



Benefit distribution across scales to reduce emissions from deforestation and forest degradation (REDD+) in Vietnam

Minh Ha Hoang^{a,*}, Trong Hoan Do^a, Minh Thoa Pham^b, Meine van Noordwijk^a, Peter A. Minang^a

^a World Agroforestry Centre, United Nations Avenue, Nairobi, Kenya

^b Vietnam Administration of Forestry of the Ministry of Agriculture and Rural Development, Viet Nam

ARTICLE INFO

Article history:

Received 2 April 2011

Received in revised form 4 September 2011

Accepted 6 September 2011

Keywords:

REDD+
Benefit sharing system
Payment for environmental services
Equity
Transparency
Accountability
Effectiveness
Watershed management
Participatory

ABSTRACT

At very high policy levels, efforts to reduce emissions from deforestation and forest degradation (REDD+) are considered to be innovative and cost-effective ways to make forest more valuable standing than cut. In response to climate change, international funding to support reductions in emissions needs to balance conservation and development. The Government of Vietnam is currently coordinating the design of a comprehensive benefit-distribution system, with the ambition to convert certified net emissions reductions into REDD+ revenue and distribute it to local partners in a transparent, equitable and cost-effective manner. A pilot scheme is underway in Bac Kan province. With forest cover of 56.6% and a poverty rate of 36.6%, Bac Kan is among the most heavily forested and poorest provinces of Vietnam, making it a potential site for pioneering REDD+ schemes in the country.

Research questions were how to incorporate international, national and local stakeholders' investments into any distribution scheme; and how to sustain and manage an efficient, effective and equitable funding scheme for environmental services, including REDD+ revenues. Multiple data collection and analytical methods (including participatory approaches) were used to answer both research questions. Additionally, for the second question, we employed cost-benefit, opportunity cost and economic analyses.

Three key concepts formed the research frame for this paper: (1) benefit-distribution systems; (2) reducing emissions from deforestation and forest degradation plus conservation (REDD+); and (3) the broader concept of payments or rewards for ecosystem services; as well as lessons learned from existing, similar schemes.

This results shows that an appropriate benefit-sharing system for REDD+ revenues can be developed in such a way that meets international regulations as well as national and sub-national circumstances, particularly for the environmental services' providers who directly protect forests. Vietnam's payments for forest environmental services' and integrated conservation schemes (where conservation and rural development are integrated) serve as a base for the development of a REDD+ benefit-distribution system.

We discuss ways of bundling such schemes with REDD+ 'service' payments and income streams from forestry and agroforestry 'goods' to provide short-term food-security/economic return and long-term environmental benefits. This combination is expected to provide sustainable incentives, but further effort is needed in the use of participatory methods and a 'bottom-up' approach to provide a strong base for an effective and equitable REDD+ mechanism at landscape level.

Experience drawn from Vietnam, in general, and in Bac Kan, in particular, can be replicated and directly contribute to reducing carbon emissions globally.

© 2011 Elsevier Ltd. All rights reserved.

Introduction

Forests are important for mitigating and adapting to climate change. However, forest resources in many parts of the world, in general, and in Vietnam, in particular, are still not being managed sustainably. Vietnam was one of the first countries to turn the corner on 'forest transition' without having first completely depleted forests. However, while reported forest area increased, net emissions continued to rise as carbon-rich forest was lost and plantations of low carbon-stock were added

* Corresponding author at: ICRAF Vietnam, No. 1, 14A, Trung Yen 3 Street, Yen Hoa Ward, Cau Giay Dist., Hanoi, Viet Nam. Tel.: +84 4 3783 4645x23; fax: +84 4 3783 4644.

E-mail addresses: m.h.hoang@cgiar.org, hoangminhha58@gmail.com (M.H. Hoang).

(Hoang et al., 2010). The estimated emissions from deforestation, forest degradation and forest land-use changes in Vietnam in 2000 were 19.38 Mt CO₂, 1.58 Mt CO and 0.18 Mt CH₄, respectively. The emissions from the agriculture and forestry sector were 29% of annual greenhouse gas emissions, even greater than the emissions from the energy sector (Government of Vietnam, 2010a).

A decision on 'reducing emissions from deforestation and degradation' (REDD) was adopted at the Thirteenth Conference of Parties (COP 13) in December 2007. At the COP 15 in December 2009 in Copenhagen, a development on REDD, known as 'REDD+', was emphasized because it recognized the importance of promoting the sustainable management of forests and the co-benefits this provided, such as biodiversity. After COP 16, REDD+ had developed to a point where it was understood as the most innovative and cost-effective mechanism aimed at five key issues: (1) reducing emissions from deforestation; (2) reducing emissions from forest degradation; (3) conservation of forest carbon-stock; (4) sustainable management of forests; and (5) enhancement of forest carbon-stock.

At the international level, REDD+ involves creating mechanisms to make payments to developing countries for reducing emissions from deforestation and forest degradation. Some of the developing countries, including Vietnam, prepared themselves to participate in these mechanisms through a number of activities. Vietnam understands REDD+ as the way to balance conservation and development. Revenue from REDD+ can contribute to forest protection as well as poverty reduction and thus to sustainable development. The Government is fully committed to REDD+ and is currently coordinating the design of a comprehensive benefit-distribution system. The Government's ambition is to convert certified net emissions reductions into REDD+ revenue and distribute it to local partners, especially to the ultimate beneficiaries, in a transparent, equitable and cost-effective manner. Since all variations of REDD schemes entail large-scale payments for ecosystem services—with the primary service delivered being a reduction in greenhouse gas emissions (Bond et al., 2009)—one of the core issues is how to incorporate international, national and local stakeholders' investments into any distribution scheme.

A second research question is how to sustain and manage an efficient, effective and equitable funding scheme for environmental services, including REDD+ revenues? Although using payments for environmental services as a REDD implementation mechanism is not a new idea and has been found in the literature (Bond et al., 2009; Blom et al., 2010; Börner et al., 2010), setting up a locally specific, but also internationally and nationally appropriate, benefit-distribution mechanism remains critical and complex in the case of Vietnam.

The perspectives introduced in this paper on benefit distribution at the national and sub-national levels are the first findings of on-going activities in Vietnam in Bac Kan province. The aim is to ensure that REDD+ initiatives at these levels are informed by science-based knowledge and to produce as much new knowledge as possible regarding 'what works'. The benefit-distribution mechanisms being developed aim to address international regulations, national requirements and local contexts. Since there is no internationally agreed set of principles for balancing fairness,¹ efficiency² and equity³ for carbon environmental services providers, a conceptual framework was developed to guide the research.

¹ 'Fairness' means rewarding forest stewardship and supporting high carbon-stock economic growth.

² 'Efficiency' means low-cost emissions reductions.

³ 'Equity' means local people's participation.

Literature review and conceptual framework

This paper draws from three key concepts, namely (1) benefit-distribution systems; (2) reducing emissions from deforestation and forest degradation plus conservation (REDD+); and (3) the broader concept of payments or rewards for ecosystem services; as well as lessons learned from existing, similar schemes. Experience with the benefit-distribution concept and existing environmental services schemes serves as the main frame for analyzing these in Vietnam. We also examine broader environmental services' paradigms when considering the second research question.

Benefit-distribution systems in REDD+

A benefit-distribution system means a set of rules, regulations, policies and mechanisms for sharing monetary and non-monetary rewards from policy or market incentives for ecosystem services. 'Ecosystem services' applies to broader natural resources management interests but, most specifically, to water quality and quantity, scenic beauty, biodiversity and forest carbon-stocks. Lindhjem et al. (2011), identified a number of features of a well designed and efficiently functioning benefit-sharing system: (1) engages the right stakeholders; (2) determines the right forms and levels of incentives; (3) creates legitimate mechanisms for management of benefits; (4) enforces effective transparency provisions; and (5) develops effective dispute settlement mechanisms. They further argue that these will be shaped in different contexts based on the governance situation and could be complicated by factors such as unclear land tenure and rights, corruption, poor analytical capacity and limited enforcement of rules and laws.

These points were drawn from a wide range of experiences and literature and present a good starting point for analyzing benefit-distribution systems. We make use of some of their discussions relating to forms of payment, stakeholder involvements and institutional frameworks in this paper.

There is currently no prescribed benefit-sharing system for REDD within the United Nations Framework Convention on Climate Change (UNFCCC) and there are very few existing systems operating around the world. Therefore, it is important to learn from experiences in forestry and other natural resources sectors in relevant countries (Lindhjem et al., 2011; Bond et al., 2009). Accordingly, we examine benefit-sharing for water quality and quantity in Vietnam in this paper.

Payments or rewards for environmental services

The concept of payments for environmental services emphasizes the economic value of the benefits of nature to humans. Such schemes can be described as a voluntary transaction where a well-defined environmental service is bought by a buyer (that is, people who benefit from its provision) if, and only if, the provider (that is, local landholders or residents) ensures the provision of the service (Wunder, 2008). While the concept of 'payments' for environmental services is focused on monetary and direct payments, 'rewards' for environmental services is broader, involving also in-kind and in-direct payments.

Four principles have been identified in the scoping stage of rewards mechanisms (Van Noordwijk and Leimona, 2010): (1) 'Realistic' (linked to measurable change in environmental services' levels); (2) 'Conditional' (based on performance and, if possible, outcomes); (3) 'Voluntary' (based on free, prior, informed consent of all parties, with rewards that are deemed appropriate by all involved); and (4) 'Pro-poor' (or at least not increasing inequity). During implementation, pilot mechanisms have varied in the way these principles have been addressed, owing to influence from intermediaries wanting to meet their own objectives or the

Download English Version:

<https://daneshyari.com/en/article/93063>

Download Persian Version:

<https://daneshyari.com/article/93063>

[Daneshyari.com](https://daneshyari.com)