

Kyoto Protocol's Clean Development Mechanism and REDD+

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The Future of Forests

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Introduction

- 1. Kyoto Protocol's Clean Development Mechanism**
- 2. REDD+ (Reducing Emissions from Deforestation and Forest Degradation)**
- 3. Agriculture, Forestry, and Other Land Use (AFOLU)**





1. Kyoto Protocol's Clean Development Mechanism

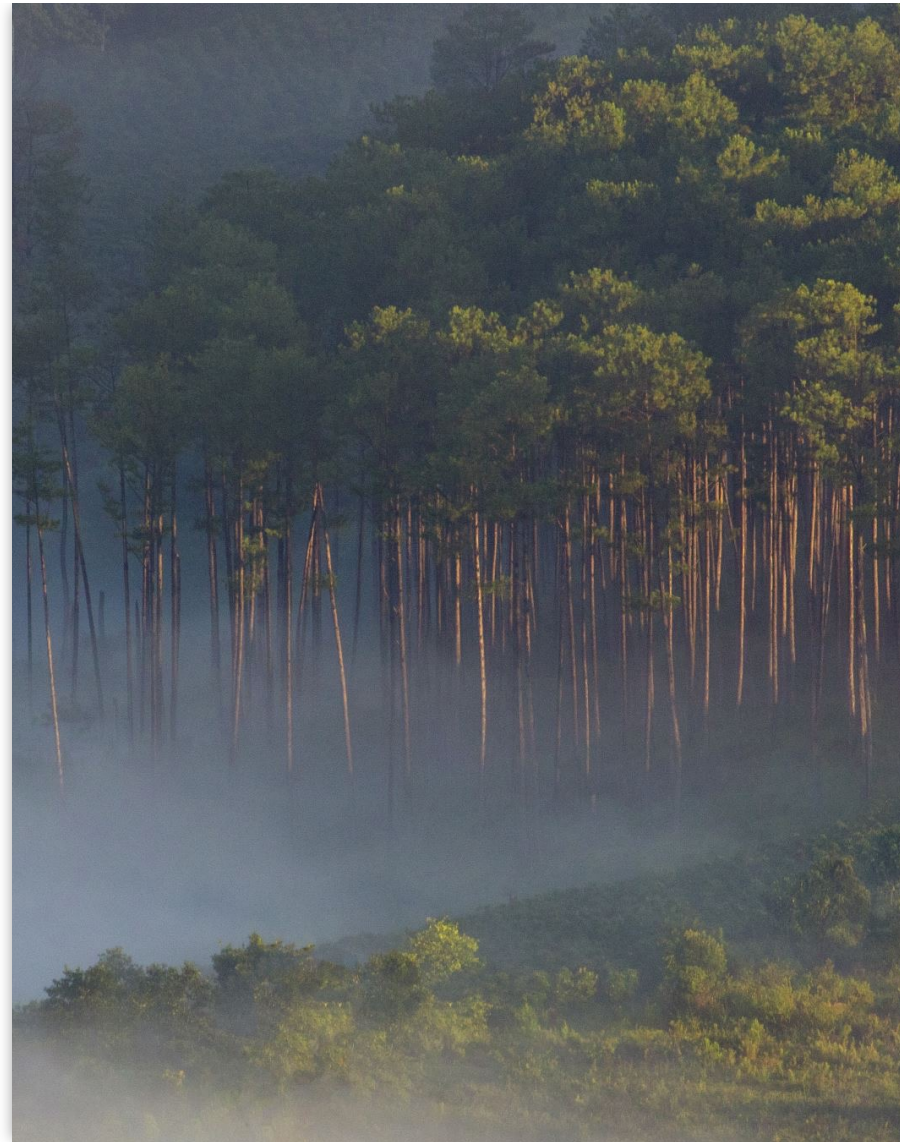
Kyoto Protocol's Clean Development Mechanism (Article 12)

- A public body or a private undertaking from a **developed country** (Annex B of the Kyoto Protocol) implementing GHG abatement projects in a **developing country** (the host country) in order to meet their agreed emission reduction targets.
- Upon verification, the developed country receives certified emission reductions (CERs) for the abatement. CERs may be traded in carbon market schemes.

Kyoto Protocol's Clean Development Mechanism (Article 12)

Projects need to demonstrate

- **additionality** (the project reduces emissions more than would have occurred in the absence of the intervention created by the CDM),
- the **absence of leakage** (projects displacing existing land-use practices and shifting emissions elsewhere). While forest is conserved in one area, deforestation could be promoted in another.
- The CDM Executive Board (EB) oversees the functioning of the CDM.





Control by the host State

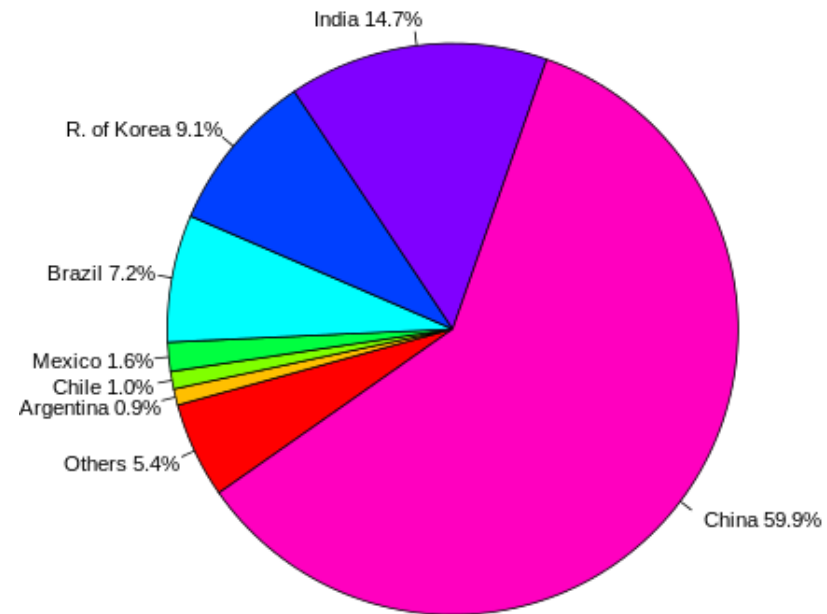
- CDM requires host countries to confirm that CDM projects contribute to their own sustainable development.
- Project managers also have to provide documentation on the environmental impact of AR projects, including impact outside project boundaries.
- If negative impacts are deemed to be significant by project participants and the host country, an EIA will have to be carried out.

Rationale behind the CDM

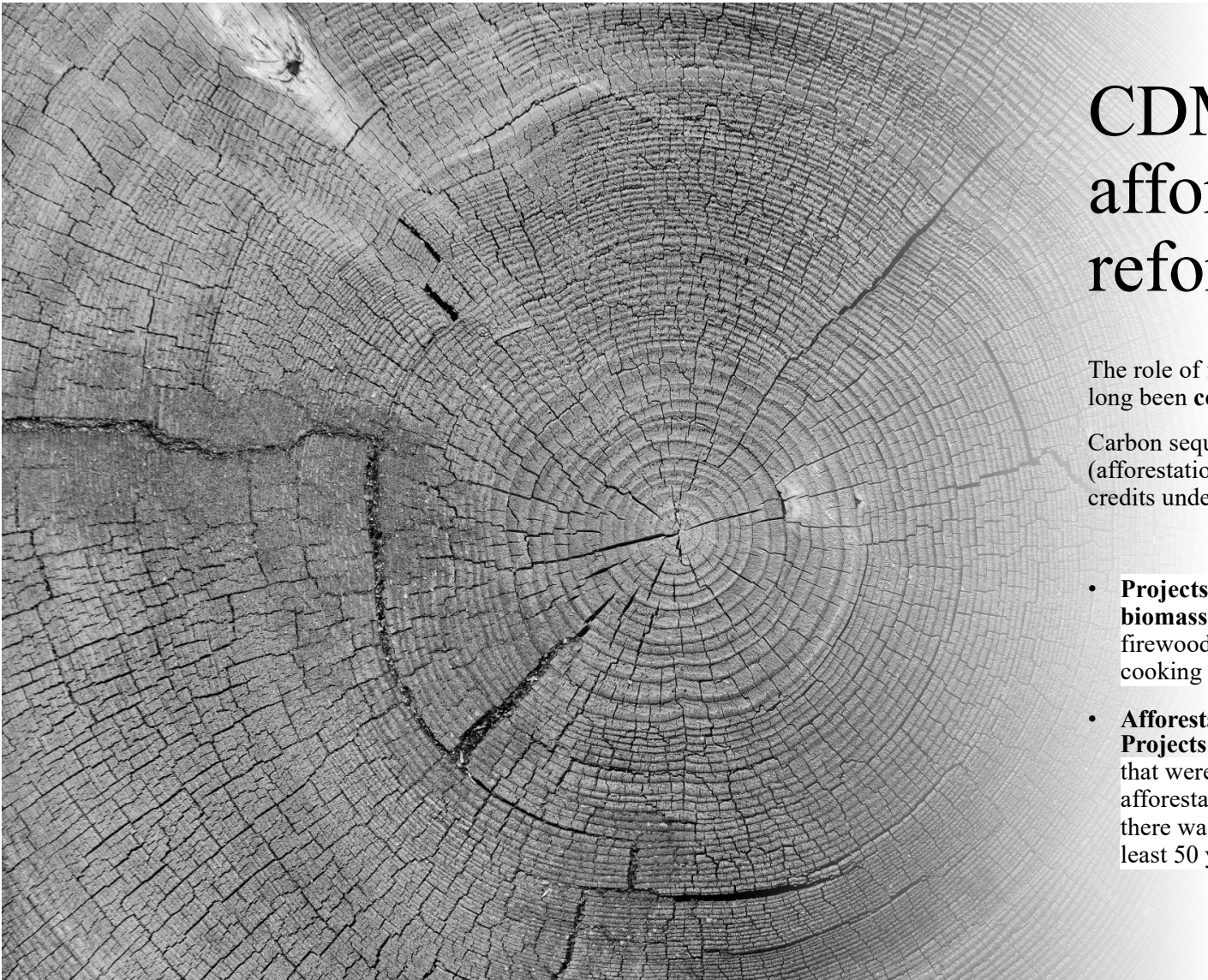
- The **rationale** behind the CDM is that emission reductions should be undertaken where it costs the least, as GHG emissions abatement is a global issue.
- Most of the market for CDMs came from European countries parties to the Kyoto Protocol.
- From 2005 to 2010, CDMs were succesfull. As more certified ECRs were issued, the credit price gradually fell, down to €10 T/CO₂. In 2012 the credit price crashed, falling to €0.5 T/CO₂.

October 2012

Certified emission reduction units by country



Data: <http://cdm.unfccc.int/Statistics/Issuance/CERsIssuedByHostPartyPieChart.html>



CDM and afforestation and reforestation

The role of forests as a climate change strategy has long been **controversial**.

Carbon sequestration of forestry projects (afforestation and reforestation) made eligible for credits under CDM (December 2011).

- **Projects that replace non-renewable biomass:** projects in poor communities, where firewood is frequently used as a fuel for cooking and heating.
- **Afforestation and Reforestation (A/R)**
Projects: reforestation (planting forest in areas that were deforested before 1990) and afforestation (planting forest in areas where there was previously no forest vegetation for at least 50 years)

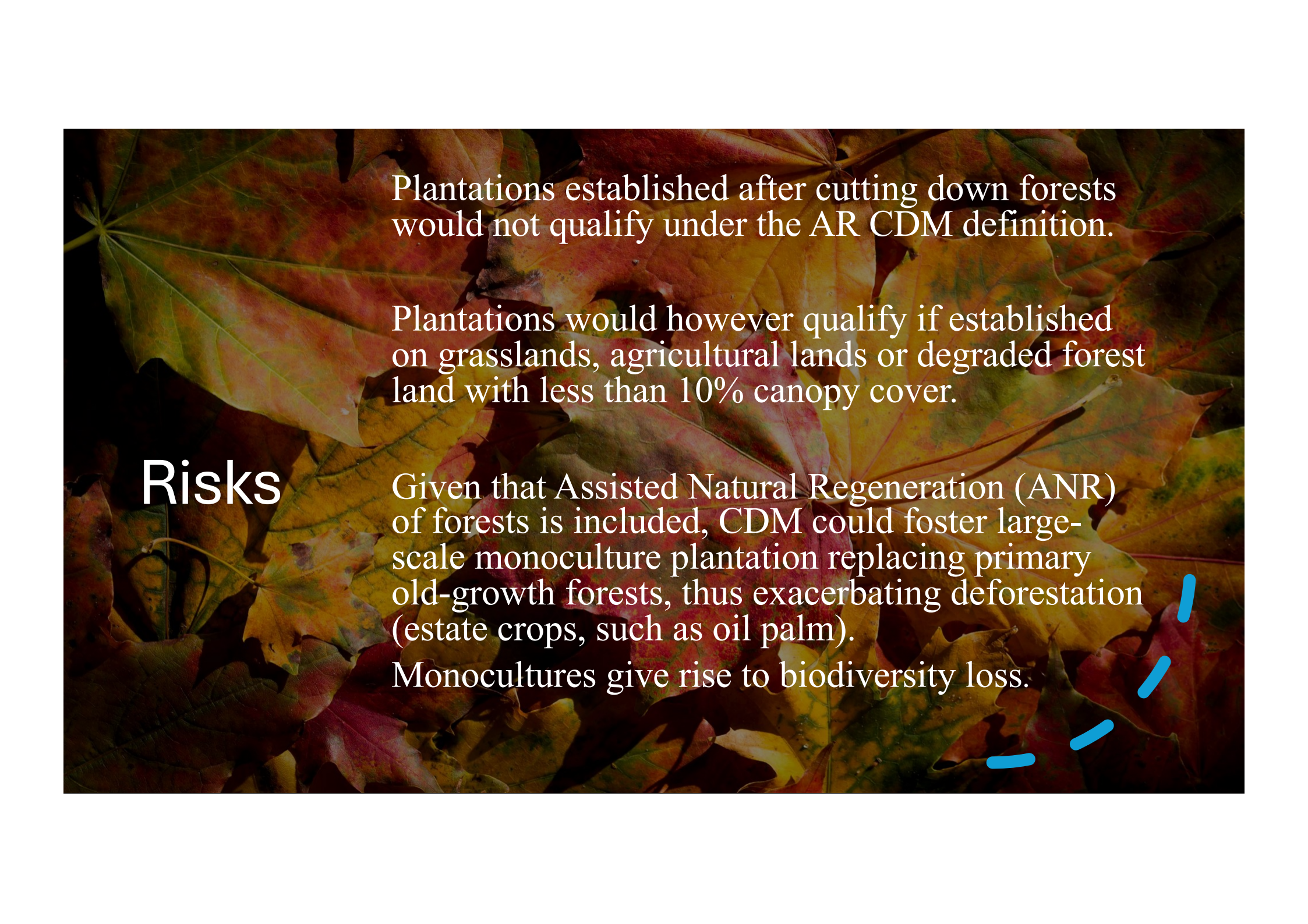
A/R Large-scale
Consolidated
Methodology
Afforestation and
reforestation of
lands except
wetlands (AR-
ACM0003)

The land subject to the project activity does not fall in wetland category.

Soil disturbance attributable to the project activity does not cover more than 10% of area in each of the following types of land, when these lands are included within the project boundary:

- (i) Land containing organic soils;
- (ii) Land which, in the baseline, is subjected to land-use and management practices and receives inputs listed in the appendix of the methodology.





Plantations established after cutting down forests would not qualify under the AR CDM definition.

Plantations would however qualify if established on grasslands, agricultural lands or degraded forest land with less than 10% canopy cover.

Risks

Given that Assisted Natural Regeneration (ANR) of forests is included, CDM could foster large-scale monoculture plantation replacing primary old-growth forests, thus exacerbating deforestation (estate crops, such as oil palm).

Monocultures give rise to biodiversity loss.





2. REDD+ (Reducing Emissions from Deforestation and Forest Degradation)



REDD+

National scale of REDD+ was agreed at **UNFCCC 2010 COP16** in Cancun. Developing country participating in REDD+ need to adopt

- **a national strategy or action plan (NS/AP);**
- **a national forest reference emission level (FREL) or national forest reference level (FRL);**
- **a robust and transparent national forest monitoring system;**
- **and a system for providing information on safeguards.**

Warsaw Framework for REDD+

UNFCCC Nov. 2013 COP 19 adopted the **Warsaw Framework for REDD+** (WFR) that includes 7 decisions

- > capacity-building,
- > technical assistance,
- > demonstration activities
- > and results-based finance.

Warsaw Framework for REDD+

- WFR required **national-level implementation** in order to prevent the risk of potential displacements and reversals of emissions.
- It requires **monitoring and reporting** of emissions displacement at the national level and reporting on how displacement of emissions is being addressed.
- It set up an **independent technical assessment process** for FREL/FRLs, modalities for measuring, reporting and verification of REDD+ results, as well as modalities for national forest monitoring systems.

Art. 5(2) of the Paris Agreement

- REDD+ and the WFR play a significant role in the implementation of the Paris Agreement and for achieving its goals.
- By including REDD+ in the Paris Agreement, Parties agreed that forestry is a key sector for taking climate action.
- Parties are **encouraged** to include REDD+ activities in their NDCs.
- Forest and land-use based mitigation is included in 80 % of all submitted NDCs under the Paris Agreement, while 59 % include adaptation and 31 % refer to REDD+.



First Global Stocktake

The importance of REDD+ has recently been stressed by all parties to the Paris Agreement in the decision on the Outcome of the **First Global Stocktake**

“the need for **enhanced support and investment**, including through financial resources, technology transfer and capacity-building, for **efforts towards halting and reversing deforestation and forest degradation by 2030** ..., in accordance with Article 5 of the Paris Agreement, including through **results-based payments** for policy approaches and positive incentives for activities relating to reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries [REDD+]; ...” (Decision 1/CMA.5 Outcome of the first global stocktake, § 34).



Challenges and controversies

- displacement of emissions outside the project area (**leakage**); risk of continued deforestation and forest degradation
- effectiveness of the emissions reduction and sustainable forest management
- distribution of costs and benefits between developed and developing countries
- implementation of REDD+ activities is **voluntary**



Integrating biodiversity into REDD+



UN REDD PROGRAM SOCIAL
AND ENVIRONMENTAL
PRINCIPLES AND CRITERIA



WORLD'S BANK FOREST
CARBON PARTNERSHIP FACILITY
(FCPF)



BILATERAL AGREEMENTS
BETWEEN FUNDING COUNTRIES
AND RECIPIENT COUNTRIES

**(i) UN REDD
Program Social
and
Environmental
Principles and
Criteria**

UN-REDD Programme guidance and tools are designed to enable countries to take a robust and flexible approach to meeting the safeguards requirements under the UNFCCC.

Safeguards in order to protect or to avoid risks (“do no harm”), while promoting benefits (“do good”).

(i) REDD+ safeguards (Decision 1/CP.16, Appendix I)

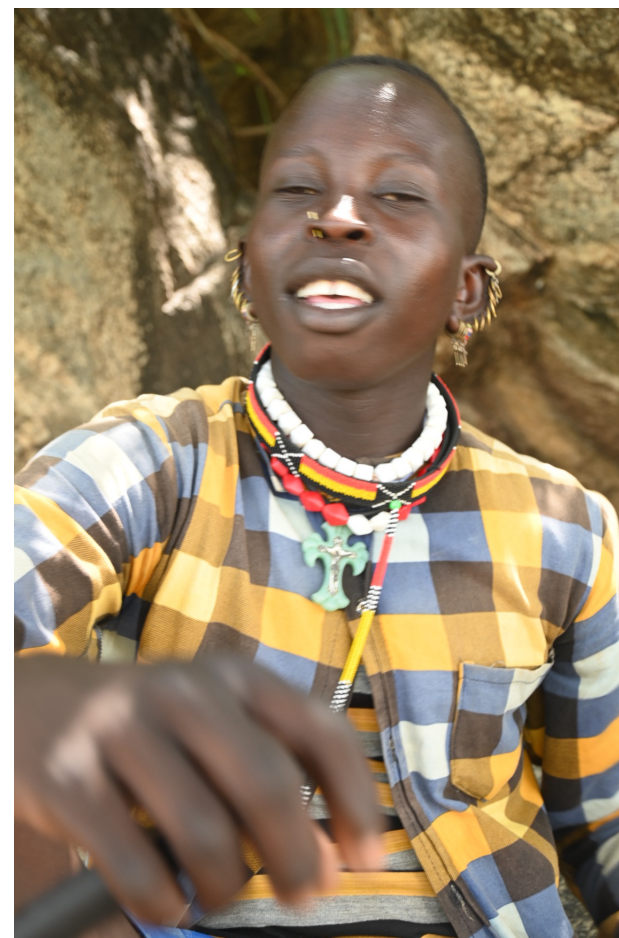
- entails full and effective **participation of relevant stakeholders**, in particular indigenous peoples and local communities
- **independent verification** of REDD+ results by experts selected from the UNFCCC roster.
- is consistent with the **conservation of natural forests and biological diversity**, ensuring that REDD+ actions are not used for the conversion of natural forests, but to incentivize the protection and conservation of natural forests and the ecosystem services they provide.

This safeguard is “particularly important in the context of tree planting initiatives emerging as solutions to the climate crisis as it clearly sends the signal on the need to prioritize conserving natural forests and aims to avoid the conversion of natural forests to plantations” (Voigt et al., ‘The Paris Agreement and the Relevance of the Warsaw Framework for REDD+’)

Participation of indigenous peoples and local communities



Karamajong
NE Uganda



(ii) World's Bank Forest Carbon Partnership Facility (FCPF)

- Launched in 2008, the FCPF is the world's largest multilateral REDD+ **financing mechanism**.
- Global partnership of governments, businesses, civil society, and Indigenous Peoples focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation, the sustainable management of forests.
- FCPF assists 47 developing countries across Africa, Asia-Pacific, Latin America, and the Caribbean.

(ii) World's Bank Forest Carbon Partnership Facility (FCPF)

- the **Readiness Fund** provides developing countries with technical and financial assistance to set up REDD+ (national strategies, reporting, verification schemes, stakeholders engagement). In total, **47 REDD+ country participants** signed Participation Agreements with the FCPF. 472 million \$
- the **Carbon Fund** pilots Results-Based Payments (RBPs) to **15 countries** that have advanced through REDD+ implementation

(iii) Funds

- Most of the finance come from international public sources
- Scale up funding from private funds

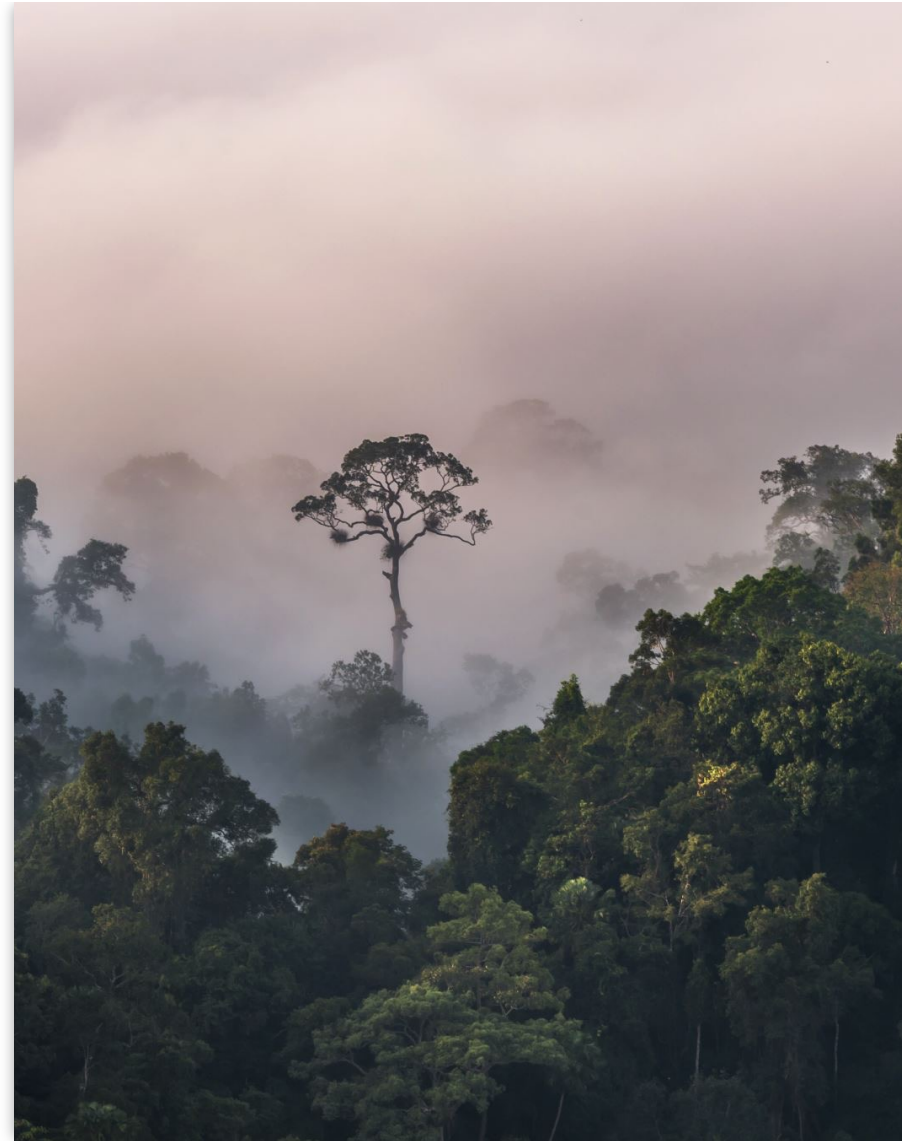


(iii) Carbon Funds

The FCPF has limited relevance for High Forest, Low Deforestation (HFLD) countries. Ten 10 HFLD countries are part of FCPF, but only 2 of them have been selected as part of the Carbon Fund (DRC and Republic of Congo).

Countries such as Bhutan, Panama and the Guyana have either low or negative deforestation rates due to low population densities, low demands for forest conversion or the presence of strong national policies to protect, conserve or restore forests – but currently are not eligible for support from the Carbon Fund.

- Baastel, *Third program evaluation of the forest carbon partnership facility. Final Evaluation Report, Vol.1.* Executive Summary, viiii.

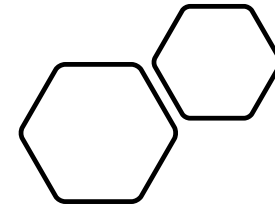
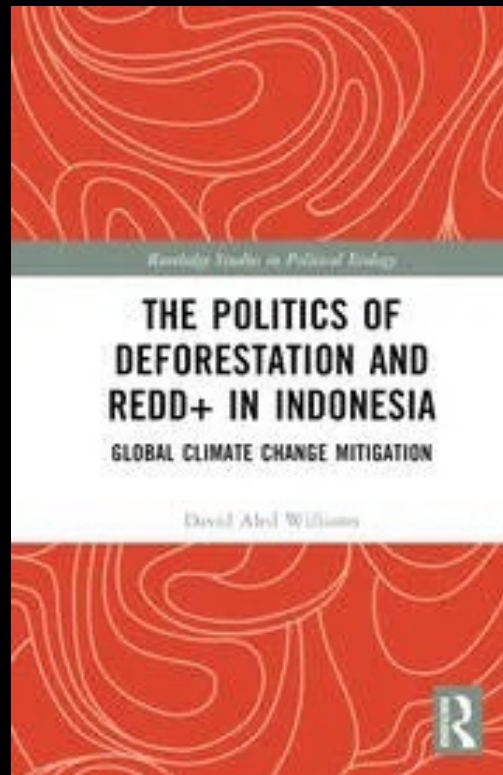


‘Unique structure for forest protection through international cooperation within a multilaterally agreed framework with clear rules, robust methodologies and independent oversight’ (Voigt et al., ‘The Paris Agreement and the Relevance of the Warsaw Framework for REDD+’).



Success story?

- 60 developing countries have reported REDD+ activities to the UNFCCC secretariat.
- End of 2022, REDD+ activities implemented by developing countries cover a forest area of approximately **1.35 billion hectares** (about 62% of forest area in developing countries) and about 75% of global deforestation.
- Many developing countries have significantly enhanced forest monitoring and management capacities.

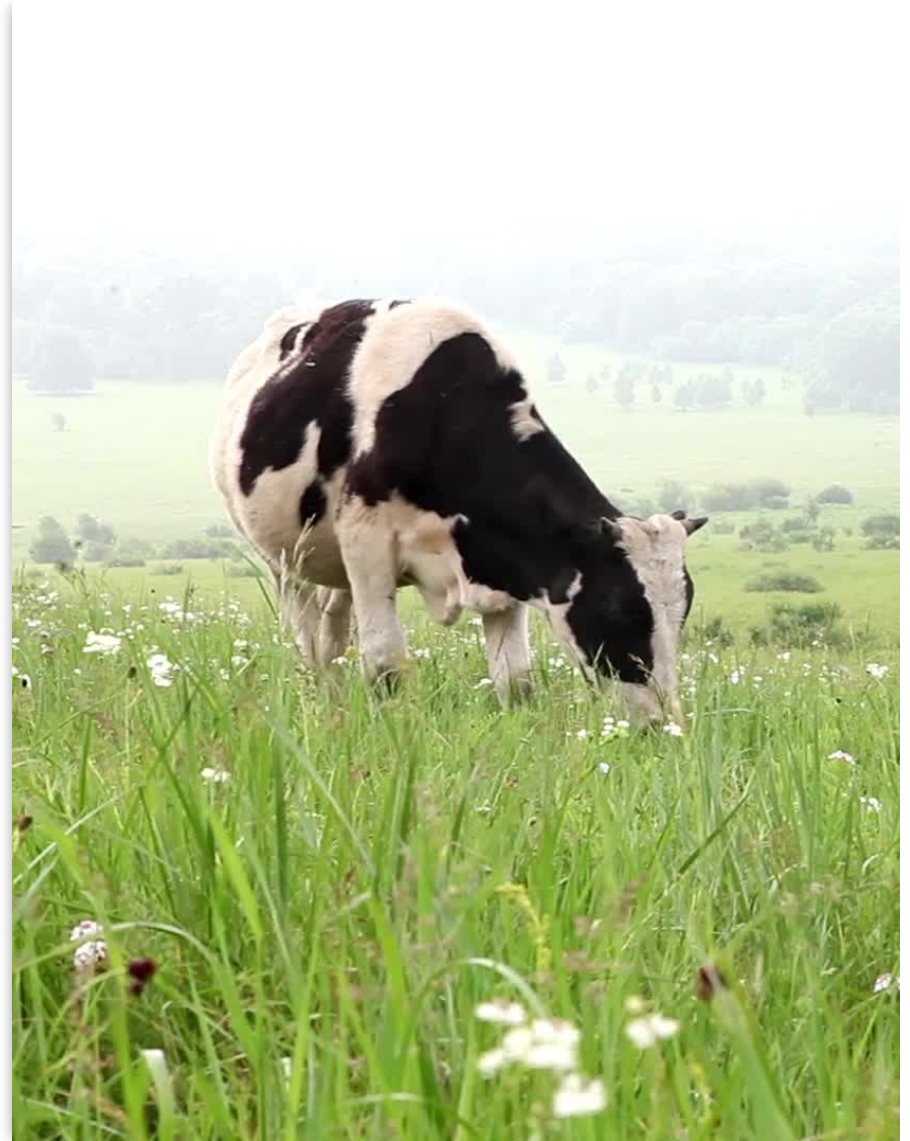


3. Agriculture, Forestry, and Other Land Use (AFOLU)

Simultaneously a **Source** and a **Sink** of CO₂ emissions

+> Grazing cattle on grassland emits methane but, depending on the grazing practices, can induce carbon capture by grassland.

Major emissions from land are **expected to increase** (thawing of permafrost, wildfires).



Agriculture, Forestry, and Other Land Use (AFOLU)

AFOLU All activities that make use of the soil in a way that either leads

- to GHG emissions
- or to uptake of GHG emissions through sequestration in soils or in vegetation

LULUCF covers everything that falls under AFOLU, except non CO₂ emissions from agriculture

AFOLU



IPCC 2006 Guidelines integrate assessments of emissions from agriculture and LULUCF



> grassland, cropland, forests, settlements, wetlands, harvested wood products, livestock



Regulating these emissions is a daunting task.

UNFCCC, Article 4(2)(b)

- All parties have to report to the COP national inventories of GHG emissions sources and removals by sinks of all GHG.
- Sustainable management, conservation, and enhancement of sinks and reservoirs mentions biomass.

EU LAW

- Agricultural emissions do not fall under the EU LULUCF Regulation.
- Emissions from livestock are only regulated under the Effort Sharing Regulation together with non-ETS emissions (traffic, small industries, households).

Conclusion

Various interconnections between:

- Forestry,
- Energy (biomass),
- Agriculture (agroforestry),
- Nature protection (protected areas, protection of species),
- Development policies (eradication of poverty, gender equality, education, etc.).

Conclusion

Financial value for the carbon stored in forests by offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.

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EU Sustainable Value Chains

Jean Monnet Chair UCLouvain, St Louis

[http: TradevEnvironment.EU](http://TradevEnvironment.EU)