



Synergies of **REDD+** and **Biodiversity**

International Workshop on REDD +

A new framework for conservation of tropical forests:
monitoring, biodiversity and practices

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Outline

- Understanding the “plus”
- Linking Biodiversity and REDD+
- When REDD+ & Biodiversity conservation are mutually supportive?
- When REDD+ may threaten Biodiversity?
- Why safeguards are important?
- What can we do? What is ITTO doing?
- Conclusions

Based on outcomes of the Global Expert Workshop on REDD-plus Biodiversity Benefits, Nairobi, Kenya, 20-23 September 2010

Forests and climate change



Impacts on ecosystems, people and biodiversity

Forests are vulnerable



Forests emit GHG



Second most important source of GHG emissions

REDD+ Definition

(UNFCCC- Bali Action Plan, 2007)

“Developing policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and

- ⇒ the role of conservation,**
- ⇒ sustainable management of forests and**
- ⇒ enhancement of forest carbon stocks in developing countries”.**

Understanding the “plus”

- **REDD +** : Reducing emissions from deforestation and forest degradations

plus

- > Conservation of forest carbon stocks
- > Sustainable management of forests
- > Enhancement of forest carbon stocks

Direct impact on
forest biodiversity

Mitigation strategies	Target	Mechanism	Forest management alternatives
Reducing emissions	Reduce Deforestation	RED	(1) Maintain existing forests e.g.: Improve law compliance, establish new protected areas, account the full value of the forests and promote payment for environmental services (PES) to retain forests, avoid forest fires, etc
	Reduce Degradation	REDD ("second D")	(2) Rehabilitate degraded forests Multipurpose forest management, community-based forest management, increasing forest stock (enrichment plantating), PES for ecological rehabilitation, etc
Storing CO ₂	Restoration and rehabilitation of degraded areas	Recover carbon Pools	
	Establish new carbon pools	A/R CDM (outside forests)	(3) Establish new forests Plantation forests, agroforestry, etc



Linking biodiversity and climate change

“Biodiversity and climate change are inextricably linked, not only because of the current and expected future impacts of inevitable climate change on biodiversity, but also because of biodiversity’s essential role in climate change mitigation and climate change adaptation.”

UN General Assembly Resolution 64/203 of 14 December 2009, calling for enhanced cooperation of the Rio Conventions

Linking Biodiversity and REDD+

CBD Decision IX/5 - 3 (b) : Requests the Executive Secretary to collaborate with the other members of the Collaborative Partnership on Forests to support Parties efforts to address reducing emissions from deforestation and forest degradation in developing countries;

UNFCCC Decision 4/C.P. 15: Recognizes the importance of promoting sustainable management of forests and co-benefits, including biodiversity, that may complement the aims and objectives of national forest programmes and relevant international conventions and agreements.

Various other **Conventions** and **Agreements** (ITTA 2006, CITES, CMS, RAMSAR, etc) recognize the multiple benefits of forests and the need to enhance forest ecosystem services.

CBD PROGRAMME OF WORK ON FOREST BIODIVERSITY

GOAL 1.1

Apply the ecosystem approach to the management of all types of forests.

OBJECTIVE

1. Develop practical methods, guidelines, indicators and strategies to apply the ecosystem approach to forests.

GOAL 1.2

Reduce the threats and mitigate the impacts of threatening processes on forest biological diversity.

OBJECTIVES

1. Prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biological diversity.
2. Mitigate the impact of pollution such as acidification and eutrophication on forest biodiversity.
3. Mitigate the negative impacts of climate change on forest biodiversity.
4. Prevent and mitigate the adverse effects of forest fires and fire suppression.
5. Mitigate effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur.
6. Prevent and mitigate losses due to fragmentation and conversion to other land uses.

GOAL 1.3

Protect, recover and restore forest biological diversity.

OBJECTIVES

1. Restore forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes, including in plantations.
2. Promote forest management practices that further the conservation of endemic and threatened species.
3. Ensure adequate and effective protected forest area networks.

GOAL 1.4

Promote the sustainable use of forest biological diversity.

OBJECTIVES

1. Promote sustainable use of forest resources to enhance the conservation of forest biological diversity.
2. Prevent losses caused by unsustainable harvesting of timber and non-timber forest resources.
3. Enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity.
4. Develop effective and equitable information systems and strategies, and promote implementation of these strategies.

GOAL 1.5

Access and benefit-sharing of forest genetic resources.

OBJECTIVE

1. Promote the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge.

GOAL 2.1

Enhance the institutional enabling environment.

OBJECTIVES

1. Improve the understanding of the various causes of forest biological diversity losses.
2. Parties, Governments and organizations to integrate biological diversity conservation and sustainable use into forest and other sector policies and programmes.
3. Parties and Governments to develop good governance practices, review and revise and implement forest and forest-related laws, tenure and planning systems, to provide a sound basis for conservation and sustainable use of forest biological diversity.
4. Promote forest law enforcement and address related trade.

GOAL 2.2

Address socio-economic failures and distortions that lead to decisions that result in loss of forest biological diversity.

OBJECTIVE

1. Mitigate the economic failures and distortions that lead to decisions that result in loss of forest biological diversity.

GOAL 2.3

Increase public education, participation, and awareness.

OBJECTIVE

1. Increase public support and understanding of the value of forest biological diversity and its goods and services at all levels.

GOAL 3.1

Characterize and analyse forest ecosystems and develop a general classification of forests at various scales, in order to improve the assessment of status and trends of forest biological diversity.

OBJECTIVES

1. Review and adopt a harmonized global to regional forest classification system, based on harmonized and accepted forest definitions, and addressing key forest biological diversity elements.
2. Develop national forest classification systems and maps.
3. Develop, where appropriate, specific forest ecosystems surveys in priority areas for conservation and sustainable use of forest biodiversity.

GOAL 3.2

Improve knowledge on and methods for the assessment of the status and trends of forest biological diversity.

OBJECTIVE

1. Advance the development and implementation of international, regional and national criteria and indicators, based on key regional, subregional and national measures.

GOAL 3.3

Improve understanding of the role of forest biodiversity and ecosystem functioning.

OBJECTIVE

1. Conduct key research programmes on the role of forest biodiversity and ecosystem functioning.

GOAL 3.4

Improve the infrastructure for data and information management for accurate assessment and monitoring of global forest biological diversity.

OBJECTIVE

1. Enhance and improve the technical capacity at the national level to monitor forest biological diversity and develop associated databases as required on a global scale.



Convention on
Biological Diversity

For more information, see the CBD website: www.cbd.int

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<http://www.cbd.int/forest/pow.shtml>

The CBD Programme of Work on Forest Biodiversity

1. Conservation, Sustainable Use, Benefit-sharing

- increase sustainable management of forests
- implement ecosystem approach
- designate PAs
- restore degraded forests
- fight against forest fires
- invasive alien species

2. Institutional, Socio-economic Enabling Environment

- provide incentives for the use of sustainable practices (e.g., certification)
- develop good practices in forest law enforcement and governance (FLEG)
- ensure equitable ABS with indigenous and local communities
- clarify land tenure and resource rights

3. Knowledge, Assessment, Monitoring

- advance forest biodiversity assessment methods
- research forest biodiversity and ecosystem functioning
- develop a general classification of forest at various scales
- improve the infrastructure for data and information management

When REDD+ and Biodiversity conservation are mutually supportive?

- The permanent storage of carbon depends on well-functioning and **resilient forest ecosystems**. Hence REDD+ dependency on biodiversity conservation as much as biodiversity conservation can benefit from REDD+.
- **Primary forests** and other naturally regenerated forests are generally more resilient (and stable, resistant, and adaptive) than planted forests.
 - Biodiversity (at species, genetic and ecosystem level) supports **maintain forest ecosystem resilience** and thus the long-term stability of the forest carbon stock.
 - Increasing the biodiversity in **planted and semi-natural forests** will have a positive effect on their resilience capacity and often on their productivity (including carbon storage).

When REDD+ may threaten Biodiversity?

- The current biggest risk of REDD+ to biodiversity, indigenous peoples and local communities is that a well-designed **REDD+ mechanism is not agreed** upon and, consequently, not successfully implemented.
- Specific risks for biodiversity include:
 - The **conversion of natural forests** to plantations and other land uses of low biodiversity value and low resilience; and the introduction of growing of biofuel crops;
 - **Displacement of deforestation** and forest degradation to areas of lower carbon value and high biodiversity value;
 - Increased **pressure** on non-forest ecosystems with high biodiversity value
- Specific risks of REDD+ for indigenous peoples and local communities include:
 - The loss of traditional territories and **restriction of land** and natural resource **rights**;
 - Lack of **tangible benefits** to indigenous peoples and local communities and lack of equitable benefit sharing;
 - **Exclusion** from designing and implementation of policies and measures;
 - Loss of **traditional knowledge**

Why safeguards are important?

Precautionary measures are needed to prevent negative impacts

If designed and implemented appropriately, safeguards will reduce the risks and enhance the potential benefits of REDD+, by **ensuring**, inter alia:

- a **holistic approach** to forest carbon storage
- **avoided conversion** of natural forests
- full and effective **participation** of indigenous peoples and local communities
- appropriate **baseline** and reference scenarios
- **monitoring** biodiversity impacts of REDD+

What can we do? (1)

- National plans and national approaches will benefit from the **integration of climate change, biodiversity, and development objectives and strategies**. This requires effective cross-sectoral coordination and harmonization of relevant policies and laws at national level (agriculture, energy, environment, forests, biodiversity, and others), and **integrated land use planning** at the national and local scale.
- Successful implementation of REDD+ is dependent on transparent and effective **national governance** structures.
- Support implementing **CBD Programme of Work on Forest Biodiversity** will contribute to both REDD+ and biodiversity conservation by:
 - Encouraging the Parties to **maximize the benefits for biodiversity**, for example through prioritizing the conservation of natural forests;
 - Supporting the work of the UNFCCC to **operationalize safeguards**
 - Developing a framework for **monitoring the impacts** of REDD+ on biodiversity

What can we do?(2)

- **Capacity building** efforts at all levels based on national needs assessments, as well as **information sharing**, are required to achieve multiple benefits of REDD+, including through coordinated efforts of the members of the Collaborative Partnership on Forests and other organizations.
- Identifying and realizing multiple benefits can be supported through the application of:
 - **Spatially explicit tools**, such as maps and ecological gap analyses, to identify synergies and tradeoffs among climate change, biodiversity, and social issues;
 - **Valuation** of multiple forest benefit e.g. through the results of “The Economics of Ecosystems and Biodiversity” (TEEB) process;
 - Design of social and environmental **indicators** for REDD+

What can we do?(3)

- **Key research and development needs** in the context of REDD+ multiple benefits include:
 - Analysis of key **drivers of biodiversity loss** due to deforestation and forest degradation at the national and local level
 - The conditions for effective and **equitable distribution** mechanisms
 - Criteria and indicators for **monitoring multiple benefits and safeguards**
 - Spatially explicit support **tools/maps**, including information on ecosystem services;
 - **Socio-economic analyses** of implementing REDD+ considering the full value of forests and multiple benefits
 - Reviewing and improving **national biodiversity strategies** and action plans (NBSAPs) to reflect climate change issues

ITTO work related to REDD+

- **Projects to advance REDD+**
 - REDDES Thematic Programme
- **Working with partners:**
 - CBD/ITTO Initiative to support implementing the CBD Programme of Work on Biodiversity in ITTO producer member countries
 - Co-host (with CBD) the CPF Working Group to advance a common message on SFM
- **Promoting PPP: Private Public Partnerships**
 - Seven & i Holdings and Indonesia
 - METI/Marubeni feasibility study in Indonesia

ITTO REDDES Demonstration Projects

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- A world map with a yellow background. Countries where ITTO REDDES demonstration projects are located are highlighted in brown. These include Brazil, Guatemala, Guyana, Peru, the Democratic Republic of Congo, Ghana, China, Indonesia, and Sumatra. The map also shows other countries in grey and blue for the oceans.
1. Monitoring Pan-Amazonian forest (Brazil)
 2. Social processes for SFM (Guatemala)
 3. Resources assessment & monitoring (Guyana)
 4. Communities and PES (Peru)
 5. Carbon stock inventory (Dem Rep Congo)
 6. Collaborative management for REDD (Ghana)
 7. PES in degraded/secondary forests (China)
 8. SFM to enhance carbon stocks (Indonesia)
 9. REDD in south Sumatra peatland (Indonesia)
 10. Voluntary carbon marketing scheme (ITTO)

Total allocation 2009: USD 4,000,000



Monitoring Pan-Amazonian Forest (Brazil)

Monitoring deforestation, logging and land use change in the Pan Amazonian Forests

■ Executing Agency:

**AMAZON
COOPERATION TREATY
ORGANIZATION (ACTO)**

■ Duration & Budget:

4 Yrs (Mar 2010-Feb 2014)

Total: US\$ 7.873.244

ITTO (1.050.320), ACTO
(356.854), ACTO MEMBER
COUNTRIES (1.808.000),
OTHERS (FUNDO
AMAZONIA; 4.658.070)



Eight ACTO Members Countries for the project



Monitoring Pan-Amazonian Forest (Brazil) (2)

■ Outputs

Outputs 1:

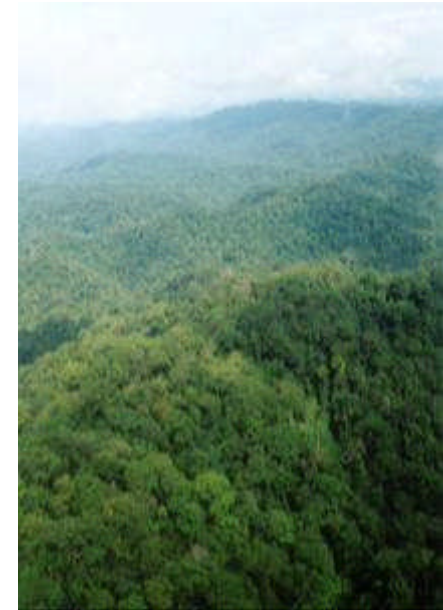
National plans for the implementation of a forest cover monitoring system prepared

Outputs 2:

National Plans for **forest cover monitoring system** implemented

Outputs 3:

Spaces for **regional dialogue and coordination** on forest management harmonized and other C&I strengthened





Carbon Stock Inventory in DR Congo

Supporting UN-REDD

■ Executing Agency:

Dep of Inventory and Forest Management (DIAF)

■ Duration & Budget:

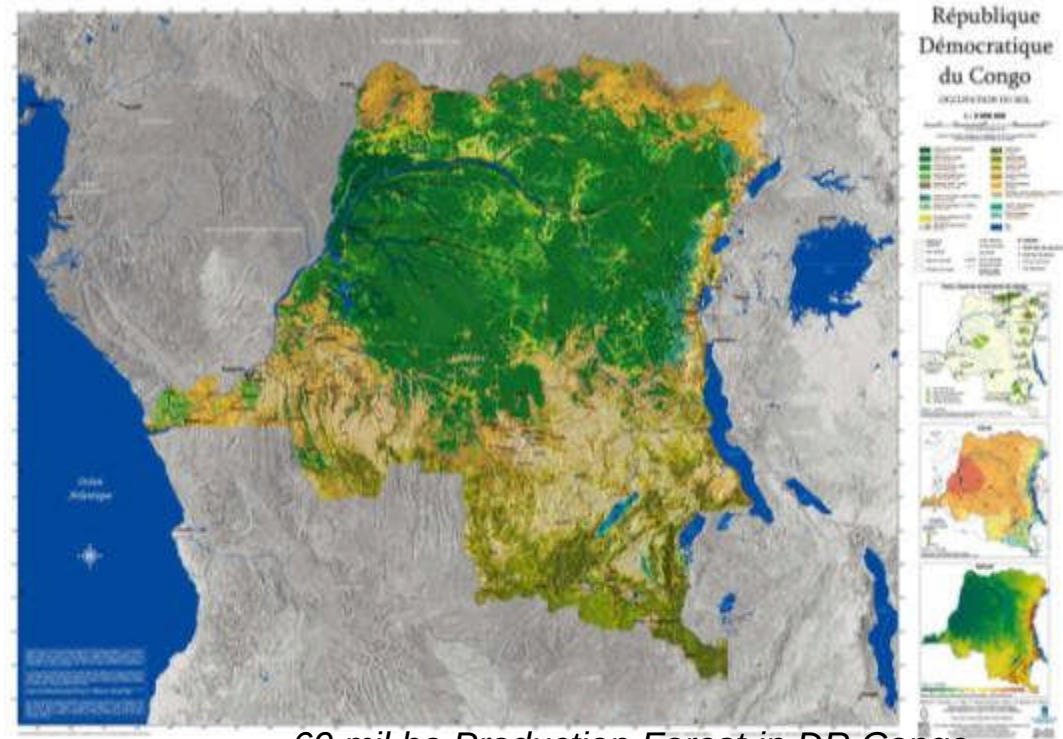
- 1 yr (Mar 2010-Feb 2011)
- US\$476,000

■ Project Outputs:

- 1) 70 - 80 technicians of the DIAF, DDD (and other partners) are formed to execute the national forest carbon inventory
- 2) Acquisition, set up and distribution of equipments to operate the national forest carbon inventory

Technical guidance from the on-going ITTO Project

"Multispectral Three-Dimensional Aerial Digital Imagery for Monitoring SFM in Congo"



60 mil ha Production Forest in DR Congo



SFM to enhance carbon stocks in Indonesia

- **Executing Agency:**

DG of Forest Production Development, MoF

- **Duration & Budget:**

2 yrs (April 2010-Mar 2012), US\$535,000

- **Specific Objective:**

To develop national strategy to maintain and increase forest carbon stock through SFM

Completed ITTO project “**Internal Monitoring of SFM Performance at Forest Management Unit Level** [PD 389/05 Rev. 2 (F)]” will complement



South Sumatra Peatland in Indonesia

■ Specific Objectives:

to enhance conservation and restoration of Peat Swamp Forest ecosystems in South Sumatra

■ Expected Outputs:

- I. Institutional setting to prevent further deforestation and forest degradation
- II. Sound and applicable technology in restoration and rehabilitation of PSF
- III. Demonstration activities with the plantation of indigenous species



A Public-Private Partnership to promote REDD+ A conservation project in Indonesia Meru Betiri National Park, Java



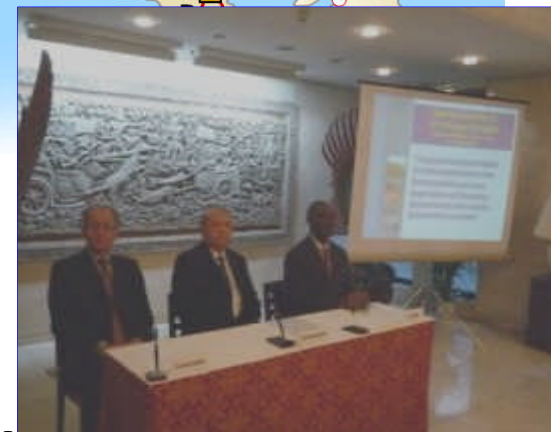
Executing Agency:

FORDA, MoF

**Duration & ITTO
budget**

4 yrs (Jan 2010-Dec 2014)

US\$900,000



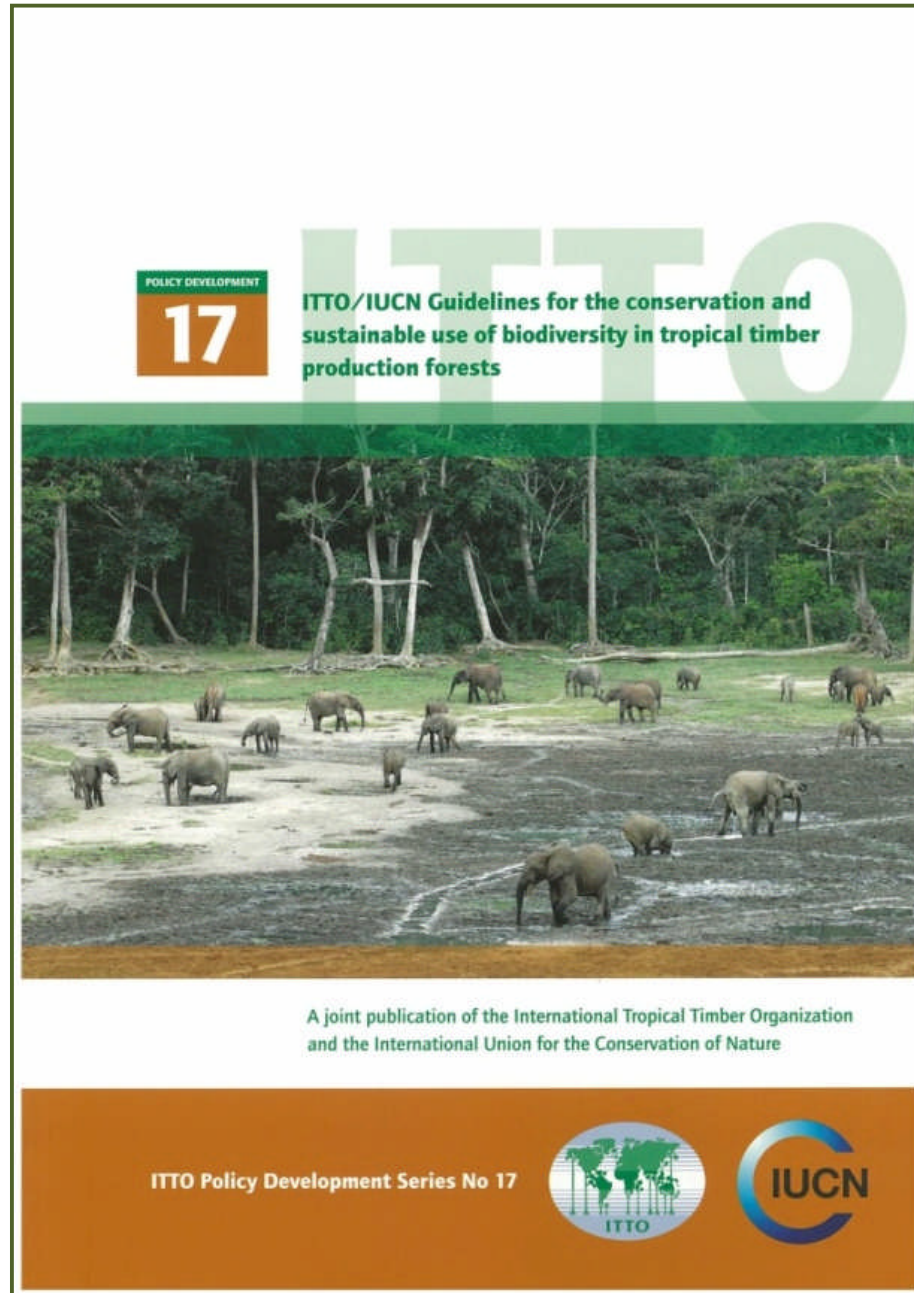
**Ceremony at Indonesian Embassy
(Tokyo, Oct 2009)**



Examples of REDD+ related projects of ITTO and JICA are available at:



http://www.itto.int/technical_report/

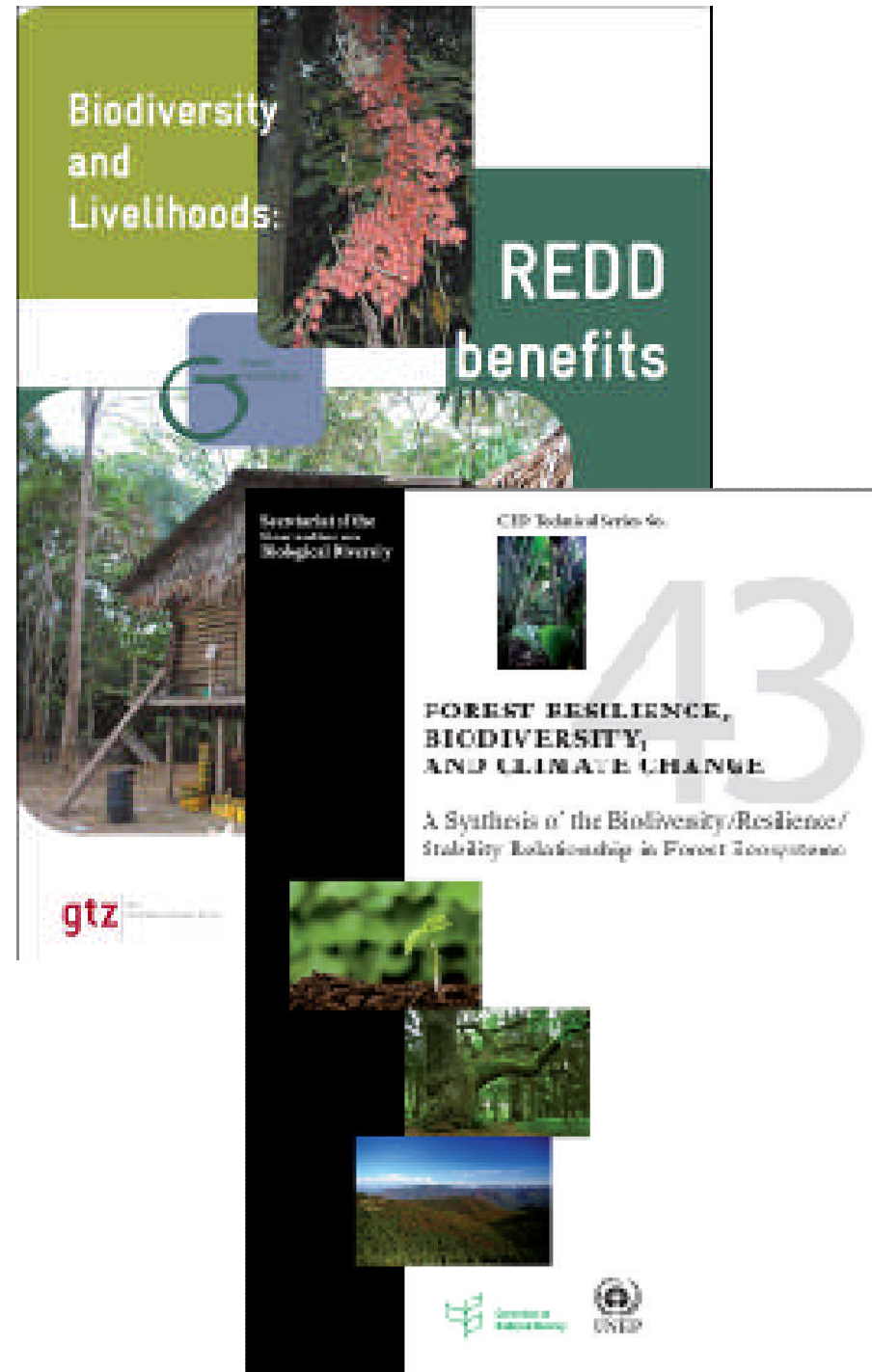


The ITTO/IUCN Guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests

- 2009
- 11 Principles, 46 Guidelines
- Priority actions

Further reading

- CBD documents on Biodiversity and REDD+ at:
 - <http://www.cbd.int/doc/?meeting=EWREDD-01> (Nairobi Workshop)
 - <http://www.cbd.int/doc/publications/for-redd-en.pdf> (CBD/GTZ publication)



In conclusion:

- If REDD+ is successful at reducing deforestation and forest degradation, and promoting forest conservation, it will have **significant and unprecedented benefits for biodiversity**.
- A well designed REDD+ mechanism also has the potential to deliver **significant benefits to indigenous peoples and local communities**.
- **Multiple benefits of REDD+** are already being realized in many countries that are taking REDD+ activities forward, e.g. through ITTO REDDES projects and other initiatives to advance REDD+ and to assist countries getting ready for REDD+.
- Both **biodiversity** and the full and effective **participation** of indigenous peoples and local communities are necessary for the success of REDD+.



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