

## Perceptions on Fairness and Efficiency of the REDD Value Chain

Methods and results from pilot analyses in Indonesia and Peru



Reducing Emissions from Deforestation and Degradation (REDD) will require a 'value chain' that links global beneficiaries to local actions towards high carbon-storing land use patterns. The value chain includes: effectively reducing emissions, a shift in development pathways and all 'transaction costs' to make a transparent, verifiable claim on emission reductions that can obtain 'credits' and market value. Fairness in this context means rewarding stewards of current forests, and efficiency means focussing on high-emission areas for reductions.

The Fair and Efficient REDD Value Chain Allocation (FERVA) method explores perceptions along the emerging REDD value chain. This brief reports on its applications in Indonesia and Peru.

### Key findings

- 1 Efficiency and fairness need to be balanced in order for REDD to accomplish its objectives.** Immediate and efficient emission reductions require a focus on 'hot spots' of current emissions, but incentives for effective stewardship ('fairness') are also needed to achieve medium-to-long term goals.
- 2 Stakeholders indicate that their 'desirable' value chain allocation differs from the 'expected' allocation of REDD money;** this can and should lead to further dialogue on how a realistic, conditional, voluntary and pro-poor mechanism can emerge.
- 3 The currently expected allocation of funds to 'transaction costs' of monitoring, reporting and verification reduces both 'fairness' and 'efficiency' of the REDD value chain,** hence transaction costs will have to be lowered through simple and clear rules.
- 4 There is considerable divergence among the perceptions of different stakeholders;** negotiations and dialogue are needed to reduce these gaps for mutually acceptable solutions.

### Implications

The FERVA method provides a replicable approach for involving stakeholders in the design of REDD mechanisms that will be effective, efficient and fair. It uses a preliminary definition of a REDD value chain and allows for the analysis of the divergent opinions with respect to it and, if replicated over time, analysis of progress along learning curves in local negotiations.

REDD has been embraced by international climate change negotiations, but details of how this can be done in practice are still under research. A major challenge for REDD is how to combine **efficiency** and **fairness**. If all the attention goes to 'hot spots' and 'urgent threats', real stewards of forests feel left out (lack of fairness); if the hot spots are ignored, little emission reduction will be achieved (lack of effectiveness and efficiency).



Photo SJ Velarde



Photo: V Meadu

Workshops with stakeholders help reveal expectations and preferences for REDD implementation

## The FERVA method: Fair and Efficient REDD Value Chain Allocation

There is no empirical evidence on the REDD value chain yet, as no transactions have been finalized. There is enough clarity, however, on the functions that will have to be included. The REDD value chain will have to include many stakeholders: local actions, a number of layers of government, civil society and the private sector – for monitoring, certification and verification – and global stakeholders who are willing to invest in and/or pay for certified emission reduction. An important question would be how the different actors along this value chain will be rewarded or will bargain for their share?

The Fair and Efficient REDD Value Chain Allocation (FERVA) method was designed to help in this process of negotiation (1). The method is based on the hypothesis that in the absence of data, actions and choices by stakeholders are based on their perceptions about how REDD will function. The contrast between what they 'expect' and what they see as 'desirable' may drive their effort to influence the way the REDD value chain is established. FERVA involves a number of steps, all in discussion with stakeholders.

### FERVA method in 5 steps

1. First, the climate change issue and the role of 'greenhouse gases' are introduced to ensure a leveling of the playing field and common understanding among stakeholders. Participants can be local communities, government officials, NGOs, university officials, private sector, mixed together or in separate groups (according to local conditions). Then participants are exposed to the issue of 'fairness and efficiency' in REDD.
2. Based on their preference, participants are divided into two groups, one to argue for fairness and another to argue for efficiency; the joint discussion focusses on "why should a REDD mechanism be fair **and** efficient?".
3. Next the concept of a 'value chain' is introduced, using a local agricultural commodity (e.g. coffee, rubber or timber) value chain as an example, and comparing the prices per unit weight (or volume) at farm-gate, after processing and when bought by the end user.
4. Then, the concept of 'value chain' is applied to the REDD mechanism. The traded product in the carbon market is a piece of paper called

Certified Emission Reduction (CER). Figure 1 shows 8 different functions that need to be fulfilled to produce CERs and sell them, with multiple layers in the 'monitoring, reporting and verification' process adding value to local emission reduction activities. The first two functions refer to efficiency (reduce emissions) and fairness (support sustainable livelihoods). Functions 3-8 are part of the transactions costs. Functions 3-4 (Guarding against leakage: physical and temporal, and securing additionality by clear baselines) are filters for any REDD mechanism. Then the national certification scheme (function 5) is needed and should follow international rules on eligibility (function 6), for later verification (function 7) until the CERs can be sold (function 8).

5. We divide participants into small groups (5-10 persons per group) to discuss the distribution of payments of REDD money. Then we ask participants to allocate 100 units of value among the 8 functions of the value chain noted in step 4 within two scenarios: what they expect to happen (or their current perception based on experience so far) and what they see as desirable.

Further steps can include the use of tools from experimental economics that quantify the willingness of individuals to cooperate and jointly achieve benefits for all.

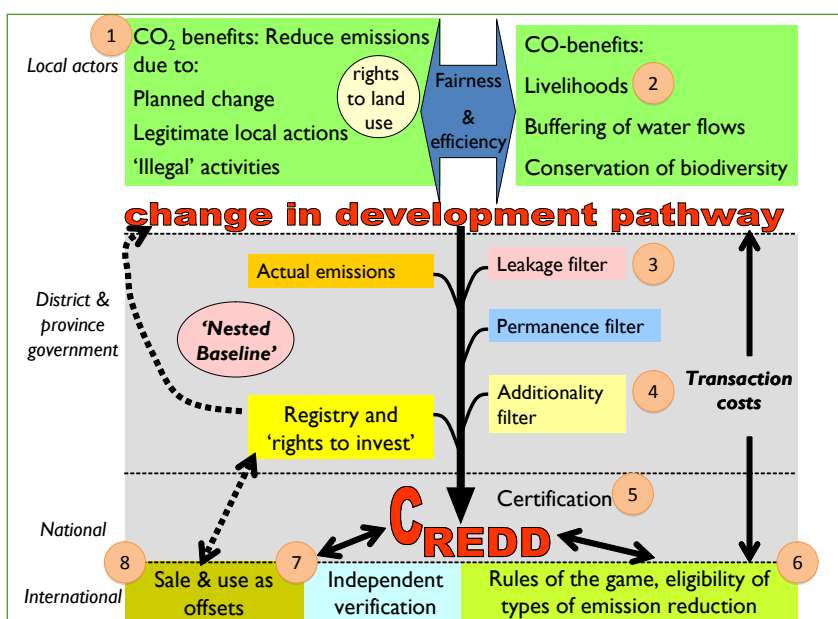


Figure 1. Eight functions of REDD value chain: From carbon emissions to Certified Emission Reductions, adapted from (2).

## Indonesia

Two workshops were conducted in Palangka Raya, Central Kalimantan, and Jayapura, Papua (3). Whereas Central Kalimantan has the highest emissions from deforestation and fire hazards in the country, there is still 90% of state-designated forest land in Papua. Following are key conclusions from the FERVA analysis:

- **Fairness vs. efficiency:** Arguments supporting fairness include moral consideration for people who already protect the forest and provide environmental services, and also the avoidance of deforestation and forest degradation threat to the protected/conservation forest. Efficiency arguments stressed on the implementation towards emission reduction in highly deforested and degraded areas.
- **REDD value chain:** It can be concluded that the stakeholders were pessimistic about REDD money distribution based on their current expectations, where the transaction costs were perceived to be very high (80% - 90%) and the payment to the local actors itself to be very low (10% - 20%). They hoped that at least the money could be distributed equally for transaction cost and the local actors (50% - 50%) (Figure 2).
- **Differences in views among governments, NGOs and university groups** relate mainly to different functions of the value chain, within the transactions costs, in an 'expected' scenario. However, allocations are very similar in a 'desirable' scenario for all stakeholders (Figure 2).
- In Papua where forest cover is still large, participants perceived forest as a potential resource for investment, supported by local actors' strong land ownership rights. On the other hand, local actors supporting efficiency argued against the forest management practices by concession holders without respect to indigenous knowledge.
- Overall, the local community and regional governments tended to prioritize fairness arguments, while donors and brokers may put more priority on efficiency.

## Peru

Three workshops were conducted in the most deforested regions of the Amazon in Peru: Ucayali, San Martin and Loreto in October 2009 (4). REDD value chain analysis was based on their own knowledge and experience on development and conservation projects. Participants were divided randomly in multi-stakeholder subgroups of 5-8 people. Key messages that came out of these workshops are:

- There is a need for a REDD mechanism to be significantly more fair and efficient, that is, to reduce deforestation on the ground and to contribute to sustainable livelihoods in the Amazon.
- **Fairness and efficiency:** Resources spent on actually reducing emissions should at least double in an ideal situation and the ones spent on securing sustainable livelihoods should increase. High transaction costs, in particular, of certification and verification, are currently benefiting mostly international consulting firms, making the regulated carbon market an 'exclusive' mechanism. It is not clear how communities and indigenous populations will be included in the REDD process and benefit from it.
- **Rules of the game:** The Ministry of Environment (MINAM) needs to present a position about the issue and to partner with other countries in the international climate change negotiations. It should also clarify how REDD carbon credits would relate to current government rewards for conservation schemes and how it would fit with the new environmental services law under discussion.
- **Change in development pathway:** The Peruvian government needs to change its 'primary development' model, based on exploitation of natural resources, to one of sustainable economy, where financial interests would not be above environment and social interests.
- **Transparency and participation:** Lack of availability of information about REDD to local stakeholders in formats and languages they can understand (the most recent information is only available in English), in order to build an effective mechanism with the direct participation of local communities, indigenous population and other actors, and to avoid future conflicts.

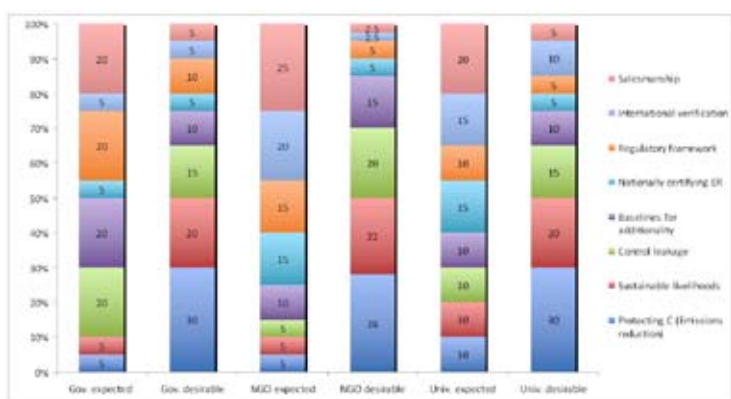


Figure 2. Stakeholder perceptions of the REDD value chain in Central Kalimantan by stakeholder group (government, NGO and University: Expected vs. desirable)

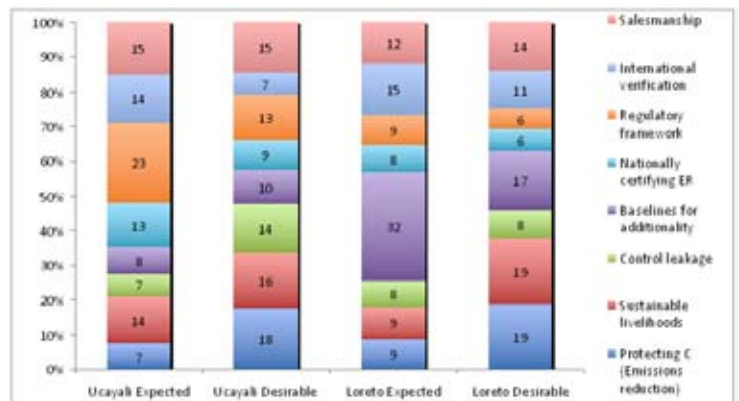


Figure 3. Stakeholder perceptions of the REDD value chain in Ucayali and Loreto (Peru): Expectations based on current experience and desirable.

## Conclusions

The current FERVA analysis captures the perceptions and expectations of stakeholders at early stages of a REDD strategy and helps them to understand the different REDD value chain functions.

FERVA can serve as a tool for further discussion and quantification of divergence in opinion. It does not represent actual transactions as yet.

Transaction costs of REDD activities at project scale are perceived to be 80-90%; even in a 'desirable' condition, they may represent 50-66% of the value chain. This affects both fairness and efficiency.

Different perceptions can be influenced by the scale at which the FERVA method is applied – international, national, provincial or district – and by the type of stakeholder who participates. This will also be important at the REDD implementation stage.

The ASB Partnership for the Tropical Forest Margins is working to raise productivity and income of rural households in the humid tropics without increasing deforestation or undermining essential environmental services. ASB is a consortium of over 90 international and national-level partners with an ecoregional focus on the forest-agriculture margins in the humid tropics, with benchmark sites in the western Amazon basin of Brazil and Peru, the Congo Basin forest in Cameroon, southern Philippines, northern Thailand, and the island of Sumatra in Indonesia.

The ASB Policybriefs series aims to deliver relevant, concise reading to key people whose decisions will make a difference to poverty reduction and environmental protection in the humid tropics.

The initial research on FERVA was supported by the David and Lucile Packard Foundation. Its application in Peru forms part of work undertaken for the Reducing Emissions from All Land Uses (REALU) project funded by the Norwegian Development Agency (NORAD). The views expressed in this brief are not those of the funder. This work would not have been possible without the participation of more than a hundred workshop participants and the local partners for FERVA project in Indonesia and Peru. ASB encourages free dissemination of its work. This document may be quoted or reproduced without charge, provided the source is acknowledged.

© ASB 2009

## Recommendations

Recommendations from participants and the authors call for complementary research on REDD value chain analysis, adding time, cost, technical capacities and governance implications to the different value chain functions identified. This would bridge the knowledge gap between what is desirable and what is realistic for a REDD mechanism. For example, Peru has estimated that it needs US\$ 347 million per year for implementing an effective forest management policy at the national level (5), a basic component of a REDD strategy.

In the near future, research will be needed to find a minimum threshold that a REDD scheme should meet in terms of its contributions to livelihoods, and water and biodiversity co-benefits, in order to participate in a post-Kyoto regulated market.

## References

- (1) van Noordwijk M. 2008. Fair & Efficient REDD Value Chains Allocation (FERVA). Bogor, Indonesia. World Agroforestry Centre - ICRAF, SEA Regional Office.
- (2) van Noordwijk M., Purnomo H., Peskett L. and Setiono B. 2008. Reducing emissions from deforestation and forest degradation (REDD) in Indonesia: options and challenges for fair and efficient payment distribution mechanisms. ICRAF Working Paper 81. World Agroforestry Centre (ICRAF), Bogor, Indonesia.
- (3) Suyanto. 2009. Fair and Efficient REDD Value Chain Allocation: Lessons from Indonesia. World Agroforestry Centre (ICRAF), Bogor, Indonesia.
- (4) Velarde, SJ. 2009. Equidad y Eficiencia en REDD: Voces de la Amazonía Peruana. Version 1.0. ASB-World Agroforestry Centre (ICRAF), Nairobi, Kenya.
- (5) Libélula. 2009. Análisis de Necesidades y Opciones de Financiamiento para el Nuevo Régimen de Cambio Climático bajo el proceso de la Convención Marco de las Naciones Unidas sobre Cambio Climático. Resultados preliminares.

## Correct citation

Velarde SJ, van Noordwijk M, Suyanto (eds). 2009. Perceptions of Fairness and Efficiency of the REDD Value Chain. *ASB Policy Brief No. 14*. ASB Partnership for the Tropical Forest Margins, Nairobi, Kenya.

## Key Terms used in this brief

**Additionality** refers to the emission reduction achieved in comparison to a 'business as usual' development pathway.

**Effectiveness** means success or achieving the results that you want (targets).

**Efficiency** means effectiveness (achieving targets) per unit invested focusing on areas to reduce emission.

**Fairness** means rewarding stewards of current forests for their efforts.

**Leakage** is the unintended effect on emissions elsewhere (beyond the project scale).

**Permanence** or temporal leakage refers to future emissions (beyond project accounting period).

**Value chain** is a representation of a sequence of actions that transform raw materials (or land use enhancing C sequestration) into marketable products (certified emission reduction) that an end user could buy.

### Contact us at:

ASB Partnership for the Tropical Forest Margins,  
P.O. Box 30677-00100 Nairobi, Kenya  
Tel. +254 20 7224000  
Email: asb@cgiar.org  
<http://www.asb.cgiar.org>

