use is uncertain until such time as the need for other uses arises	Government

Ensuring forest ecosystem health and vitality

Principle 3:
Ecological resilience, forest health and climate-change adaptation (pages 38-41)

Ecological resilience is a key tenet of SFM in natural tropical forests, and it must be maintained or enhanced to reduce the risks posed to sustainability by destructive agents, climate change and other stresses and disturbances .

Principle 3: Ecological resilience, forest health and climate-change adaptation

Rationale (pages 38-39)

- Managing intact natural tropical forests
- Restoring degraded forest ecosystems
- Addressing the effects of climate change on natural tropical forests
- Management of pests and diseases

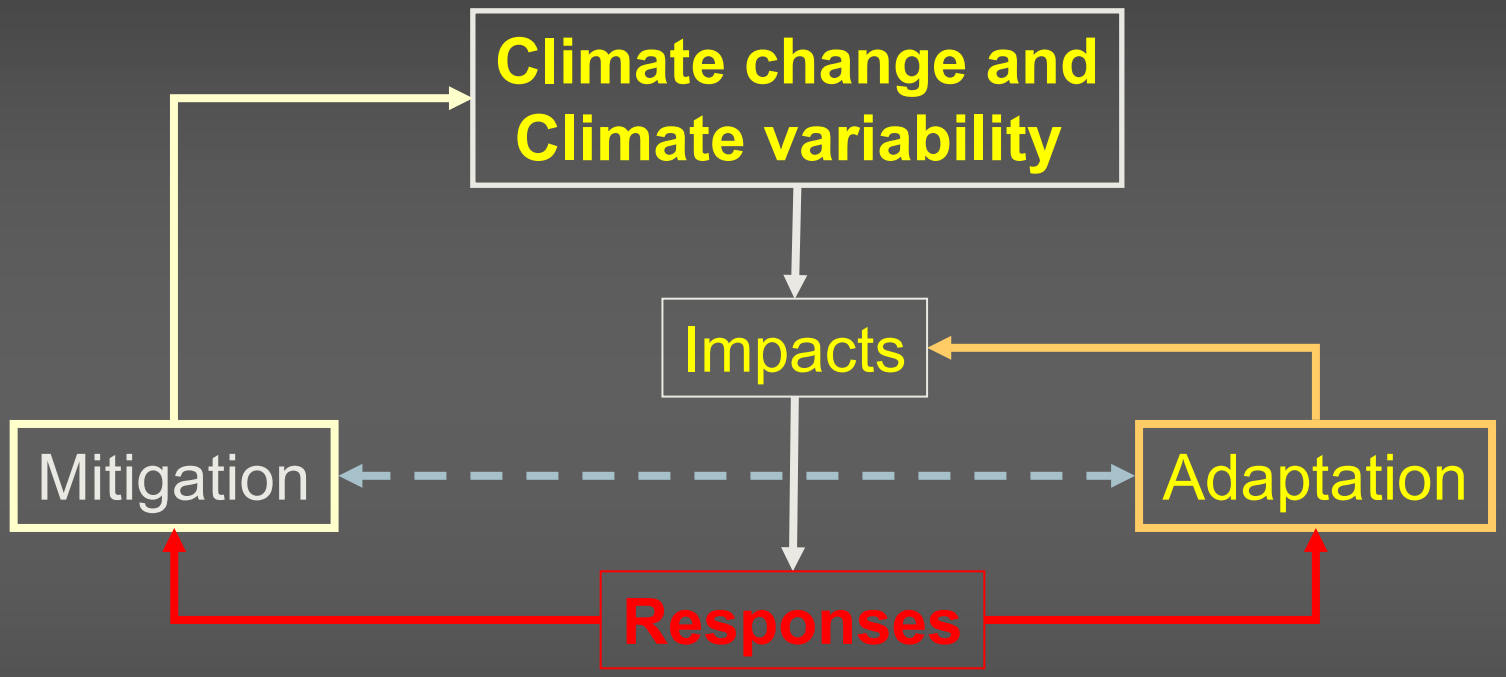
Broader rationale: Forest Management Guidelines and C&I at a landscape level

- Focus stability:
  Ability to retain (and/or restore) forest landscapes while adapting to changing environmental, social and economic conditions (including climate change)

- Focus functional flexibility (goods & services):
  Ability to respond to varying needs, demands and changing priorities and values of people (local and beyond)

- Focus ecosystem integrity:
  Ability to protect biodiversity and nature while using the resources sustainably

Forests and climate change: the basics



… maintaining and increasing ecosystem C pools and C sequestration – reducing emissions from biosphere

… maintaining and increasing ecosystem resilience – reducing vulnerability

The role of SFM in climate change

Adaptation

Maintaining and increasing ecosystem resilience – reducing vulnerability

- Forest ecosystems are affected by climate variability and climate change:

  What are the direct and indirect impacts
  - forest-dependent people?
  - on the forestry production chain?
  - at the landscape level?

- How can forests and trees contribute to reduce vulnerability for people and ecosystems)?

→ **A forest management agenda that includes a CC adaptation analysis and measures can increase the value of forests**

"Avoid the unmanageable and manage the unavoidable." (Sigma Xi)

Forests in Climate Change:
Forests can increase resilience, fix and maintain carbon

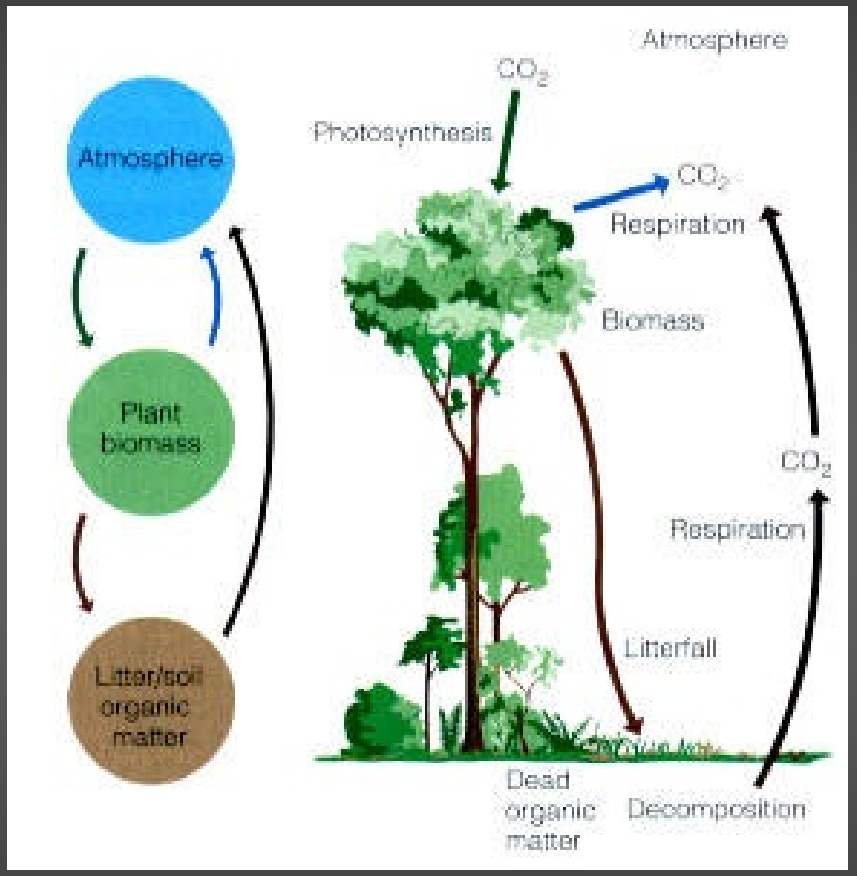
- If average C02 concentration continues to increase to 550 ppm or higher, forests will become highly vulnerable → high risk that GHG sinks become sources of GHG emissions
  - Forests are a mitigation option now and over the next 50 – 100 years or so, a transitional measure towards a low carbon economy
  - Need to increase resilience of forest trees and ecosystems at the same time as using forests as a mitigation option.
- Presently, the potential of forests as a mitigation option is huge : keeping and managing forests; planting forests; restoring forests
  - **REDD+**
- **Integrate such new risks and potentials into tropical forest management plans**

Mitigation: Carbon cycle and forest

Source
1.6 m Gt/y.

Emissions:

- Deforestation
- Degradation



Sink
12.1 m Gt/y.

Sequestration in 5 carbon pools:

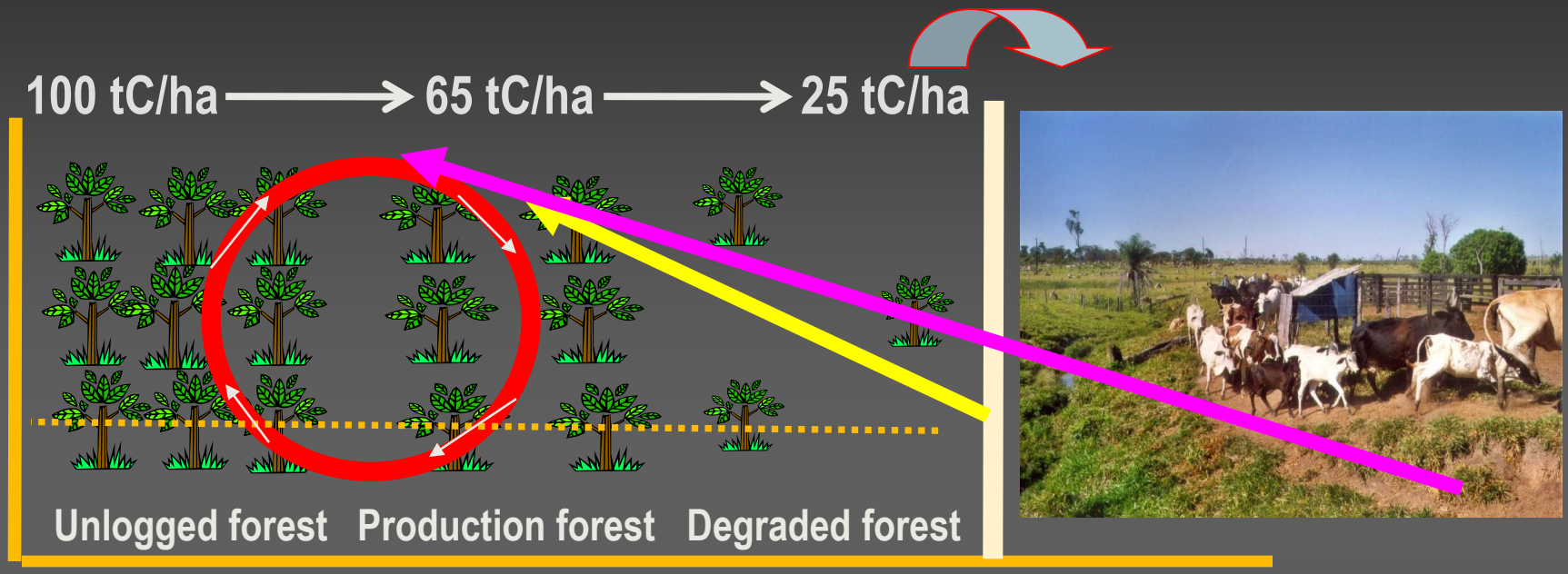
- Biomass (AGB + BGB)
- Litter
- Dead wood
- Organic soil

Substitution

- Conserving existing carbon stocks
- Bioenergy, wood products substituting other materials

→ Natural Forest Degradation Process →

Deforestation
(land-use change)



— Reducing deforestation and forest degradation

- - - - Conservation and sustainable use of existing forest

- - - - - - Forest Restoration: Carbon sequestration

- - - - - - Plantations & Agroforestry: Carbon sequestration

REDD+ options

Principle 3: Ecological resilience, forest health and climate-change adaptation

Guidelines (1-8)

3.1 Identify causes and put in place preventative and remedial actions to reduce the vulnerability of forests to biotic and abiotic stresses

3.2 Conserve and use biodiversity in ways that maintain ecological resilience and enable adaptation to change

3.3 Manage forests in ways that maintain their regenerative capacities land ecological resilience

3.4 Restore degraded forest ecosystems to improve habitats for native species, forest structure, biodiversity, productivity & ecosystem functions

3.5 Assess the impacts of climate change and climate variability on natural tropical forests and evaluate the risks

3.6 Assess the economic and social effects of climate change as they relate to tropical forests

3.7 Manage natural tropical forests for adaptation to climate change

3.8 As appropriate, include carbon storage as a management option in natural tropical forests and monitor forest carbon and safeguards

Example: Principle 3, Guidelines 3.1 & 3.2 and suggested actions under the guidelines

Principle 3: Ecological resilience, ecosystem health and climate-change adaptation			
Guidelines		**Suggested actions**	**Indicative stakeholder group**
3.1	**Identify causes and put in place preventative and remedial actions to reduce the vulnerability of forests to biotic and abiotic stresses**	Develop policies and remedial actions, including capacity building, technologies and resources to reduce the vulnerability of forests to biotic and abiotic stresses	Government, forest managers, civil society, research and education institutions
		Strengthen the capacity of forest managers to address new and emerging issues affecting ecological resilience	
		Provide technical support to private and community forest owners to ensure that their activities increase the ecological resilience of forests	
3.2	**Conserve and use biodiversity in ways that maintain ecological resilience and enable adaptation to change**	Identify forests with high conservation value, provide them with legal status, and manage them to maintain and increase their ecological resilience	Government, civil society, research and education institutions
		Improve and apply ecological knowledge to ensure that forest processes such as pollination, seed dispersal and nutrient cycling are maintained	
		Identify and manage species of flora and fauna that are strongly interactive, play key ecological roles or have important influences on the ecological resilience of the forest	Government, forest managers, civil society, research and education institutions

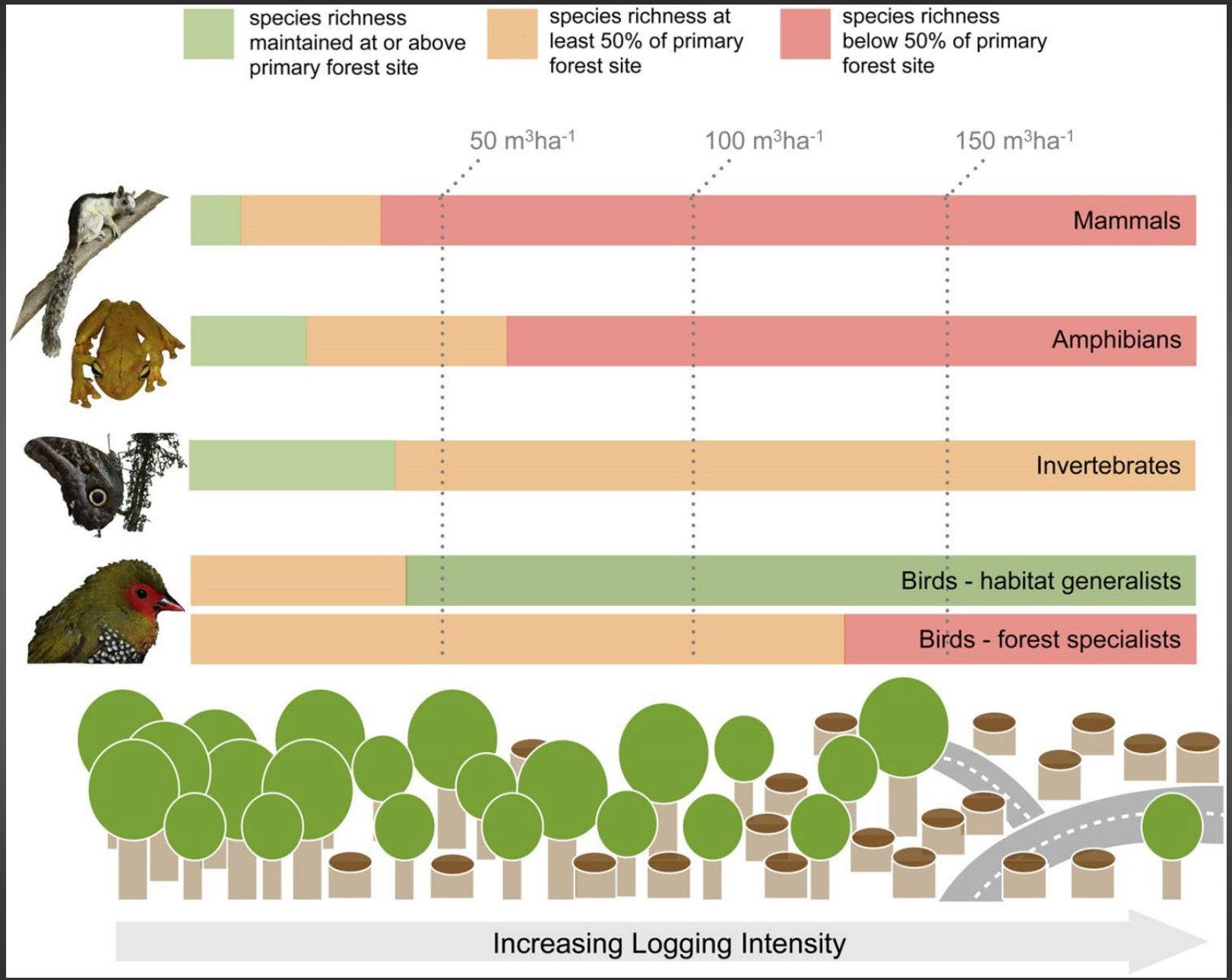
Maintaining the multiple functions of forests to deliver products and environmental services

Principle 4:
Multipurpose forest management (pages 42-46)

The role of natural tropical forests as providers of multiple goods and services should be safeguarded by the application of sound planning and management practices that maintain ecosystem functions and the potential of forests to yield the full range of benefits to society.

Rationale (pages 42-44)

- Management for multiple complementary objectives
- Biodiversity conservation at forest management unit level
- Managing forest carbon in natural tropical forests



Current Biology 2014 24, 1893-1898DOI: (10.1016/j.cub.2014.06.065)

Principle 4: Multi-purpose forest management

Guidelines (1-5)

4.1 Enable multipurpose forest management to manage forest products and environmental services , including carbon

4.2 Ensure effective soil and water management to maintain the productivity and health of forests and their hydrological regulation functions

4.3 Emphasize biodiversity in all aspects of the management of natural tropical production forests

4.4 Provide guidance and take measures to avoid unsustainable levels of NTFP extraction and hunting

4.5 Monitor biodiversity in FMUs to minimize negative impacts

Example: Principle 4, Guideline 4.1 and suggested actions under the guideline

Principle 4: Multipurpose forest management			
Guidelines		**Suggested actions**	**Indicative stakeholder group**
4.1	**Enable multipurpose forest management to manage forest products and environmental services**	Develop a comprehensive knowledge of forest resources with the aim of boosting the value of forest goods and services and uphold usufruct rights	Government, forest managers, civil society, private sector, research and education institutions
		Complement national, subnational and FMU-level forest resource assessments and inventories with qualitative assessments of timber, NTFPs and environmental and cultural services, using the ITTO C&I for SFM as a basis	
		As appropriate, integrate assessment methods recommended at the international or national level for forest carbon assessments into national forest inventories	Government, forest managers, research and education institutions

4.4	**Provide guidance and take measures to avoid unsustainable levels of NTFP extraction and hunting**	As appropriate, accommodate the existing NTFP harvesting and trade patterns of local communities in the method and scale of timber harvesting	Government, forest managers, civil society, private sector
		In forest management plans, consider the potential for human–wildlife conflicts due to logging activities, and take appropriate measures to prevent them	
		Take measures that benefit wildlife species, such as retaining dead standing trees and large fruiting trees, maintaining wide riparian strips to provide wildlife with access to water, and providing migration pathways for large animals	Government, forest managers, private sector, civil society
		When planning the road network, take measures to minimize direct negative impacts on wildlife	Forest managers, private sector, research and education institutions
		Ensure that forest management plans have provisions for biodiversity monitoring and that managers understand and are responsive to the outcomes of such monitoring	Forest managers, private sector, civil society

Guidelines 4.4 – bushmeat/viande de brousse

Maintaining the multiple functions of forests to deliver products and environmental services

Principle 5: Silvicultural management (pages 47-55)

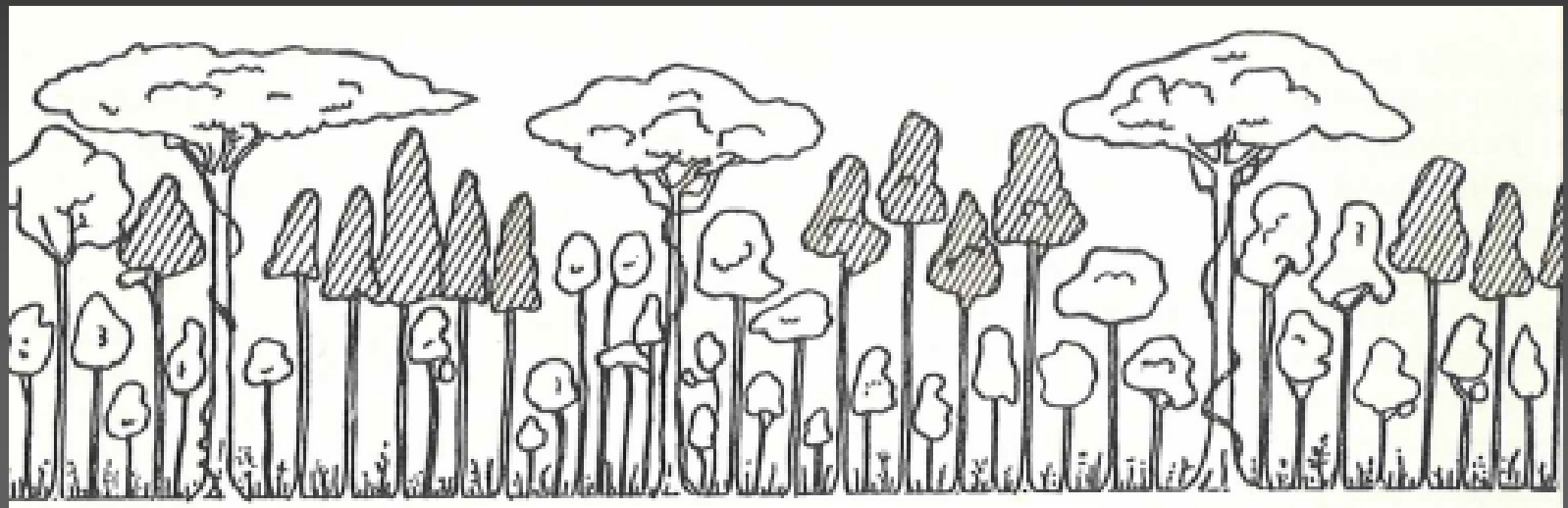
In timber production forests, each FMU should have an approved management plan, with clearly stated management objectives and measures—including silvicultural measures—for achieving them. Silvicultural measures should be revised periodically in the light of accumulated experience, new information and changing circumstances.

Principle 5: Silvicultural management

Rationale (pages 47-50)

- Multifunctional zoning and multi-resource inventory
- Annual allowable cut
- Yield regulation
- Forest management plans
- Silvicultural systems
- Reduced impact harvesting
- Monitoring
- Post-harvesting actions
- Protection measures at the FMU level

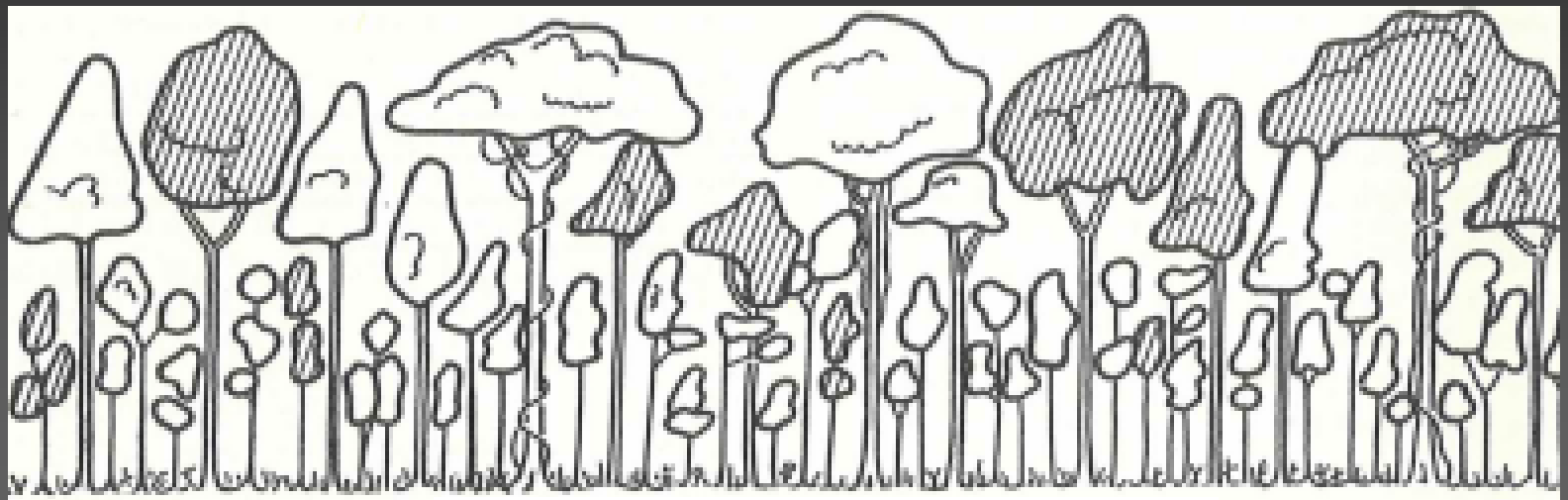
Silvicultural transformation, of low impact type



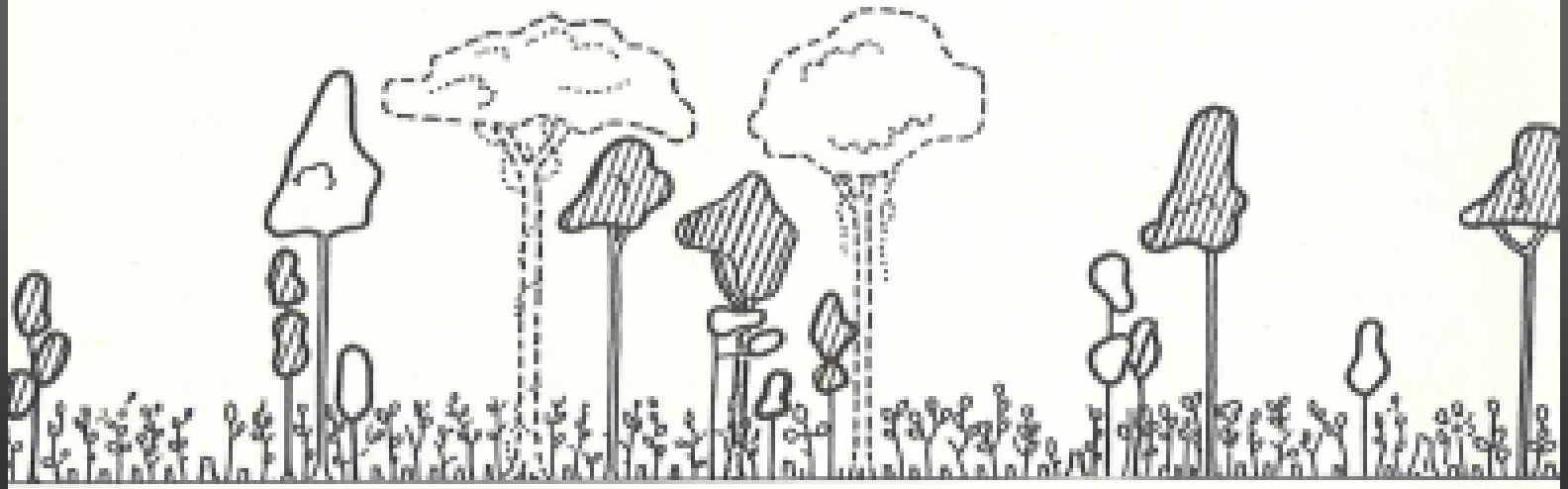
Before improvement felling

After improvement felling

Silvicultural transformation, of high impact type

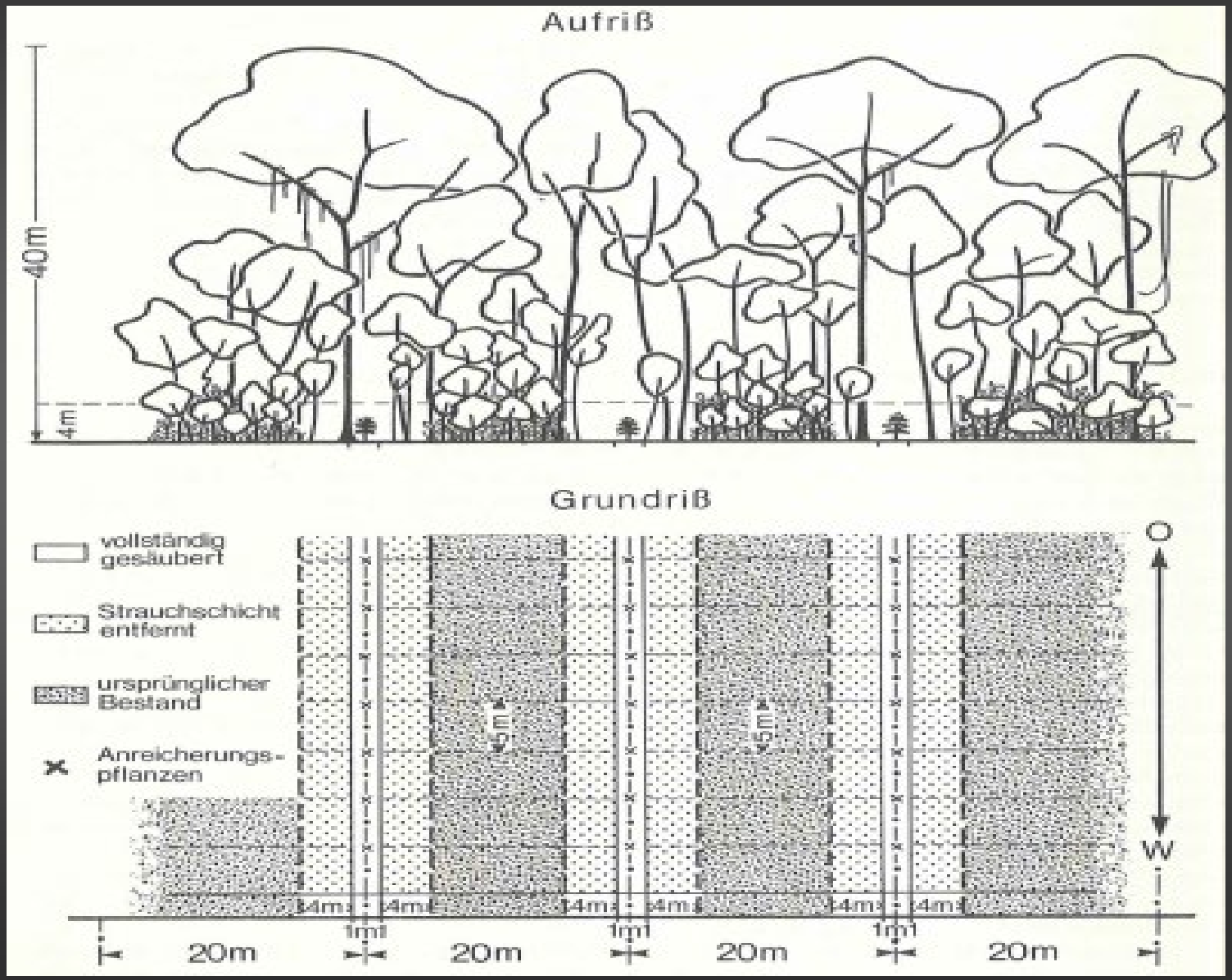


Before the monocyclique felling



After harvesting and favoring natural regeneration

Silvicultural transformation, of high impact type (2): enrichment planting



Principle 5: Silvicultural management

Guidelines (1-13)

5.1 Conduct preliminary studies and develop a multiresource inventory

5.2 Define management objectives for individual resources (e.g. timber, NTFPs, and carbon and other environmental services)

5.3 Use a reliable method for regulating and controlling yields of timber and NTFPs

5.4 Plan harvests to enable good technical control, minimize costs and reduce environmental impacts

5.5 Manage FMUs according to forest management plans and silvicultural systems

Principle 5: Silvicultural management

Guidelines (continues to 13)

5.6 Incorporate wildlife and biodiversity concerns into forest management plans

5.7 Enhance the potential for generating income from the environmental services provided by FMUs

5.8 Prepare detailed 10-year working plans and annual operational plans for harvesting and silvicultural management

5.9 Monitor the implementation of management plans and apply adaptive management

5.10 Protect FMUs from illegal and unsustainable activities

5.11 Formulate and implement fire management plans for FMUs and adjacent lands

5.12 Integrate the management of pests and diseases into forest management plans

5.13 Ensure that all waste and pollution derived from, and chemicals used in, forest management activities are stored and disposed of properly

Example: Principle 5, Guideline 5.1 and suggested actions under the guideline

Principle 5: Silvicultural management			
Guidelines		**Suggested actions**	**Indicative stakeholder group**
5.1	**Conduct preliminary studies and develop a multiresource inventory**	Conduct preliminary studies (socioeconomic, environmental, biodiversity) for the development of the management plan and establish a GIS database for creating forest zoning maps	Government, forest managers, private sector
		Conduct a multiresource forest inventory and collect data on timber, NTFPs, natural regeneration, fauna, flora, soil, hydrology, human activities, etc.	
		Integrate the multiresource inventory and forest zoning by forest function, taking into account customary rights where applicable	
		Create wildlife GIS overlays based on agreed priorities for wildlife conservation and designate wildlife conservation areas as appropriate	
		Analyze management scenarios in accordance with national laws, policies and strategies based on inventory data	
		Develop a clear understanding of the forest values to be maintained and the goals to be achieved, and establish clear medium-term and long-term management objectives, taking into account the tradeoffs needed	

Integrating social, cultural and economic aspects to implement SFM

Principle 6:
Social values, community involvement and forest worker safety and health (pages 56-61)

Forest management should recognize and aim to meet social needs. Forest management decisions should be participatory and inclusive, and the costs and benefits should be shared equitably among stakeholders. Communities should be empowered to participate in SFM through measures to achieve equity and build capacity among stakeholders. The provision of safe and adequate working conditions is also an essential element of SFM.

Principle 6: Social values, community involvement and forest worker safety and health

Rationale (pages 56-58)

- Active and informed participation of communities and stakeholders
- Rights and responsibilities of local communities
- Working conditions for forest workers
- Capacity development

Principle 6: Social values, community involvement and forest worker safety and health

Guidelines (continues to 10)

6.1 Address the local livelihood needs of people, including indigenous peoples and local communities

6.2 Ensure the effective participation of relevant stakeholders in planning and implementing SFM

6.3 Recognize cultural, archaeological and spiritual sites identified in the PFE

6.4 Consult with local communities on the management of natural forests in the PFE and at the FMU level

6.5 Provide opportunities for local communities to participate in SFM

Principle 6: Social values, community involvement and forest worker safety and health

Guidelines

6.6 Ensure that the benefits derived from community forest management are shared among stakeholders according to their rights, roles and responsibilities

6.7 Provide a framework of rights and responsibilities for forest workers and forest managers on safety and health in forest operations

6.8 Make safety management a top priority

6.9 Introduce best practices in forest operations to ensure safe and efficient operations

6.10 Develop capacity at all levels of the workforce, including by improving working conditions

Example: Principle 6, Guideline 6.1 and suggested actions under the guideline

Principle 6: Social values, community involvement and forest-worker safety and health			
Guidelines		**Suggested actions**	**Indicative stakeholder group**
6.1	**Address the local livelihood needs of people, including indigenous peoples and local communities**	Identify the livelihood needs of people, including indigenous peoples and other vulnerable forest-dependent people, and incorporate them in national and subnational forest policies and programs related to SFM	Government, forest managers, civil society, research and education institutions
		Provide guidance and tools on the use of participatory approaches to facilitate the involvement of indigenous peoples and local communities in SFM	
		Ensure there is clear recognition and respect for the rights of indigenous peoples who live in or have a traditional dependence on forests	

Integrating social, cultural and economic aspects to implement SFM

Principle 7:
Investment in natural forest management and economic instruments (pages 62-64)

SFM only succeeds if it is properly financed. Capturing the full value of forests, including environmental services, and ensuring the equitable distribution of costs and benefits, are essential for SFM. .

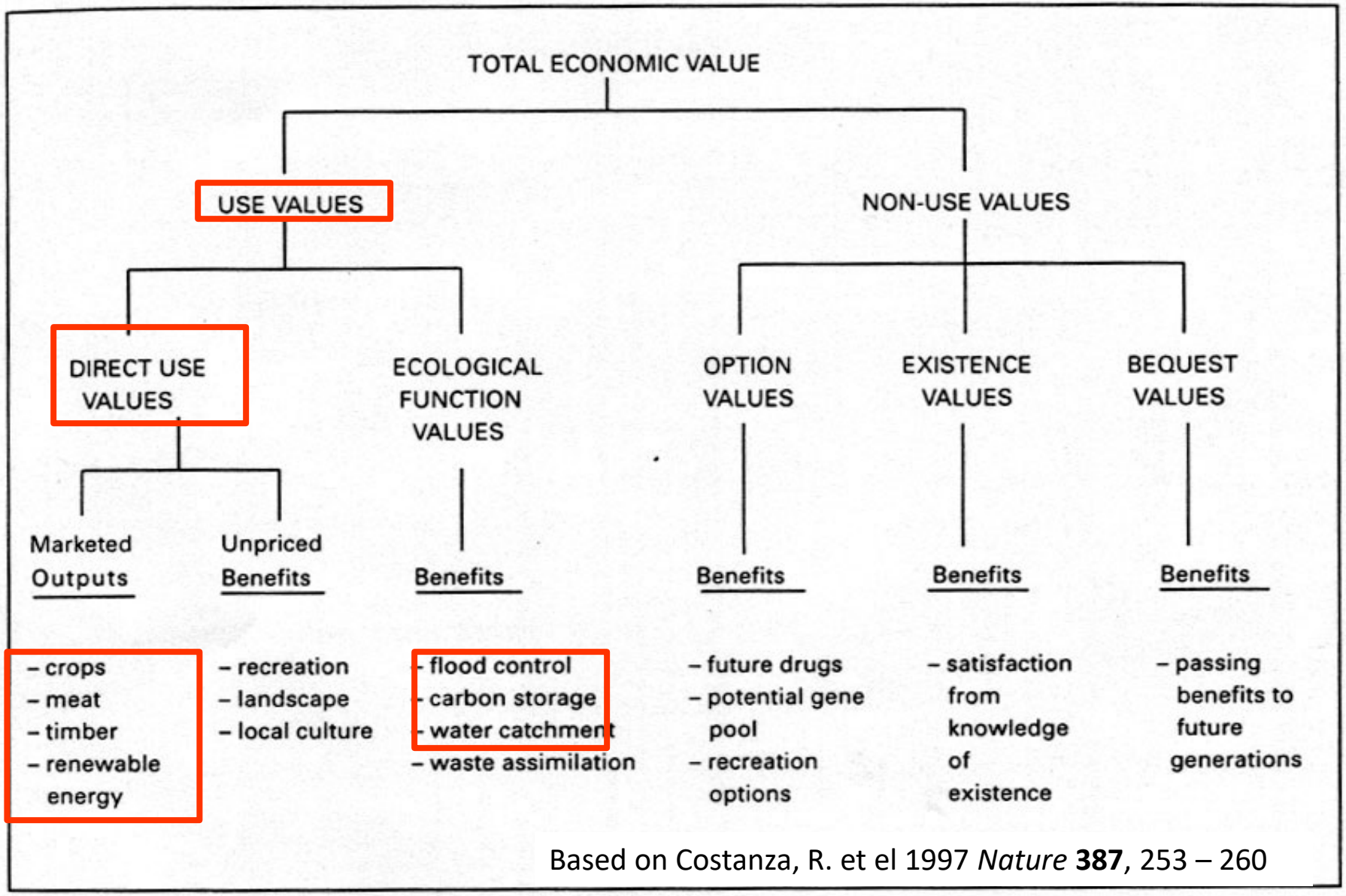
Principle 7: Investment in natural forest management and economic instruments

Rationale (pages 62-63)

- Competition with other land uses (opportunity costs)
- Forest finance and adaptive management
- Economic instruments

Valuation of forest goods and services

Assure that the opportunity costs allow sustaining a substantial part of what is forest now also in future:



Based on Costanza, R. et el 1997 *Nature* **387**, 253 – 260

International financing SFM – three prong approach

Initial upstream funding	Mainstream upfront investment	Full-value investment
ODA funding, bilateral or dedicated funding: REDD+ readiness (FCPF, UN-REDD, GCF Readiness, FAO TCP), Forest & Farm Facility, thematic programs of ITTO, Bonn Challenge /FLR , etc.)	Coordinated work through inter-national organizations including multilateral support World Bank and Regional Banks grant and lending, GEF, FIP, REDD+ Phase 2 funding; FCPF Carbon Fund; forest-related adaptation funds, Green Climate Fund Proposal supported by A.E.	International and country-based funding .Main financing secured by market regulation and global externality payments. Results-based payments. New transfer payment schemes, voluntary carbon market. "Green Economy"?
Short term up to 2025	**Mid-term up to 2030 and beyond**	**Long-term, «sustainable»**
TECHNICAL COOPERATION Reconfirmed and increased tailor-made funding to eligible countries, taking into account the global role of SFM (FI, REDD+, and MEAs)	**STRATEGIC COOPERATION** Coordinated by a competent organisation; need strategic decision for mainstream involvement in those countries that commit themselves to the SFM pathways. GCF and other REDD+	**POLICY COOPERATION** Develop negotiation strategy for PES-schemes (market, fund based) and forest products and service trade
LEVEL OF FUNDING 100K to several million US$ (LDCs in particular)	LEVEL OF FUNDING Several tens or hundreds of millions of US$ (high forest cover countries)	LEVEL OF FUNDING Significant – to be secured from investment and financial flows, reflecting appropriate valuation

Principle 7: Investment in natural forest management and economic instruments

Guidelines (1-5)

7.1 Enable a favourable environment for investment in natural tropical forest management

7.2 Provide guidelines for optimum efficiency in timber harvesting to reduce log waste

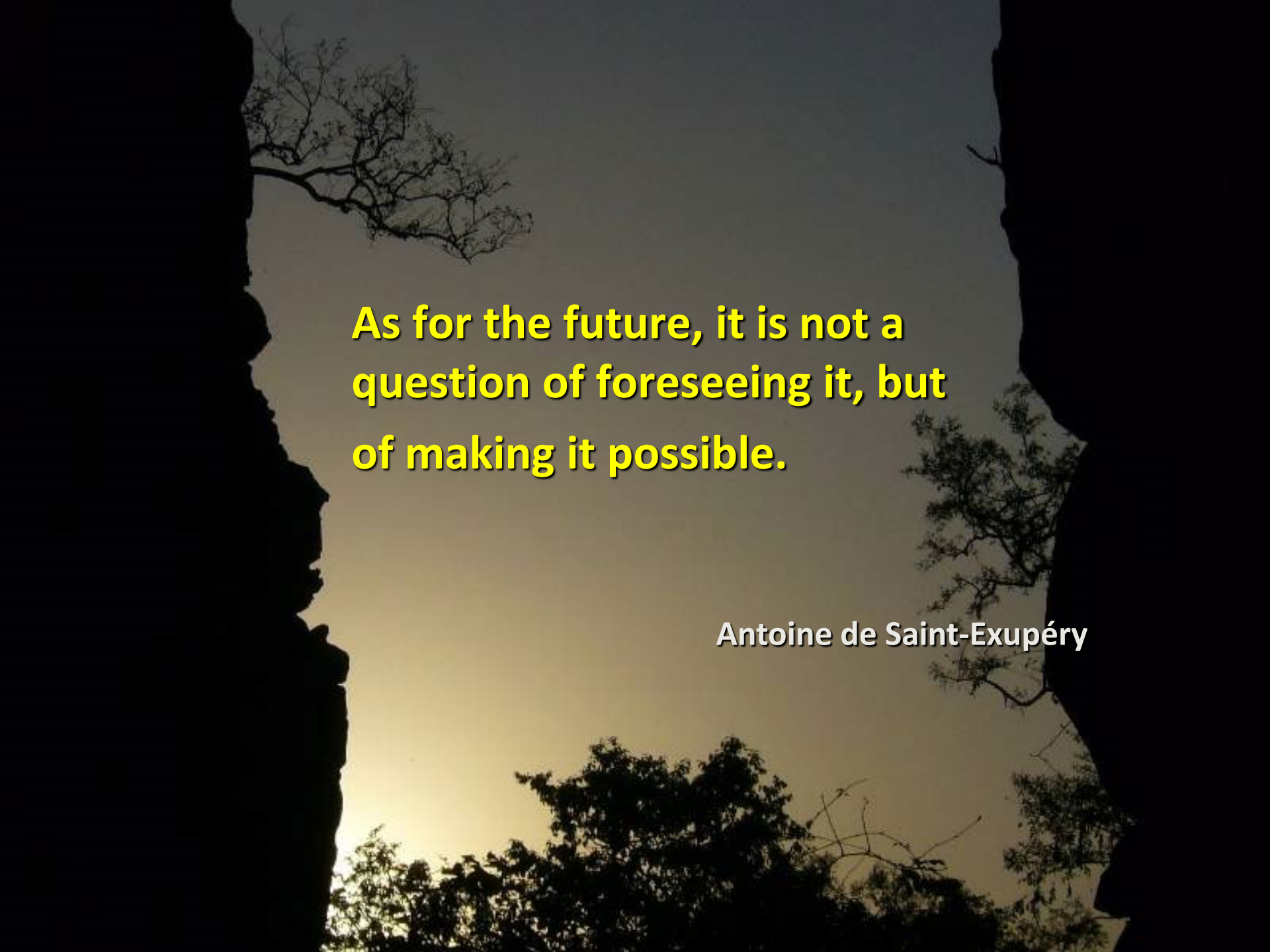
7.3 Monitor the distribution of the costs and benefits of forest management among stakeholders

7.4 Encourage economic instruments to support natural tropical forest management

7.5 Provide preferential access to markets for products from sustainably managed tropical forests

Example: Principle 7, Guideline 7.1 and suggested actions under the guideline

Principle 7: Investment in natural forest management and economic instruments			
Guidelines		**Suggested actions**	**Indicative stakeholder group**
7.1	**Enable a favourable environment for investment in natural tropical forest management**	Provide framework conditions (e.g. legal, policy, institutional and tenurial) to attract investments in natural tropical forest management	Government, forest managers, private sector, civil society, research and education institutions, consumer-country governments
		Develop instruments to support adequate financial returns for forest use, including mechanisms to provide payments for environmental services	
		Create awareness among forest operators and stakeholders of the value of adaptive management approaches to improving the financial viability of SFM	
		Consider using part of the financial benefit accruing from forest harvesting to help maintain the forest's productive capacity	
		Intensify national and international marketing efforts to obtain the highest possible value for sustainably produced forest products	
		In FMUs, explore options for generating income from environmental services, such as those related to carbon, water, biodiversity and tourism	Forest managers, private sector, civil society
		Identify options for improving carbon management and evaluate their risks, costs and benefits and their implications for other forest management objectives	Government, forest managers, private sector
		Develop effective mechanisms for resolving conflicts among stakeholders	Government, forest managers, private sector, private sector, civil society
		Develop the capacity of rightsholders to obtain fair returns for the use of their forest resources	


As for the future, it is not a question of foreseeing it, but of making it possible.
Antoine de Saint-Exupéry