



Asia Forest Partnership

REDD, Green or White?

Exploring REDD from the perspective
of responsible and legal forestry

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Introduction

This background paper was prepared for the Eighth Meeting of the Asia Forest Partnership (AFP) Dialogue. The meeting examines the links between initiatives for 'reducing emissions from deforestation and forest degradation' (REDD) and initiatives to combat illegal logging. A discussion and understanding of these links is critical at this time for two reasons: the tight timeframe for decisions on REDD under the UN Framework Convention on Climate Change (UNFCCC) and the premise that 'if a country—or, indeed, a global trade system—cannot control illegal logging, it is unlikely to be able to implement REDD', a hypothesis set forth by the Government of Indonesia.

To understand the link between REDD and legal and illegal practices, we must review legal and illegal logging, initiatives to promote legal logging as well as initiatives for responsible, sustainable forest management. This paper first discusses REDD, responsible forest management certification and timber legality verification. It presents selected initiatives under these approaches. Based on these initiatives, it then explores REDD from the perspective of sustainable forest management and timber legality. The paper presents examples only from Indonesia. In this region Indonesia's forests could have significant impact on the ability of REDD initiatives to contribute to the UNFCCC carbon emissions objectives. These specific cases, however, are offered to exemplify the issues presented; they are not the best nor the worst examples and are in no way meant to challenge the organizations and individuals involved.

REDD: Climate change and forest management

Following the Bali Action Plan¹ that came out of the Thirteenth Conference of the Parties (COP13) to the UNFCCC in Bali in December 2007, more than 30 countries are developing national strategies for REDD. The international community recognizes REDD as a critical component of national and international strategies for mitigating climate change. An agreement that commits to climate stabilization at a maximum 2°C temperature increase, consistent with atmospheric carbon dioxide concentrations below 450 parts per million, is planned for later this year in Copenhagen. Bilateral and multilateral initiatives are providing assistance, including the World Bank-managed Forest Carbon Partnership (FCPF), the United Nations' Collaborative Programme on REDD in Developing Countries (UN-REDD), and the Norwegian Climate Forest Initiative. More than 30 countries are developing national REDD strategies under UN-REDD or FCPF. Still others are developing their strategies without such assistance. In addition, many REDD demonstration activities are underway on the ground, supported by NGOs, the private sector, bilateral donors

¹ 'Bali Action Plan', Decision 1/CP.13, Addendum to the Report of the Conference of the Parties, Bali, December 2007, p. 3. <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=3>.

and multilateral agencies. For example, some two dozen pilot projects related to REDD are being implemented in Indonesia. Three projects are presented in text box 1 (below).

Text Box 1. Examples of REDD projects in Indonesia

- **Kalimantan Forests and Carbon Partnership.** KFCP is an initiative by the governments of Indonesia and Australia, and the private company BHP Billiton. The initiative is located in Central Kalimantan where it aims to rehabilitate drained peatland and protect forested peatland in order to address global warming and its adverse effects (Downer and Wirajuda 2008). KFCP is expected to save some 23 million tons of carbon dioxide annually (World Bank 2009).
- **REDD and HTI: Partnerships for Avoided Emissions Supporting Sustainable Development.** REDD and HTI is an initiative by Asia Pacific Resources International Holdings Ltd. Located in the province of Riau in Sumatra, Indonesia, the initiative is expected to save some 16 million tons of carbon dioxide annually (World Bank 2009).
- **Conservation of the Upper Kapuas Lakes System.** CUKLS is an initiative of Fauna & Flora International and Macquarie Capital Securities Indonesia. Located in Kapuas Hulu District in West Kalimantan, the initiative is expected to save some 7 million tons of carbon dioxide annually (World Bank 2009). The Rainforest Alliance certified CUKLS against the Climate, Community and Biodiversity Project Design Standards in February 2008.

These initiatives are in their early stages. So far, no systematic assessments are available, no tools acknowledged. It is hoped, however that they, along with other ongoing initiatives in Indonesia and elsewhere, will help address several key challenges facing REDD design. Only by addressing the challenges, can REDD fulfill its promise of promoting sustainable forest management, channeling significant financial resources to developing countries and shifting the economic landscape which currently promotes liquidation of forest assets, often at the expense of local rights and livelihoods.

These challenges can be grouped into three broad categories:

- Measuring and monitoring deforestation and forest degradation remain challenging for many developing countries. It will be difficult to reliably establish reference levels and monitor and report deforestation. It will be just as difficult to monitor and report REDD's positive outcomes of forest preservation and increase of forest carbon stocks. For instance, Indonesia's deforestation during 1985-2000 is estimated between 0.8 and 2.4 million hectares (ha) annually (Food and Agricultural Organization 2007; Sunderlin and Resosudarmo 1996). One particularly high estimate, '3.8 million ha per year or higher' (Kleden *et al* 2009), is often quoted by NGOs to stress the dire straits of Indonesia's forests. Quantitative analyses suggest recent deforestation is much lower (Forest Watch Indonesia 2009; Gaveau *et al* forthcoming), roughly at the same proportional rate of loss ($\frac{1}{2}\% \text{ yr}^{-1}$) as the rest of the Earth's humid tropical forests (Achard *et al* 2002).

- Research suggests a number of basic elements must be developed before REDD can be implemented, including key design issues, costs and potentials, scale, needs versus resources, thresholds, verification and co benefits (Angelsen 2008; see image right). Some of these challenges should be addressed by the global REDD architecture. Others rest with national-level policies, institutions and capacities of developing countries.



- Pilot projects are off to a rocky start and have been heavily criticized (for example, Anderson and Kuswardono 2008 and REDD-monitor 2008). In Indonesia, 'REDD may not effectively reduce deforestation in the face of competing extractive industries, such as oil palm, and in roads development' (Gaveau *et al.*, forthcoming). This example only illustrates that developing countries will have to rethink their development strategies and remove policy and institutional barriers for effective engagement in REDD schemes.

With the Copenhagen meeting just months away, REDD must overcome the lack of knowledge about 'what works' when it comes to reducing deforestation and degradation. REDD implementers must consider how to apply REDD incentives to catalyze actions that work. Can responsible forest management certification and timber legality verification provide valuable lessons for REDD?

Green: Responsible forest management

Responsible forestry, or sustainable forest management, was born from the concept of sustainable development, which has obtained increasing recognition worldwide since the late 1980s (Wang 2004). Today, sustainable forest management is a recognized concept. One of the definitions of sustainable forest management is 'the ways and processes of managing forest resources to meet society's varied needs, today and tomorrow, without compromising the ecological capacity and the renewal potential of the forest resource base' (Wang 2004). Another definition is 'forest management that is ecologically sound, economically viable, and socially desirable' (Aplet *et al.* 1993; Cook and O'Laughlin 1999). As a result, there has been significant discussion over what 'sustainable' actually means. The leading international network for standardization, ISO, argues that sustainability cannot be adequately measured (Simula and Nussbaum 2005). This paper thus uses the term 'responsible' forest management, or management that conforms to the best management practices currently known.

Responsible forest management includes a variety of initiatives. These initiatives incorporate environmental or forest preservation objectives and are therefore 'green' to a greater or lesser degree.

Mandatory verification of responsible forest management is nothing new. The majority of mandatory initiatives are nationally regulated, to ensure compliance with

national, approved procedures of forest resources management. In Indonesia, mandatory verification was initially based on annual compliance reporting and timber administration, dating back to at least the 1980s. The Association of Indonesian Forest Concession Holders (APHI) implemented a mandatory verification initiative in 1990 (Ngadiono and Asycarya 2006).

Voluntary verification of responsible forestry is a relatively young branch of verification in Indonesia. Active since 1985, the initiative attempts to address a broad array of international concerns over forest management, such as illegal logging and tax evasion (legal concerns), tenure rights and labor equity (social concerns), and deforestation and the use of genetically modified organisms (environmental concerns). In late 1990 the Rainforest Alliance awarded the first certification to Indonesia's State Forestry Company (Donovan 2000).

Indonesia's main initiatives for responsible forest management certification today are presented in text box 2 (below).

Text Box 2. Indonesia's main initiatives for responsible forest management certification

- **Certification Support Program.** CSP is a voluntary initiative run by the Tropical Forest Foundation. Active in Indonesia since early 2000, it aims to assist concession companies to achieve independent forest management certification. CSP has already assisted two Indonesian concessions achieve certification under the SmartWood Program, and one concession to achieve certification under the Sustainable Forest Management Program. The program offers technical guidance at all levels along with training and intensive management support. A key aspect of the program is its ongoing assistance to assure maintenance of the certification status.
- **Independent Assessment Association.** Called Lembaga Penilaian Independen in Indonesian, LPI is a mandated initiative by the Ministry of Forestry. Implemented in 2008, LPI aims to independently assess compliance levels of forest managers. LPI awards licences for heavy machinery and annual cutting limits to concessions that pass, and requires an action plan from concessions that fail (Kusumawardhani 2008). LPI's standards are similar to those of the Sustainable Forest Management Program.
- **Indonesian Forestry Communities.** Called Masyarakat Perhutanan Indonesia, MPI was a mandated initiative by the Association of Indonesian Forest Concession Holders, and the ministries of forestry and the environment. Initiated in 1990, MPI aimed to certify responsible forest management. It was discontinued in 1997, when the association and the Ministry of Forestry agreed to use the Indonesian Ecolabelling Institute's Sustainable Forest Management Program (Elliot 2000). MPI's standard is based on international criteria and indicators developed by ITTO and national criteria and indicators of sustainable forest management for management of working units (Ngadiono and Asycarya 2006).
- **SmartWood Program.** SmartWood is a voluntary initiative developed by the Rainforest Alliance. Active in Indonesia since 1990, SmartWood aims to provide independent, objective evaluation of forest management practices, chain of custody and legality of forest products, timber sources and companies, enabling the public to identify products that come from well-managed forests. SmartWood evaluates forest management operations in natural forests, plantations, large commercial businesses and small-scale family or community forests, and awards certificates or verification statements to those that meet its Forest Stewardship Council Interim Standard or those that have gone through an extensive consultation process, such as those for legality and carbon.
- **Sustainable Forest Management Program.** Pengelolaan Hutan Lestari, or PHL, is a voluntary initiative developed by the Indonesian Ecolabelling Institute (LEI). PHL looks at issues of land tenure, timber production and regeneration, financial feasibility of the management unit, efficiency of forest resource utilisation, and evidence of professional management. Initiated in 2000, it focuses on two aspects: output and management. PHL defines three main types of management dimensions: natural production forest, plantation forests and community managed forests.

A related initiative, but with more emphasis on forest conservation and protection, is the conceptual High Conservation Value Forests (HCVF). The Forest Stewardship Council (FSC) launched HCVF as a separate principle (Principle 9) in 1992. FSC requires that 'management activities in high conservation value forests shall maintain or enhance the attributes which define such forests in the context of a precautionary approach' (FSC 2004). HCVF forces the forest manager to look beyond the boundaries of her or his management unit, and consider and justify upstream, downstream and perhaps even side stream impacts of the management regime.

The results so far, again, vary widely:

- Few results of mandatory initiatives are publicly available. However, they appear well established, and are moving towards verification by professional service providers. Up until 2007, LPI, an independent assessment body, has certified some 6 million ha, all managed by commercial forest managers (Kusumawardhani 2008). However, national initiatives have little credibility due to perceived corruption, collusion and nepotism.
- Voluntary initiatives have certified only a dozen commercial forest managers that oversee about 1 million hectares of natural forest and some 200 000 hectares of plantation forests (van Assen, forthcoming). The State Forestry Company's certificate was revoked in late 2001 after a heated debate among Indonesian stakeholders. Nonetheless, voluntary initiatives are considered more credible than mandatory initiatives, and a 'second wave' of commercial foresters and certifiers is preparing for voluntary certification.
- HCVF is being implemented by various organizations, including the HCV Network and Roundtable on Sustainable Oil Palm, and numerous HCVF assessments were performed in Indonesia (for example, Albertus *et al.* 2006; Daryatun *et al.* 2002). The concept is hampered by a lack of clear guidance by FSC, and is becoming increasingly complex, time-consuming and expensive. In general, all parties agree that HCVF must be embedded in existing responsible management initiatives, such as certification.

White: Legal forest management

In the 1990s, environmental NGOs and intergovernmental organizations identified export volumes and destinations of Indonesian timber harvested and traded in violation of legislation. Though still concerned with loss of forests and impacts on livelihoods, the discussion of illegal logging has long moved also into a discussion of crime, corruption and loss of revenue. Recently INTERPOL linked illegal logging to other criminal problems, including organized crime and corruption (see Younger 2009). Pressure increased to demonstrate tangible steps were being taken to tackle the problem, with governments and civil society groups highlighting the links between forest destruction, governance and trade. A number of consultations,

conferences and national initiatives² were held to address the threat from illegal logging, associated illegal trades, wildlife poaching and corruption to forests.

Numerous definitions of illegal logging emerged (see text box 3), and the debate became evermore impassioned, with various organizations and groups at opposite ends of the debate. Significant differences were apparent among the estimates of rates and among the causes of illegal logging. For instance, estimates of illegal logging in Indonesia vary from 36% to 83% of Indonesia's annual timber production (Brown 2000; Miller *et al.* 2006; Forest Watch Indonesia and Global Forest Watch 2002; Sunderlin and Resosudarmo 1996; Tacconi 2007b; Tacconi *et al.* 2004), and allegations and rumors of illegal activities are excessive among stakeholders (see Colchester and Ferrari 2007; Sofyar *et al.* 2007). Issues that hamper a deeper understanding of legality include the lack of comprehensive legal reviews for countries affected by it (Patlis 2002), and little agreement over what constitutes a major or a minor transgression (Brown 2002, Miller *et al.* 2006).

Text Box 3. Definitions of Illegal Wood

Theft of timber or logs; cutting in parks, reserves or similar areas; or cutting where government approvals are obtained by corrupt practices

– American Forest Products Association

Harvesting timber in violation of national laws is illegal. Illegal harvesting may include not only using harvesting practices that contravene the regulations but also using corrupt means to gain harvesting rights, extraction without permissions or from protected areas, cutting protected species or extracting timber in excess of agreed limits. Beyond harvesting, illegal practices may also extend to transport infringement: illegal processing and export; nonpayment of taxes or charges; or false customs declarations

–European Commission

Illegal logging takes place when timber is harvested, processed, transported, bought or sold in violation of national laws. Laws can be violated at many different stages of the supply chain and can include: obtaining concessions illegally (for example, via corruption and bribery); cutting protected tree species or extracting trees from a protected area; taking out more trees and more undersized and oversized trees than is permitted or trees outside an agreed area; illegal processing and export; fraudulent declaration to customs of the amount of timber being exported; nonpayment or underpayment of taxes; and use of fraudulent documents to smuggle timber internationally

– Greenpeace

Sourcing of illegal wood takes place when unprocessed wood is procured in the absence of the seller's legal right to sell or harvest. Illegal logging takes place when timber is harvested in violation of relevant forestry and environmental laws and regulations. Illegal forest products trade involves the procurement, processing, distribution and marketing of products made from wood that has been obtained by illegal sourcing or illegal harvesting and/or are not in compliance with relevant national and international trade laws

– World Wide Fund for Nature and World Business Council on Sustainable Development

Source: Miller *et al.* 2006

² Including the 1999 'Regional symposium on strengthening cooperation for forestry law enforcement in the Mekong Basin countries' in Phnom Penh; the 2000 'Workshop on control of illegal logging in East Asia' in Jakarta (http://www.illegal-logging.info/uploads/WWF_-_Indonesia_country_paper_N_Scotland.doc); the 2001 'Forest law enforcement and governance (FLEG) East Asia ministerial conference' in Bali (http://www.illegal-logging.info/sub_approach.php?subApproach_id=37&printer=1); and the 2003 'EU forest law enforcement governance and trade (FLEGT) action plan(ec.europa.eu/environment/forests/flegt.htm, <http://www.dfid.gov.uk/eupresidency2005/flegt.asp>).

Various initiatives have emerged whose main objective is to curb illegal logging and bring these activities out of the shadow economy and into the 'light'. This is why they are referred to as 'white' initiatives in contrast to the green initiatives whose objectives are sustainable development Indonesia's main initiatives for timber legality verification are presented in text box 4.

Text Box 4. Indonesia's main initiatives for timber legality verification

- **Annual Compliance Reports and Timber Administration Documentation:** The Annual Compliance Reports and Timber Administration Documentation are a set of mandated initiatives to ensure legal compliance. Initiated by the Ministry of Forestry back in the 1980s, the initiatives cover annual cutting plans, cruising reports, production reports, transport permits and invoicing (Ngadiono and Asycarya 2006).
- **The Forest Law Enforcement, Governance and Trade Voluntary Partnership Agreements (FLEGT VPA):** In early 2002, the government of the United Kingdom signed a memorandum of understanding with the government of Indonesia regarding improved forest law enforcement and governance, reduced illegal logging and the trade in timber from illegal logging.
- **The Legal Verified Mark:** The Legal Verified with Chain of Custody mark is a voluntary initiative. Implemented by the Tropical Forest Foundation in 2001, the initiative aims to ensure both legality and chain of custody.
- **The Timber Industry Revitalisation Body.** The Badan Revitalisasi Industri Kayu, or BRIK is a mandatory initiative for exporters, based on a joint decree issued by the Minister of Trade and Industry and Ministry of Forestry. Active since 2003, BRIK's task is to monitor and verify the legality of timber. The initiative uses a central database to verify timber transport documentation.
- **Timber Legality Verification System.** Sistem Verifikasi Legalitas Kayu (SLVK) is a mandatory initiative under development since early 2003. SLVK aims to assess timber legality throughout the supply chain, from 'from tree stump to store' (SGS and URS 2005).
- **Verification of Legal Origin and Compliance Programme.** VLO/VLC is a mandated initiative, initiated in 2005 by the Rainforest Alliance. VLO verifies that timber comes from a source that has a documented legal right to harvest, pursuant to the laws and regulations of the relevant jurisdiction. VLC expands upon the basic component of VLO by verifying that timber harvesting complies with all applicable and relevant laws and regulations related to forestry.

Results – again – vary widely:

- The mandatory initiatives are well established, and all timber exported from Indonesia is covered by one or more mandatory certificates. However, they lack transparency, and their credibility is regularly challenged (see Colchester 2005). Despite significant resources being mobilized, Indonesian stakeholders do not yet agree on a common standard for timber legality.
- The voluntary initiatives are far more advanced and acknowledged on the international market. Their standards pivot around two levels of legality. The first is verified legal origin and legal right to harvest. The second is verified legal compliance (see Miller *et al.* 2006).

REDD, green and white: Lessons, opportunities and obstacles

For more than two decades, conservation and sustainable development donors worldwide have invested billions of dollars in attempts to tackle deforestation. The results have been disappointing: no measurable slowdown in forest clearing in the developing world has been achieved. Research has shown convincingly, deforestation continues because of demand for the land (for example, Kaimowitz and Angelsen 1998): users and owners find they can reap better gains by, for example, planting crops and pasturing livestock. Increasing land demand in developing countries is linked to population growth and the desire for increased income as well as to commercial-scale agro industrial development. Thus a variety of development pathways and policies at macro and micro scaling continue to contribute to ongoing forest loss.

The relation between responsible forest management certification and timber legality verification is clear. The first principle of the SmartWood Program/Forest Stewardship Council standard covers legal compliance and the “Legal Verified with Chain of Custody” mark is the first step in the Forest Market Linking Program. However, linking responsible forest management and timber legality initiatives to REDD is more challenging.

In Indonesia, the large majority of forest loss during 1985-2000 occurred in conversion forests (Forest Watch Indonesia and Global Forest Watch, 2002), to facilitate conversion into estate crops (Gaveau *et al.* forthcoming, Pagiola 2000). The remainder occurred in limited production forest (Forest Watch Indonesia and Global Forest Watch 2002). Thus, potential REDD areas in Indonesia include conversion forests (both for oil palm and plantations), and limited production forests, but also protected areas and peat land forests, which are now included in REDD-Plus. In contrast to REDD, where the main objective is to reduce emissions through limiting deforestation and degradation of tropical forests, the aim of REDD plus is to secure permanent protection, ecologically and legally, with properly funded management.

The initiatives discussed are mainly being implemented in production forest, and links are restricted to limited production forests. Only the concept of High Conservation Value Forests is implemented in the other potential REDD areas, mainly in forest conversion to oil palm and timber plantations.

Can REDD learn from the initiatives for responsible forest management and timber legality? Linking experiences from the initiatives presented above to relevant assessment tools results in various general issues for further discussion. Several issues discussed in the Forest Certification Assessment Guide (FCAG; World Bank and World Wide Fund for Nature 2006) and the Assessment of Legality Verification Schemes and Standards (ALVSS; Lawson 2007) applicable to REDD are discussed below.

International frameworks and principles

Various cross-border and cross-sector links have been identified for REDD (Obidzinski and Andrianto 2006; Younger 2009). Effective REDD strategies will need to go beyond the borders of forestry and forest policies and address other drivers, such as agricultural and energy policies, infrastructure development plans and others. REDD requires a balanced approach composed of complementary national and international policies specific to the forest sector and to reduce pressure on forests.

Implementing international frameworks and principles are key elements in the FCAG. Nonetheless, green and white initiatives approach these elements differently, as do mandatory and voluntary initiatives. While green initiatives focus on responsible resource management, white initiatives aim to curb illegal logging and related illegal activities. Mandatory initiatives largely ignore the international concerns regarding forest management. Voluntary initiatives move towards compliance with international frameworks and principles, such as International Organization for Standardization and World Trade Organization standards.

Mandatory and voluntary verification

FCAG suggests that voluntary initiatives are more credible. Are voluntary and mandatory initiatives mutually exclusive or complementary? Evidence suggests that linking mandatory and voluntary can create substantial synergy (Jarvis and Jacobson 2006). Learning from the failures and success of mandatory and voluntary initiatives, both green and white, is critical for REDD, especially in the ongoing discussions on whether and how to achieve synergies among national, sub national and nested approaches (Angelsen *et al.* 2008).

Stakeholder consultation

Environmental policy making is more sustainable in the long run if there is meaningful participation by a wide range of stakeholders (NGOs, public groups and private groups) as well as adequate representation of women across scales (national and local) and sectors (for example, forests, agriculture and development). Both FCAG and the ALVSS require meaningful stakeholder consultation. Again, green and white initiatives comply differently with this requirement. The Timber Legality Verification System and the local High Conservation Value Forest toolkit used extensive stakeholder consultation throughout Indonesia, while LEI's Sustainable Forests Management Program maintains local community forums. The Smart Wood Program mainly applies internet-based stakeholder consultation. Mandatory initiatives mainly rely on inputs by experts only.

All these approaches have their strengths and weaknesses. Extensive consultation is costly, whereas limiting consultation affects credibility and legitimacy. Where lies the balance for REDD?

Objective and measurable performance standards adapted to local conditions

For all green and white initiatives, the standard is the central element on which they pivot. Developing objective and measurable performance standards adapted to local conditions is required by both FCAG and ALVSS. This element is crucial in any initiative that aims to establish and comply with standards, including REDD. Two issues that define any standard are: To what extent does it rely on rewards or sanctions, and how does it distinguish between major and minor kinds of compliance.

Most white initiatives maintain a pragmatic approach towards legality. FSC requires that 'conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties' (FSC 2004, Criterion 1.4). In Indonesia, Brown (2002) was one of the first to focus on 'forest laws and regulations that are both (1) at least occasionally followed by more responsible timber companies and (2) are important to the long-term sustainability of national timber supply'.

Major versus minor issues

What are major and minor non-compliances with REDD? Can it function in areas where illegal logging occurs, or is illegal logging a critical threat? Rights and tenure conditions are potentially crucial to REDD, too, because they define to a large extent who benefits, how they benefit and whether or not key forest-dependent stakeholders are excluded from benefits. In addition, the design and implementation of REDD activities will have important repercussions on pre-existing systems of rights, altering them for better or for worse.

Reliable and Independent verification

The quality of verification strongly affects the credibility of initiatives. FCAG and ALVSS both require that verification must be reliable and independent. Nowadays, most initiatives implement independent verification of compliance, including the mandatory initiatives (Ngadiono and Asycarya 2006).

How should REDD implement monitoring, data collection and verification? Two issues come to mind: public summaries and the use of Geographic Information Systems.

Where public reporting is common in voluntary initiatives, this is not the case in many mandatory initiatives. Can the lack of credibility of mandatory systems be traced to a general lack of public information of the assessments? The answer appears to be cautiously positive. Does this mean that REDD architects should discuss if and how to implement public reporting?

Conclusion

REDD has the potential to become a broadly supported initiative with global impact on forests and development choices in forest-rich countries. However, it has to address serious challenges to fulfill that promise. These challenges range from agreement on basic concepts, to knowledge of 'what works', to establishing open and inclusive processes and to dealing with short timeframes established by the negotiation process under the UNFCCC, to name a few. Initiatives for responsible (green) forest management and legal (white) forest management provide the following general lessons relevant for REDD:

- Mandatory initiatives are less credible. Their credibility suffers from their lack of transparency.
- Voluntary initiatives are more credible, mainly because they are more transparent, provide clear guidance and are based on international standards. However, they are limited in scope.
- Linking mandatory and voluntary initiatives could create substantial synergies and is likely to be more effective.
- Clear guidance and standards are critical.
- Complex, time-consuming and expensive initiatives have limited support or outcomes and tend to roll into simple and more straightforward initiatives, as is the case with HCVF.

Experience in green and white initiatives suggests that REDD will have to address the more general issue of whether and where illegal logging is a critical threat to its objectives. One of the factors that will determine how serious the threat is in specific locations, is the availability of credible information about its scale. Such information is currently lacking and estimates vary widely.

Even in the absence of such location-specific information or agreement about its actual contribution to deforestation, it is clear that illegal logging is a big operation worldwide. Therefore REDD will benefit from a significant investment in green and white initiatives; complementary between the three initiatives could be established.

REDD can build on many of the instruments used in green and white initiatives such as law enforcement, community-based responsible forest management and others. To be able to do so, however, the community (global, national and local) involved in REDD design need an assessment of which of these instruments are likely to be efficient, effective and equitable and which policies are needed for them to work.

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