Environmental Integrity and Permanence of REDD+

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Policy Report Submitted as an Engaged Partner Project for Conservation International

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Conservation International

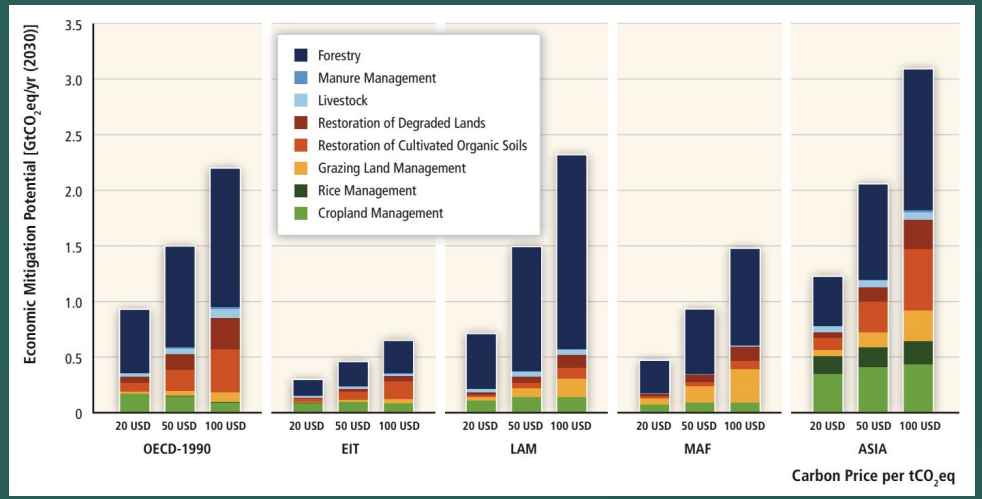
- US-based non-profit organization founded in 1987 with the vision of a healthy, prosperous world in which societies are forever committed to caring for and valuing nature, for the long-term benefit of people and all life on Earth.
- To date, CI has helped to protect over 6 million square kilometers of land and sea across 70 countries
- Four main working areas:
  - Protecting nature for climate
  - Conserving oceans
  - Nature-based development
  - Innovation in science and finance
- Our project focused on their climate change efforts
  - Protection and restoration of tropical forests, peatlands and mangroves

Research Questions

- What is permanence as it relates to REDD+ and carbon sequestration?
- How has the issue of permanence hindered the adoption of nature-based climate solutions in international negotiations? Are these arguments substantive?
- How can natural climate solutions offer long-term emissions reductions?

REDD+

- Reduced Emissions from Deforestation and Forest Degradation (REDD+) as mechanism to control these emissions under the UNFCCC
- First discussed in 2005, finalized in 2015
- Creates financial incentives for developing countries to reduce deforestation and promote sustainable development
- Controversy with REDD+
    - Permanence
    - Socio-political issues



Issue of Permanence

- Carbon stocks are not considered permanent when forest sequesters carbon but absorption is later reversed due to deforestation
- Doubts may cause REDD+ investors to become hesitant and impose restrictions
  - Fear of falsely credited carbon savings
  - Permanence is an obstacle in the recognition of forest sequestration as a mitigation strategy in the Paris Agreement
- Permanence changes based on how emissions are measured
- However, permanence is less relevant than often thought and can be resolved

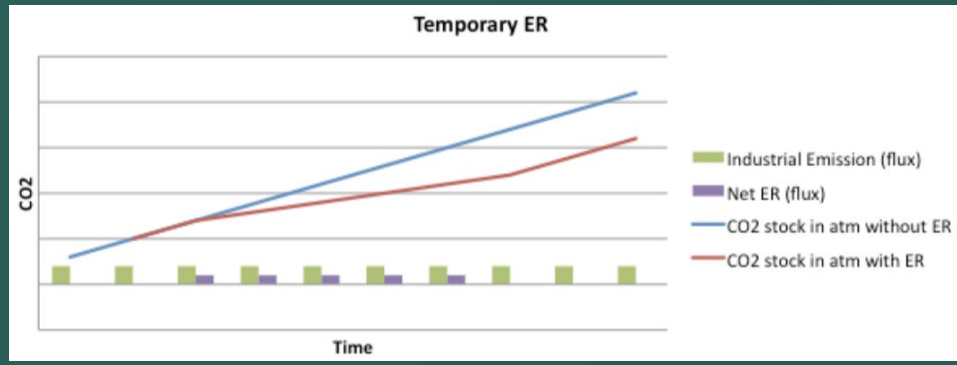
Source: https://www.biofilica.com.br/en/after-all-what-is-redd/

Article 6 + Permanence

- “Make or break”
  - Paragraph 3 permits trade of ITMO units for NDC purposes
- Article 6 of the Paris Agreement currently has no “Rulebook”
- Largest socioeconomic threat to REDD+= lack of donors and carbon markets→ Conservation International aims to legitimize REDD+ in Article 6 Rulebook

How Permanence Changes

- Emission estimates vary based on
  - How area changes are defined and measured
  - How carbon stocks change
  - Types of land management
  - When calculations are made
- UNFCCC rewards nations for **purposeful** management practices of carbon sequestration
  - Must distinguish between natural & human-induced effects
- Double-negative argument
  - Does sequestered carbon that is released do more damage than before sequestration?

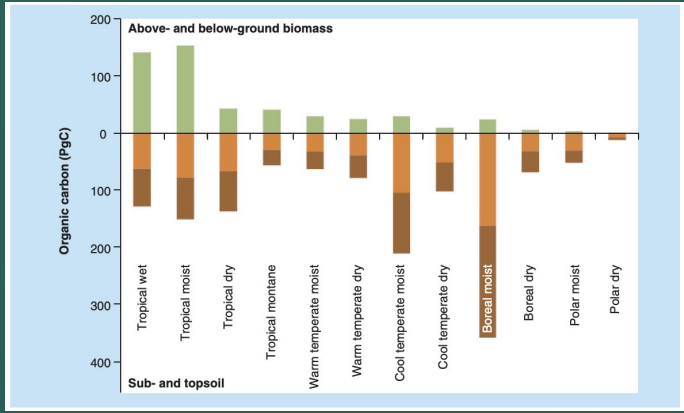


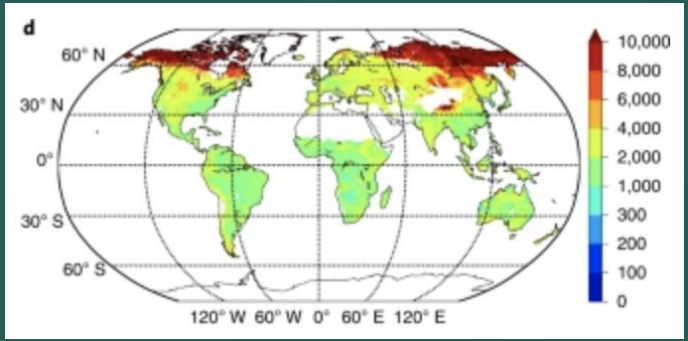
In an avoidance project, reversal leads to a permanent reduction in atmospheric CO_2 concentrations compared to the reference scenario.

Source: Joosten 2016, “Peatlands, Forests, and Climate Architecture”

Carbon Stock Accounting and Baseline Estimation

- A baseline is the measurement of GHG emissions in a business-as-usual scenario
- Vital for setting targets and measuring progress
- Improperly formulated baselines can undervalue certain carbon stocks and over exaggerate concerns of permanence, which can greatly influence the acceptance of certain nature-based solutions
    - Terrestrial carbon is third largest stock in the world
    - Study of soil organic carbon is still evolving
    - Belowground carbon quantities believed to be greater than previously estimated
    - Mean age of global soil carbon is 4,830 ± 1,730 years old
    - Belowground carbon at far less risk of human and natural disturbance





Mean Soil Carbon Age

Governance Challenges with REDD+

- Social safeguards were articulated in Cancun at COP 16 addressed a number of potential issues, stating that REDD+ initiatives should:
  - Be consistent with the objectives of national forest
  - Take into account into account national legislation and sovereignty
  - Respect for the knowledge and rights of indigenous peoples and members of local communities
    - **Clarification of tenure rights in readiness stage of implementation**
  - Involve the full and effective participation of relevant stakeholders
  - Incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits
    - **Effectively resolving the issue of ES leakage effects unless implemented improperly**
  - Address the risks of reversals (i.e. acknowledge permanence issues)
  - Aim to reduce displacement of emissions

Impacts of REDD+ Financing on Permanence

- Concerns over REDD+ aid not being “need-based”
  - Explained by safeguards and REDD+ readiness phase
- Concerns of corruption in aid recipient countries threatening REDD+ projects
  - No real evidence
  - Malaysia Kelantan State Case Study
- Lack of donors and carbon markets?
  - Carbon markets are growing quickly
  - Legitimacy under Article 6 rulebook helps
  - “Crowding-in” effect when countries become REDD+ eligible

Recommendations

1. Seek to implement combination of ground & above-ground approaches for more reliable emissions estimates
2. Advocate for REDD+ under the Article 6 Rulebook as an ITMO which can be used to meet NDCs
3. Expand REDD+ readiness criteria to involve decentralized, nested governance infrastructure with social welfare programs built in to help prevent man-made forest disturbances in developing, forest-dependent communities
4. Push for governments to establish carbon prices & discount rates that incentivize carbon trading and technological innovation for improvement of land management and monitoring
5. Refine carbon accounting, and invest in the study of below-ground and non-forest terrestrial carbon stocks


Thank you!