Negotiation-support toolkit for learning landscapes

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41 | REDD/REALU site-level feasibility appraisal (RESFA)

Laxman Joshi, Meine van Noordwijk and Janudianto

REDD/REALU Site-level Feasibility Appraisal (RESFA) assesses the feasibility of dealing with the direct drivers of land-use change that reduce carbon storage and supporting sustainable livelihoods' options that are compatible with high carbon-stock landscapes with trees that provide goods and services as any of them can become a bottleneck when full project design, approval and implementation are attempted, which is a process that costs considerable time and investment and needs to have a reasonable probability of success to justify such investments.

Introduction: would a targeted effort to reduce emissions bring local livelihoods' benefits?

Land-use and land-cover changes are a relevant part (about 15%) of the total human-induced emissions of greenhouse gasses that lead to global climate change. While most of the attention has so far gone to reductions in the other 85% that relate to fossil fuels (and some other industrial processes), no opportunity to reduce emissions can be left ignored if targets are to be met, such as keeping global warming below 2 °C. Reducing land-based emissions usually requires two things: 1) dealing with the direct drivers of land-use change that reduce carbon storage, for example, through forests or conversion; and 2) supporting sustainable livelihoods' options that are compatible with high carbon-stock landscapes with trees that provide goods and services.

To get such efforts recognized, a further set of steps is needed, which we group here under monitoring, evaluation and transaction costs. Since the discussion on 'carbon markets' has started, there are high expectations that engaging in emission reductions and/or enhancing carbon storage can help provide funding for rural development. Much of that hope may be hype but there are opportunities for real benefits if intentions are genuine and projects are designed well. The international rules are still under discussion. Figure 41.1 captures the interlinked process of different actors at different levels and the meaning of CO_2 benefits to each.

Box 41.1. Any design for reducing net emissions of CO_2 and other greenhouse gasses needs to balance between

a. dealing with the local representations of drivers of land-cover change by protecting high carbon-stock density areas (effectiveness and, when expressed per unit investment, efficiency); and

b. promoting sustainable development pathways that provide livelihoods (welfare and wellbeing) at reduced net emission levels (fairness);

while linking opportunities to reduce emissions locally with those at other scales, through the concepts:

C1. Additionality (How do 'with project' emissions differ from 'without project' ones?)

C2. Leakage (How do 'within project' actions relate to 'out-of-project' emissions?)

C3. Permanence (What is the expected emissions trajectory after the project ends?)

C4. Accounting rules (How will emission reductions be quantified and verified?)

C5. Rights to co-invest and share in future net benefits, within national sovereignty to set rules

C6. Certification (clarifying local emissions reductions as part of national-scale achievements)

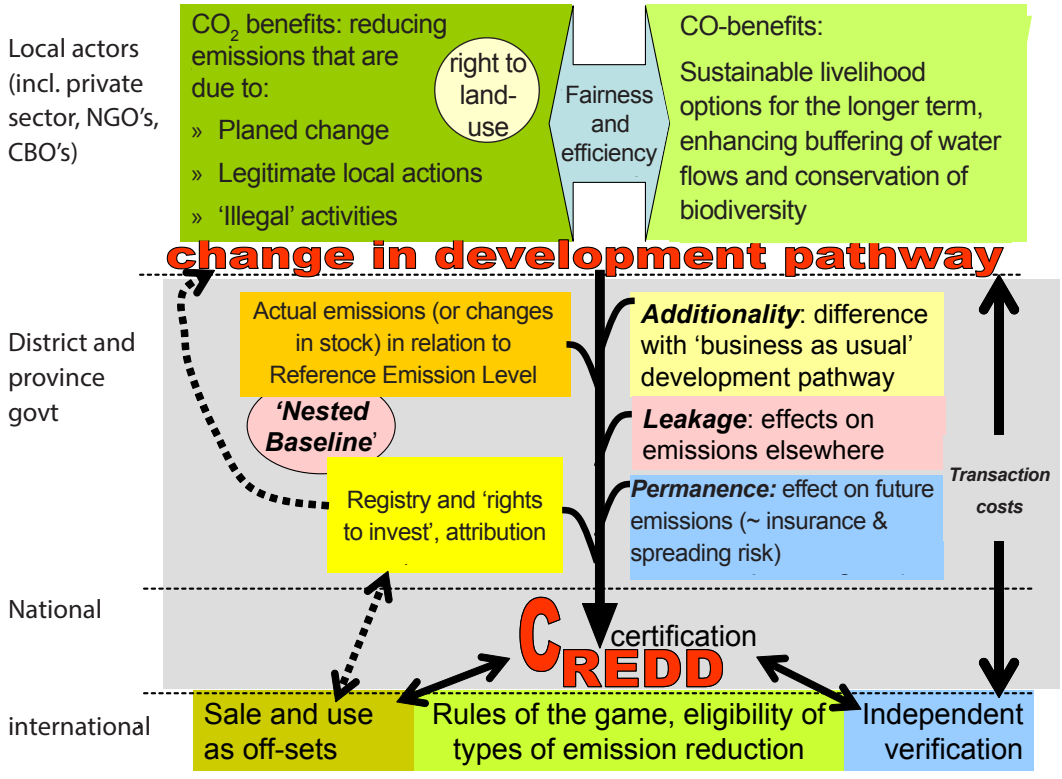

Figure 41.1. Interlinked process of multiple actors at multiple levels with multiple views of reduced CO_2 emission

Objective

RESFA integrates a number of negotiation-support tools to lead to a decision point for local communities and proponents of activities under the mechanisms for reducing emissions from deforestation and forest degradation (REDD) and reducing emissions from all land uses (REALU), answering 1) Is it worthwhile to pursue a project to reduce net emissions from land use (including forest) for this area or will it be too complex, too costly or low in co-benefit returns? 2)If so, what directions can best be pursued in project design?

Steps, key questions and tools in the assessment

1. What is the current carbon stock of the system? What other environmental services does the system provide?
2. RaCSA to provide protocols for carbon-stock assessment in the landscape

   What are the driving factors and threats that lead to reduction in carbon stocks (increase in carbon emissions)?
3. DriLUC to analyze the local drivers of land-use change, linked to analysis of actual time-series of land cover (ALUCT)
4. What is the dependency of local people on the system?
5. WNoTree, RAFT and PAPoLD can be combined to explore current land-use options within a livelihoods' perspective (which includes in- and out-migration and off-farm employment)
6. How clear are the tenure arrangements?
7. RaTA to analyze the tenure claims and history of policies that gave rise to claims and conflicts about them
8. What are the possible scenarios and what is the potential carbon stock increase or decrease under these scenarios?
9. Scenario models (either TALaS based on FALLOW or LUWES using ABACUS can explore business-as-usual trends and scenarios that are within (or just beyond) the 'plausible' domain for with/without project developments
10. What are the implications of these scenarios on livelihoods, institutions and equity? What are the opportunity costs, both financial and social? What about additionality, leakage and permanence issues?
11. How can the benefits of REDD/REALU be shared or distributed equitably? Who will benefit and who will suffer?
12. FERVA can analyze the perceptions on fairness and efficiency, within the institutional setting and emerging rules for investment in emission reduction ('carbon markets')

Decision point: 1) is it worthwhile to pursue a project to reduce net emissions from land use (incl. forest) for this area, or will it be too complex, too costly or low in co-benefit returns? **2)** if so, what directions can best be pursued in project design?

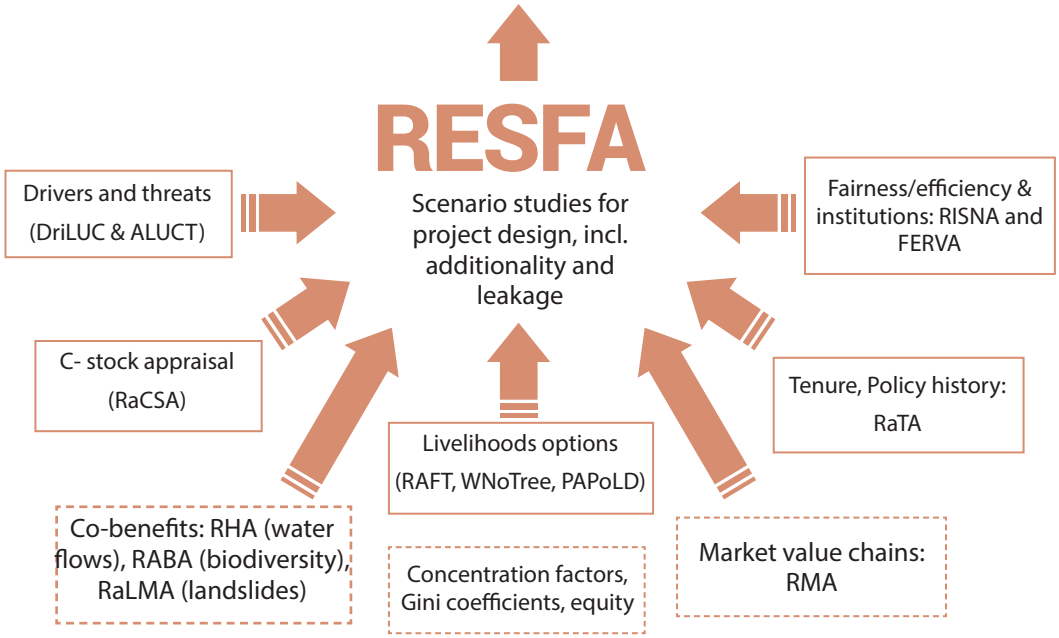

Figure 41.2. RESFA scheme, comprised of steps and applications of available tools

For example of application see:

Joshi L, Janudianto, van Noordwijk M, Pradhan UP. 2010. *Investment in carbon stocks in the eastern buffer zone of Lamandau River Wildlife Reserve, Central Kalimantan province, Indonesia: a REDD+ feasibility study.* Bogor, Indonesia: World Agroforestry Centre (ICRAF) Southeast Asia Regional Program. http://worldagroforestrycentre.org/regions/southeast_asia/publications?do=view_pub_detail&pub_no=RP0268-11.

Janudianto, Mulyoutami E, Joshi L, Wardle DA, van Noordwijk M. 2011. Recognizing traditional tree tenure as part of conservation and REDD+ strategy: feasibility study for a buffer zone between a wildlife reserve and the Lamandau River in Indonesia's REDD+ pilot province. ASB Policybrief 22. Nairobi: ASB Partnership for the Tropical Forest Margins.

The landscape scale is a meeting point for bottom–up local initiatives to secure and improve livelihoods from agriculture, agroforestry and forest management, and top–down concerns and incentives related to planetary boundaries to human resource use.

Sustainable development goals require a substantial change of direction from the past when economic growth was usually accompanied by environmental degradation, with the increase of atmospheric greenhouse gasses as a symptom, but also as an issue that needs to be managed as such.

In landscapes around the world, active learning takes place with experiments that involve changes in technology, farming systems, value chains, livelihoods' strategies and institutions. An overarching hypothesis that is being tested is:

> Investment in institutionalising rewards for the environmental services that are provided by multifunctional landscapes with trees is a cost-effective and fair way to reduce vulnerability of rural livelihoods to climate change and to avoid larger costs of specific 'adaptation' while enhancing carbon stocks in the landscape.

Such changes can't come overnight. A complex process of negotiations among stakeholders is usually needed. The divergence of knowledge and claims to knowledge is a major hurdle in the negotiation process.

The collection of tools—methods, approaches and computer models—presented here was shaped by over a decade of involvement in supporting such negotiations in landscapes where a lot is at stake. The tools are meant to support further learning and effectively sharing experience towards smarter landscape management.

World Agroforestry Centre
ASB Partnership for the Tropical Forest Margins
AARD
Federal Ministry for Economic Cooperation and Development
Norad
IFAD Enabling poor rural people to overcome poverty
CGIAR Research Program on Forests, Trees, and Agroforestry