FAO and UNEP Meeting on Forests and Climate Change
Adaptation in Asia, 26 October, 2011

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Presentation Outline

1. Role of forests for adaptive capacity and reducing vulnerability
2. Project aims
3. Case study findings to date
4. Positive and negative impacts between adaptation and mitigation
RECOFTC, Center for People and Forests: Our vision is to ensure that local communities and indigenous peoples in the Asia-Pacific region are actively engaged in the equitable and ecologically sustainable management of forest landscapes.

People, Forests and Climate Change (PFCC) – intended to explore both mitigation and adaptation elements of forest - local communities interaction. To date, RECOFTC more active in mitigation activities, only recently exploring role of forests in the CC adaptation.
“Integrated landscape management and forest restoration offer the potential to foster synergies between adaptation and mitigation by increasing carbon stocks while at the same time enhancing ecosystem resilience and reducing social and economic vulnerabilities of forest-dependent people.”

CIFOR Forest Day 4 statement at Cancun, COP16
Why the attention to the role of forests in adaptation?

- 400+ million forest-dependant in Asia Pacific
- Forests associated with mitigation, agriculture associated with adaptation (vulnerability = agriculture-based food security)
- Why this is wrong: CIFOR PEN database: average rural household globally derives one-fifth to one-quarter income from forest-based sources (Wollenburg 2011).
- CC most severe on those interacting directly with natural resources – farmers, fisherfolk, indigenous people and forest dependent communities.
- Same groups also often more vulnerable due to: remote location, poor information, infrastructure, less-diversified income sources and vulnerable geographic locations.
Vulnerability – more than climate change (drawn from CARE’s CVCA)

- Effective adaptation – understanding vulnerability to CC
- CC affects people differently based on response capacity.
- Many factors leading to CC vulnerability not related to climate.
- Capacity to adapt about power, access to information, services and control over resources.
- Critical to understand socio-economic dimensions of vulnerability (gender, low-income, caste, etc.).
Research Quest

*Community-based adaptation and CF with Implications for REDD+*

- Clear linkages between Community Forestry (and REDD+ mitigation initiatives), and CC adaptive capacity.
- Understand potential for mitigation strategies (REDD+) and adaptation to be mutually enhancing.
- Analyze policy and processes in consideration of possible synergies and conflicts.
- Current status of how CF and REDD+ together are responding/ or not to CC adaptation needs.
- Recommendations to strengthen synergies
5 country case study
supported by REDD-net, CDKN, Raks Thai and AIT-UNEP

- **Seima Protection Forest, Cambodia** (REDD+ pilot site). Working with Cambodia Rural Development Team (CRDT) in developing case study in WCS project site.

- **Dhanusha, Nepal** (CHULI and JIVAN CARE community forestry project sites). Collaborating closely with CARE Nepal.

- **Ban Huay Win, Nan Province, Thailand** (community forest/protected area). CARE project site.

- **Da Loc, Thanh Hoa, Vietnam** (community mangrove forest). CARE project site.

- **Meru Betiri National Park, Indonesia** (REDD+ pilot site). Collaborating with LATIN in developing this case study.
Nan province, Thailand

- Ag intensification as response to food insecurity (drought, changing seasonality of rains, rat infestation) - terracing, irrigated paddy fields
- Reduced pressure on forest areas (shifting cultivation).
- Natural regeneration in fallow areas. Increased forest growth (*mitigation capacity*) resulting from adaptation to CC
- HOWEVER, successful long-term adaptive strategy?
  - Currently no water scarcity, but future? Irrigation will impact water table and downstream communities (?).
  - Need for watershed-level management.
  - Fallow land areas traditionally used for vegetable crop production. Loss of fallow lands to forests may reduce nutrition with long-term health impacts.
Mangrove afforestation project as result of Typhoon Damrey in 2005.

Coastal community highly vulnerable to typhoons and extreme weather, increasing in intensity and frequency.

Sea dike built to protect coastal communities but large parts were destroyed by Damrey. Areas that had mangrove buffers were preserved.

Government initiated mangrove afforestation. Very low mangrove survival rate.

As no community participation (other than planting) or formal rights, no investment and maintenance.

- Multiple benefits from mangroves (DRR, income generation from aquaculture, etc), also interest in exploring carbon project potential.

- First ever mangrove-based CF title being provided. High chances of CF title being extended.
Seima REDD+ pilot project Cambodia

- Largely forested, low population but rapidly changing as in-migration from lowlands and new roads recently developed.
- Important recent development - granting indigenous community land titles.
- Not yet seeing significant CC impacts comparable to other parts of Cambodia.
- Lowering water table and changes in rainfall, temperature increase.
- Swift rise in cash crop production (both relatively low value and water hungry crops). Resilience to impending CC being reduced.
- REDD+ can mitigate increased vulnerability by contributing to bundle of incentives to maintain the forests – including carbon payments, MRV, biodiversity maintenance, ecotourism, etc.
Dhanusa, Nepal

- Key benefit of CF – provision of institutional platform, social capital.
- Little at local government levels, but CFUGs have developed DRR and adaptation strategies. Other CFUGs have instituted adaptation funds.
- CF established as protective barrier against river flooding – while not necessarily case in Dhanusa, will be increased river flooding due to glacial lake outbursts. Forest A/R seems to be a local adaptive strategy.
- Some communities moving higher uphill to escape heat. Increasing pressure on forest ecosystems and watershed.
- Limited water and fodder (as well as CF regulations) - number of livestock reduced up to 50%. Contributing to regeneration of forest.
- HOWEVER, unintended impacts – greater burden on women to collect fodder for stall fed animals. Decreased revenue/consumption of dairy leading to less income and health impacts for women.
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<th>Country</th>
<th>Adaptation – mitigation links (+)</th>
<th>Adaptation – mitigation links (-)</th>
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<td>Cambodia</td>
<td>- Mitigation incentives to maintain forests and ecosystem services required for adapting to CC.                                                                                                                                                    - short-term (maladaptive) strategy of converting to plantation – reduces ground water and integrity of ecosystem, particularly downstream</td>
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<td>- mitigation initiative fosters social assets, ie. management, enforcement and international monitoring of ag conversion and illegal timber trade</td>
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<td>- mitigation initiative includes provision of tenure – reduces vulnerability to CC</td>
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<td>Nepal</td>
<td>-CF (mitigation) provides organizational platform and social assets to plan, manage and undertake other activities including adaptation-related (disaster management strategies, adaptation funds)                                                                                      - Increased vulnerability of women due to CF regulations (no grazing of livestock in forest) resulting in greater work burden and health implications</td>
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<td>- CF in one site established as adaptive response as buffer to flooding (in that case not clear causality with CC).                                                                                                                                 -Forest conservation regulations under CF plans restricts collection of NTFPs including medicinal plants – leading to increased vulnerability</td>
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<td>-CF provides critical information sharing and capacity building infrastructure</td>
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<td>Thailand</td>
<td>Adaptive strategy to counter drought/ food security has been intensification of rice cultivation (terraced, irrigation) removing pressure from forest areas and leading to reforestation (mitigation) of fallow areas.                                             -(mal) adaptive strategy of agricultural intensification, possibly long-term reduction in water flow, particularly downstream</td>
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<td>-REDD+ discourages integrated landuse options. Indigenous agroforestry would not qualify.</td>
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<td>Vietnam</td>
<td>Adaptive strategy resulting from typhoons has been afforestation of mangroves - significant mitigation/ sequestration resulting (new carbon project interest).                                                                                                      Success of mangrove afforestation has led to greater economic reliance on coastal resources, diminishing rice cultivation (food insecurity?).</td>
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<td>-Mangrove afforestation has increased resilience by leading to new and additional sources of income from aquaculture production.</td>
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<td>-Opportunity costs – threat to mangroves from mollusk collection. Carbon payments could increase incentive to maintain mangroves.</td>
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Some initial emerging recommendations

Communities
- Sharing of adaptive strategies between similar communities
- Making productive use of altered habitats
- Equitable allocation of assets for adaptation purposes (ensuring marginalized groups have equal access)
- Innovative use and incorporation of local knowledge
- Strengthening local level institutions (CFUGs)

Government
- Securing tenure and land access should be accelerated and supported at all levels
- Different levels and sectors of gov’t must coordinate integrated, proactive approaches to adaptation mainstreaming
- Low-interest credit should be made available to support adaptation activities
Some very initial emerging recommendations…

- Sharing adaptive strategies with similar communities;
- Making productive use of altered habitats- equitable allocation of assets for adaptation purposes (ensuring marginalized groups have equal access);
- Securing tenure and land access should be accelerated and supported at all levels.
- Different levels of gov’t and sectors must coordinate in integrated proactive, approaches in development plans
- Innovative use and incorporation of local knowledge- Equitable multi-stakeholder approach to CBFM
- Synergies between adaptation and mitigation should be anticipated and strategically enhanced wherever possible.

Initial recommendations (continued)

Multi-stakeholder

- Equitable, participatory approaches to CBFM
- Awareness raising and capacity building on CC, sustainable dev’t and adaptation at local levels critical
- Adoption of adaptive management approaches
- Synergies between adaptation and mitigation anticipated and strategically enhanced wherever possible
Healthy forests should support resilient communities!

Thank you!