

Forests & Climate Change

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Role of Forestry Sector in Climate Change

- **Forests both sources and sinks of carbon**
- **Forests contribute about 17.4% of global CO2 emissions**
- **Forests provide large and (relatively low cost???) mitigation opportunities**
- **Provide other ecosystem goods and services to the communities to adapt to climate change**

**Forestry has been a contentious
topic in Climate Change
mitigation from the day one of
the Protocol**

Reasons

- **Might cause environmental damage**
- **Might impede progress on achieving actual emissions reduction**
- **Biotic offsets involve more unsolved complex analytical issues compared to energy and other GHG offsets, including monitoring and compliance issues**
- **The mitigation benefit of land use based offset are potentially temporary**

AFOLU (Agriculture Forestry and Land Use Change) under Kyoto

- **Earlier LULUCF (Land Use, Land Use and Cover Change, and Forestry)**
- **AFOLU activities included in the seventh COP for the first Commitment period 2008 – 2012**
- **These are limited to Afforestation and Reforestation Projects for CDM**

Definitions under AFOLU

“Forest” is a minimum area of land of **0.05 – 1.0** hectares with tree crown cover of more than **10 – 30** per cent with trees with the potential to reach a minimum height of **2 – 5** meters at maturity *in situ*

Definitions under AFOLU

“Reforestation” is the direct human induced conversion of non-forested land to forested land through planting, seeding and / or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989

Definitions under AFOLU

“Afforestation” is the direct human induced conversion of land that has not been forested for a period of at least **50 years to forested land through planting, seeding and / or the human-induced promotion of natural seed sources**

AFOLU under CDM

- **Modalities and Procedures for afforestation and reforestation activities under CDM are given in 5/CMP.1**
- **Simplified modalities and procedures for small-scale A&R projects under CDM are given in 6/CMP.1**

M & P for CDM A&R Projects (Decision 5/CMP.1)

- No restriction on species
- Host party to evaluate with its domestic legislation
GMOs, exotics, invasive, alien species etc.
- Rules negotiated for AFOLU only apply to the first
commitment period
- Host party definition of forest:
- Must report to Executive Board (EB) single minimum
tree cover value between 10 – 30%
- A single minimum land area between 0.05 – 0.1 ha
- Single minimum tree height value between 2 – 5 m

M & P for Small-scale CDM A&R Projects

Small scale project activities under CDM are expected to result in net anthropogenic GHG removals by sinks of < 16kt of CO₂ annually and are developed or implemented by low-income communities and individuals (14/CP.10)

Small Scale A&R Projects

- To reduce transaction costs, modalities and procedures are simplified for small-scale A&R Projects under CDM:
- Bundling allowed for Project Design Document (PDD), validation, registration, monitoring, verification & certification
- Requirements of PDD reduced
- Simplified baseline methodologies
- Monitoring plans & requirements simpler
- Same Designated Operational Entity (DOE) may undertake validation, verification & certification

Current Scenario of CDM A&R Projects

- **CDM Projects registered: > 1200**
- **CDM A/R Projects registered: 1**
- **CDM A/R Methodologies approved : 10**
- **Small Scale CDM A/R Methodologies approved : 3**
- **CDM A&R Projects in pipeline: 1**

CDM A&R Methodologies

CDM A/R methodologies suffer very high rejection rate mainly because of :

- **Improper understanding and use of CDM A/R modalities and procedures**
- **Not defining land eligibility**
- **Improper selection of baseline scenario and Approach**
- **Not proving additionality**
- **Improper addressing of leakages and uncertainties etc.**

Issues in CDM A/R projects

Additionality & Baselines:

- **Non-permanence:** A/R projects can lose CERs if activities that caused emissions recur after a period. Options to address this issue include “temporary CERs (tCERs)” and “Long-term CERs (ICERs)”
- **Leakage:** “Net change of anthropogenic emissions by GHG sources which occurs outside the project boundary, and which is attributable to the CDM project activity”.
- **Measurement, monitoring and verification of carbon stocks:** A key aspect of CDM projects is accurate quantification of project-level carbon benefits and its verification by independent expert teams

Non-Permanence (Temporary Credits)

- **Temporary nature of removals (fires, pests)**
- **CERs are temporary and need replacement**
 - **tCERs = expire after 5 years (“re-issuance”).**
 - tCERS valid for the end of commitment period following one in which they were issued.**
 - **ICERs = expire at the end of the crediting period. Need no “re-issuance”**
- **Need to be replaced (by AI buying Party) :**
 - **After expiry**
 - **If project results in emissions (or decreased stocks)**
 - **If no monitoring report is sent**

Potential Reasons for Low Success of CDM A/R projects

- Complex methodology
- Difficulty in proving additionality, land eligibility and establishing baseline
- Limited data and maps –expensive!
- Limited expertise to help project developers
- Low market price for forestry carbon credits?

THANK YOU