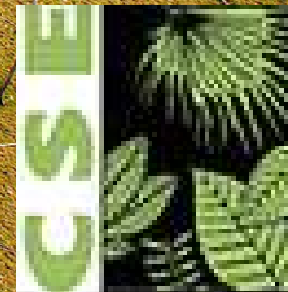


WHO DOES REDD+ HELP?

Lessons from Asia and Africa

Centre for Science and Environment
New Delhi



Overview of presentation



- Global development in REDD+
- Status of REDD+ in India and Africa
- Findings from CSE case studies
- Conclusion and Recommendations

The significance of REDD+ for climate change

- Deforestation responsible for more than 10 per cent net GHG emissions: hotspots located in tropical forests of the world.
- 129 million hectares (ha) of tropical forests lost between 1990-2015.
- In the BAU scenario, 289 million ha of tropical forests estimated to be lost from 2016–30, resulting in 169 billion tonnes of CO₂ emissions.
- Reducing tropical deforestation believed to have potential to mitigate GHG emissions by >20 per cent.
- Reducing deforestation also seen as the most direct action to build the resilience of forest-dependent communities to climate impacts.
- REDD+ conceptualized as a mechanism to tackle deforestation and forest degradation and mitigate climate change.

Where does REDD+ stand now?

- More than 50 countries are at the readiness or implementation stages of REDD+ - supported primarily by bilateral and multilateral agencies.
- More than 300 REDD+ projects - a significant number developed under different standards.
- REDD+ implementation graduating from project-based approach to sub-national/ jurisdictional programmes spanning millions of hectares of land.
- International REDD+ finance much lower than the estimated costs – most conservative estimates suggested 5 billion USD annually but actual flow averaged just 796 million USD from 2010-2014.
- No evidence to establish any significant contribution of REDD+ in reducing deforestation: 2016, 2017 & 2018 have been the worst years for tropical forests in the last two decades.
- Warsaw framework on REDD+ developed, but not robust.

Despite continued skepticism on REDD+, the mechanism has been enshrined in Article 5 of Paris Agreement.

Forests most common NDC



Source: WWF, 2015

CSE study on REDD+



□ **Objective**

To understand if REDD+ implementation is leading to sustainable forest management and improving local livelihoods

□ **Methodology**

- Secondary research on the development of REDD+ globally (India and Africa), and at the UNFCCC
- Field visits to REDD+ project sites in India, Kenya and Tanzania in 2017
- National Workshop in India with experts in February 2017
- International Workshop with experts in February 2018
- Global Media Fellowship on REDD+ in 2017

REDD+ in India:

Context and Progress

- Large-scale deforestation not a problem though quality of forests deteriorating; anthropogenic pressures for fuelwood, fodder, etc considered responsible for forest degradation
- Indian forests sequester close to 170 million tonnes of CO₂ annually – 8% of total emissions
- **India's INDC commitment** to create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ through additional forest cover by 2030
- India also became the first country to commit to first ecological transfer for forest conservation - **forests assigned 7.5% weight age in determining states' share** of Central revenues
- India has the legal framework and technical capabilities to implement REDD+; but full-fledged REDD+ projects are extremely few

Most REDD+ initiatives in India are readiness projects

Implementing agency	Name of the project
Implementation projects	
Mawphlang Welfare Society	Synjuk Umiam Sub-watershed Community Forestry Federation, also called the East Khasi Hills REDD+ project
Wild Life Trust of India	Garro Hills Wildlife Corridor Project
Meghalaya State REDD+ Cell	Umket RAID project
Readiness projects	
ICFRE (Indian Council for Forest Research and Education)	Uttarakhand REDD+ pilot project
TERI (The Energy Research Institute)	Preparedness for REDD+
Tetrattech ARD	USAID-funded 'India Forest Partnership for Land Use Science' programme, or 'India Forest +'
NEHU (North-Eastern Hill University)	REDD+ strategy in Northeast India; CFANE: (Community Forest Alliance for Northeast)
Regional Centre North East India for National Afforestation and Eco-Development Board, MOEF&CC	Feasibility study of REDD+ projects in the Northeast; capacity building regarding REDD+
Regional Centre for Development Cooperation	Saintala Forest Range of Balangir district
	Gandhamardan–Bargarh
Japan International Cooperation Agency	Evolving REDD+ readiness initiative under JICA assisted forest sector projects.
International Centre for Integrated Mountain Development, Nepal	Regional REDD+ initiative in Bhutan, India, Myanmar, Nepal
Indira Gandhi National Forest Academy	Cell for REDD+ in relation to global warming and climate change

India's National REDD+ Strategy

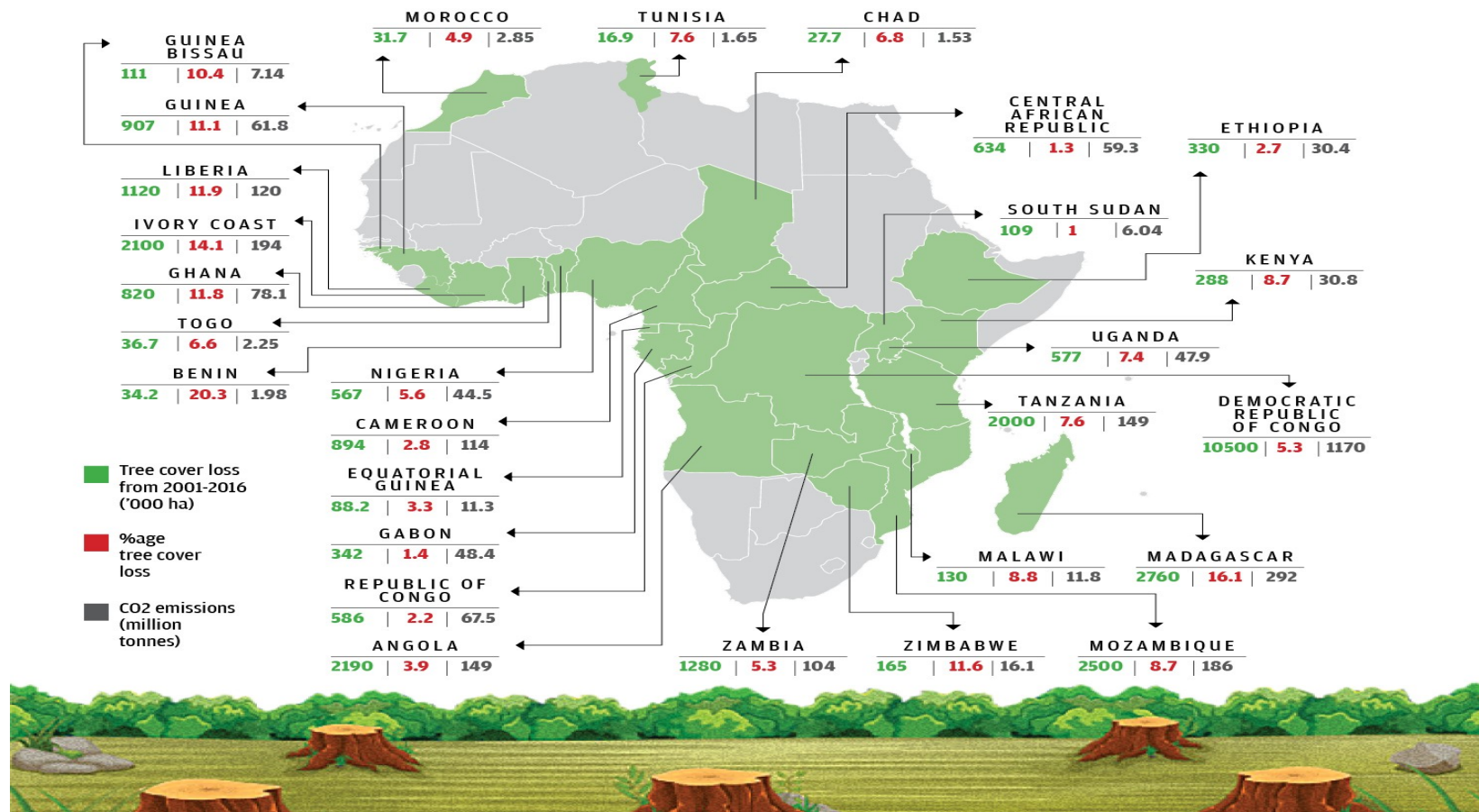
- **Scope of REDD+** includes forests and trees outside forests
- **Scale of REDD+ implementation:** Follows landscape approach, along the boundaries of physiographic zones – India has 14 physiographic zones
- **Key strategies:**
 - (i) **reducing emissions from forest degradation:** Improved cookstoves
 - (ii) **conservation of forest carbon stocks:** Protected Area management
 - (iii) **sustainable management of forests (SMF):** To prevent loss of forest carbon stock
 - (iv) **enhancement of forest carbon stocks:** Afforestation/reforestation and restoration of degraded forests
- **Adopts fund-based approach:** Finance for REDD+ will be sourced from domestic sources. The deficit in finance to be mobilized from external funding such as GCF
- **Silent on carbon rights and benefit-sharing**

REDD+ in Africa: Context and Progress

- At least 29 African countries participating in REDD+ with support from multilateral agencies.
- Deforestation estimated to be 3.4 million hectares annually, at a rate of 0.49%
- Hosts 136 forest carbon projects – only 39 REDD+ initiatives.
- Small-scale agricultural processes considered to be the major drivers of deforestation.
- Projected to witness the highest rate of population growth between now and 2050; pressure on forests expected to increase too.
- Has made little progress to decentralize forest governance, compared to Asia and South America, but is leading the transition to jurisdictional space in REDD+.

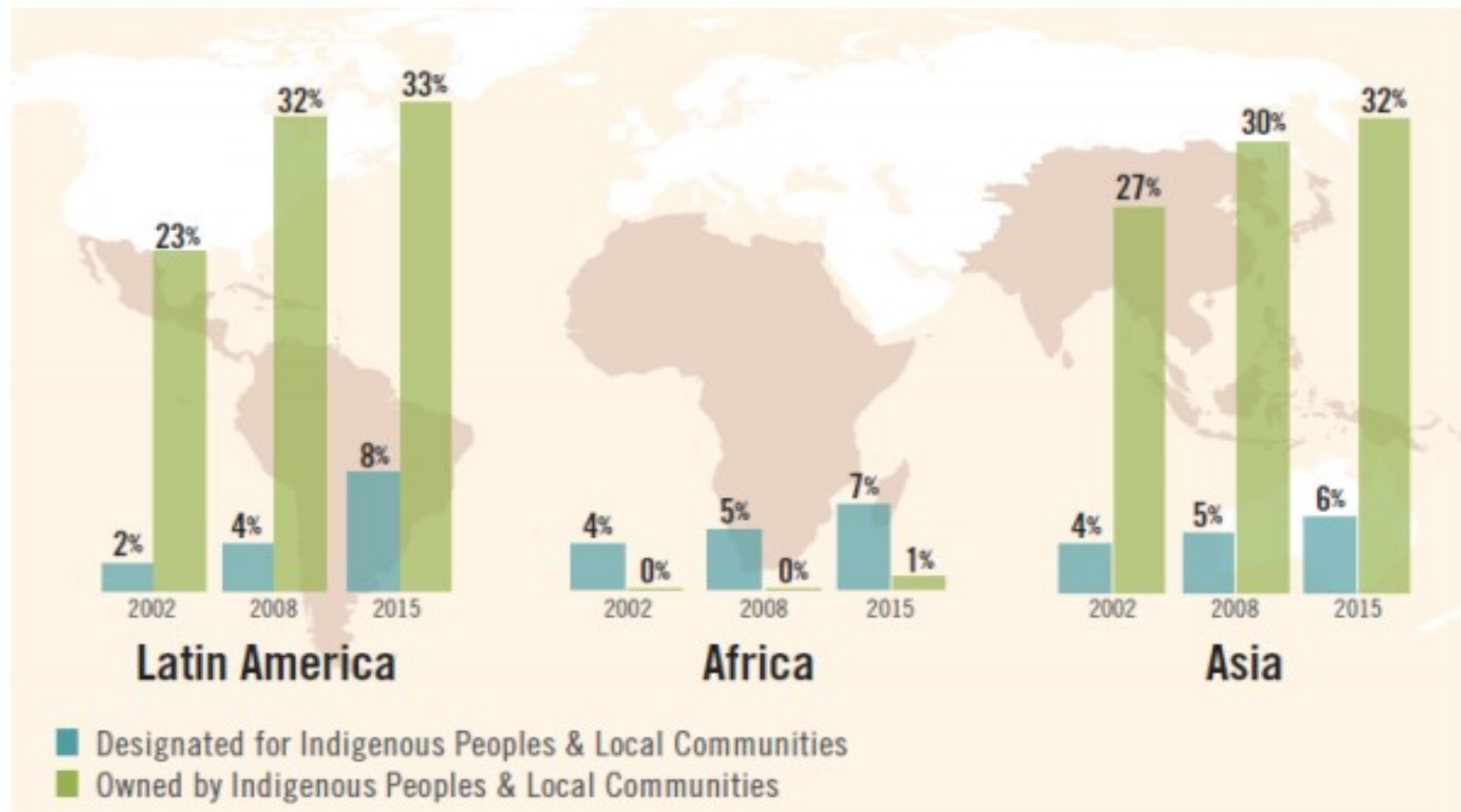
Tree cover loss in REDD+ countries (2001-2016)

Tree cover loss in REDD+ countries of Africa



Source: Global Forest Watch 2018

Poor progress on Tenure Reforms in Africa: Will jurisdictional REDD+ work?



Source: RRI ,2016

CSE case studies

Project Name	Location	Size (ha)	Project duration	Estimated annual emission reduction
Kasigau Corridor REDD+ Project	Kenya	200,000	30 years	52 million tonnes
Chyulu Hills REDD+ Project	Kenya	410,534	30 years	37 million tonnes
Making REDD+ work for communities – MJUMITA and TFCG	Tanzania	41,924	30 years	NA
REDD+ in Yaeda Valley	Tanzania	33,073	20 years	572,508 tonnes
East Khasi Hills REDD+ project	India	27,138	10 years	318,246 tonnes

Findings from case studies

- REDD+ projects studied developed either by NGOs, CBOs, private agencies to protect smaller patches of forests, developed under standards developed by voluntary agencies such as VCS-CCBA, Plan Vivo
- **Small-scale processes constituted primary drivers of deforestation:**
 - ▣ Slash and burn cultivation, charcoal production, unregulated grazing in Kenya and Tanzania
 - ▣ Forest fires and fuel wood removal in India
- **Diverse objectives and land ownership in REDD+ projects:**
 - ▣ **Wildlife Protection in Kenya:** Project areas in Kenya comprised wildlife corridors on private/communal ranches, Protected Areas. Land-use change permissible only on communal ranches. **Smallholders excluded.**
 - ▣ **Improving village-level governance in Tanzania:** Project area comprised forests within village boundaries over which legal titles didn't exist. Land-use change legally permissible.
 - ▣ **Improving forest protection and restoring degraded forests in India:** Project area comprised forests owned by indigenous communities. Land-use change legally permissible.

Findings from case studies (contd...)

- **Key approaches to achieving Emission Reduction:**
 - ▣ **Kenya:** Forest protection and monitoring to identify and stop 'illegal' use of project area constituted the primary activity.
 - ▣ **Tanzania:** Securing land titles under Village Land Act and strengthening community forest management on these lands constituted key activities.
 - ▣ **India:** Forest fire management, distribution of alternatives for fuel, reforestation of degraded areas constituted key activities.
- All projects managed to successfully achieve emission reduction from deforestation and are selling verified carbon credits in voluntary carbon markets.
- **Carbon markets a huge challenge across projects:** Carbon revenue inconsistent and unpredictable affecting the long-term project sustainability. MJUMITA REDD+ project (Tanzania) did not manage to sell a single credit after five years of initial funding support from Norway. Community benefit projects stalled in Kasigau in lean seasons of sale.

Findings from case studies (contd...)

- **Discretion adopted in benefit-sharing mechanism;** collective benefits prioritized over individual payments and opportunity costs not included.
 - **Kasigau Corridor (Kenya):** One-third to ranch owners, profits after deducting operational costs (close to 50%) to be shared equally between community benefit projects (bursaries, school and water infrastructure) and project developers.
 - **Chyulu Hills (Kenya):** 33% projected as operational costs; the remaining 67% to be allocated to nine partner organizations equally as grants for REDD+ activities. No payment system for communally owned ranches in the project area. **Few partner organizations not even physically present in project area but allocated a share for their technical/marketing expertise.**
 - **MJUMITA (Tanzania):** 40% projected to be operational costs. Every individual household a shareholder in the remaining carbon revenue. Trial REDD payments made to all individuals involved in reducing deforestation and achieving additionality. **Only project to factor in opportunity costs in determining price of carbon.**
 - **Yaeda Valley (Tanzania):** 40% projected to be operational costs and the profits shared as individual benefits such as salaries of community guards and collective benefits to meet the education and health needs of target communities.
 - **East Khasi Hills:** Profits shared as community development grants such as water infrastructure, or in kind benefits such as LPG connections, smokeless chulhas, etc

Findings from case studies (contd...)

- **Secure tenure proved successful for deforestation:** All projects chose such lands where land and forest rights were clearly defined under existing legal frameworks.
- **REDD+ a source of additional finance for project developers:** Scope of emission reduction was quite small, ranging from 1 tonne/ha/year to 9 tonnes/ha/year owing to small-scale deforestation drivers.
- **High operational costs of project implementation:** Ranged from 33% to 53% and was met from carbon revenue.
- **Replicability of pilot activities uncertain:** All projects adopted demonstration activities for livelihood diversification, landscape restoration, etc, but their scalability not clear.
- **Conflicts with communities in Kenya:** Survival needs driving deforestation; restrictions on project area use and inadequate benefits from carbon revenue leading to conflicts between communities and project developers
- **Leakage issues in India:** Communities were obtaining charcoal from outside project area to meet daily fuel needs in the absence of alternatives.
- **Aspiration to integrate into jurisdictional programmes:** Hope that the integration will open carbon markets to bilateral and multilateral agencies.

Can carbon markets meet REDD+ opportunity costs? (eg – fuelwood replacement in India)

- **A. Annual Fuelwood Consumption in India (FAO, 2015) = 385.25 million cum or 231.15 million tonnes**
Total carbon in Fuelwood consumed = $231.15 \times 0.45 = 104$ million tonnes of Carbon
Total annual CO₂ released by Fuelwood consumption = $104 \times 3.67 = 381$ million tonnes CO₂e.
- **B. Number of Forest Dependent People in India = 300 million**
Cost of Non-subsidized LPG Cylinders per family = $670 \times 12 = \text{INR } 8,040$
Per capita annual cost of LPG cylinder (assuming a family of 4 people) = INR 2,010
Total cost required to replace fuelwood with LPG = $300 \text{ million} \times 2010 = \text{INR } 603,000 \text{ million}$
- **C. Total potential Emission Reduction(ER) from fuelwood replacement = 381 million tonnes of CO₂e**
Cost of ERs = $\text{INR } 603,000 \text{ million} / 381 \text{ million CO}_2\text{e} = \text{INR } 1,582 \text{ or } 22.6 \text{ USD per tonne of CO}_2\text{e}$
- **D. Average price of REDD+ credit CO₂ in voluntary carbon markets from 2012-2016 = 4.5 USD per tonne of CO₂**

Key trends and Conclusion

- ❑ REDD+ has been driven by bilateral and multilateral agencies with their own sets of safeguards and standards, instead of UNFCCC.
- ❑ Costs of REDD+ implementation higher than expected – a market-based approach unlikely to meet the true costs.
- ❑ Global Carbon market is failing to materialize; and doubts prevail over international REDD+ finance commitments (GCF)
- ❑ Opportunity costs not being factored in benefit-sharing arrangements; carbon rights nationalized in several African countries, Nepal.
- ❑ Transition to jurisdictional REDD+ happening without resolving important forest governance issues such as land and forest rights – likely to recentralize forest governance.
- ❑ Enhancement of carbon sink through A/R a bigger priority for most developing countries – market-based approach cannot pay for it.

Making REDD+ bottom-up: Recommendations

- ❑ Ensure **REDD+ is a fund-based mechanism – partnership between community, national governments and bilateral/multilateral funding**
- ❑ **Resolve tenure issues** before implementing REDD+
- ❑ Ensure **effective and meaningful participation of communities**: communities should have the right to say no to a REDD+ project
- ❑ Develop **clarity on carbon rights**: link carbon rights to land and forest rights
- ❑ **Factor in opportunity costs** in determining the carbon price: more discussion needed on applicability of the approach
- ❑ Develop **basic protocols for benefit-sharing** mechanism
- ❑ Prioritise smaller, community-owned projects to jurisdictional REDD+ programmes
- ❑ **Integrate REDD+ with sustainable forest management**: should not only promote exclusionary conservation
- ❑ Integrate strong environment and human rights safeguards in REDD+ projects



Thank you!