First Regional Forum for People and Forests

Carbon financing and community forestry





THE CENTER FOR PEOPLE AND FORESTS



Report on the First Regional Forum for People and Forests

Photo Credits: Ben Doherty (cover); Gil Scrine Films (pg. 7-8); all other photos courtesy RECOFTC

Disclaimer: The information in this report does not necessarily reflect the opinions of the Forum organizers. Any mistakes in representing the information presented at the Forum are those of the editing team.

ISBN: 978-616-90183-2-2

RECOFTC

PO Box 1111, Kasetsart Post Office Bangkok 10903, Thailand Tel: +66 (0)2 940 5700 Fax: +66 (0)2 561 4880 Email: info@recoftc.org Website: www.recoftc.org

FAO

Regional Office for Asia and the Pacific Forestry Technical Department Group 39 Phra Atit Road, Bangkok 10200, Thailand Tel: +66 (0)2 697 4000 Fax: +66 (0)2 697 4445 Email: patrick.durst@fao.org Website: www.fao.org/world/regional/rap/forestry.asp

FSSP

Forest Sector Support Partnership Coordination Office 3rd floor, Building A8, No. 10 Nguyen Cong Hoan St. Ba Dinh Dist., Hanoi, Vietnam Tel: (84-4) 3762.9412 Fax: (84-4) 3771.1431 Email: van.fssp@hnvnnvn Website: www.ietnamforestry.org.vn

First Regional Forum for People and Forests

Hosted in Hanoi, Vietnam, from 18 to 20 August 2009, the Forum brought together more than 80 people from 12 countries, including key government, civil society, private sector, and international organization participants.

During the three days, participant learning and discussion was stimulated through case study and topical presentations, expert panel discussions, a film viewing, group work sessions, and a field visit to Vietnam's only afforestation/reforestation Clean Development Mechanism (A/R CDM) site.

The Forum was organized by RECOFTC - The Center for People and Forests, the FAO Regional Office for Asia and the Pacific, and the Forest Sector Support Partnership under Vietnam's Ministry of Agriculture and Rural Development.



The Forum organizers would like to thank Dr. Sango Mahanty of the Australian National University, Patrick Durst of FAO, Timothy Boyle of UN-REDD, and James Bampton, Dr. Thomas Enters, Dr. Nguyen Quang Tan, Ronnakorn Triraganon, and Dr. Yurdi Yasmi of RECOFTC for facilitating the event, along with all the named speakers included in this report.

Our sincere thanks go to the Hoa Binh Commune Council for coordinating the field trip and to the Vietnam Forestry University for organizing and coordinating with the site.

We greatly appreciate the contributions of panelists, including Bambang Antarika, Dr. Nur Masripatin, Kenn Mondiai, Andrew Speedy, Derek Trau, and Vicky Tauli-Corpuz.

Our gratitude also goes to Maylee Thavat for rapporteuring and drafting this report.

The views expressed here are those of the presenters and do not necessarily reflect the views of RECOFTC or its partners.



Introduction

In early 2009, momentum was gathering for a global forest carbon financing mechanism. Reduced Emissions from Deforestation and Forest Degradation (REDD) had become the hottest topic on the world's forestry agenda, and the much anticipated United Nations Framework Convention on Climate Change (UNFCCC) Copenhagen negotiations were fast approaching that December. Yet many crucial questions remained unanswered, including: How might forest carbon financing initiatives impact local communities and indigenous peoples living in and around forests? What would be the role of these peoples in climate change mitigation initiatives? And would they be important players in the success of such initiatives?

The answers to these questions were, and still are, much needed. Some 450 million people are inextricably linked to forests in the Asia-Pacific and many countries in the region are exploring and implementing Clean Development Mechanism, REDD projects, and REDD 'readiness' activities, as well as moving increasingly toward REDD+ initiatives.

In response to growing interest, the *First Regional Forum for People and Forests: Carbon Financing and Community Forestry* was held in August 2009 to explore how carbon financing and community forestry could be strongly and positively connected.

Contents

Introduction



1 Forum summary: Local people hold the key



7 Documentary: *The Burning Season*



3 New and bold measures: Opening speeches



5 Towards a truly sustainable region: Keynote address



9 The million-dollar question: Who owns the carbon?

11 Making it work: Local people, PES, and intermediaries

14 The view from the buyer's side

18

The local perspective: What's in it for us?

23

Trees, markets, and communities

26 Introducing UN-REDD

29 Learning from the region: China Cambodia Nepal Vietnam

38 Call for action

40 Moving into action



Forum Summary Local people hold the key

Deforestation and forest degradation contribute about 17% to 20% of global greenhouse gas emissions. Forest-related mitigation measures are now widely assumed to be among the most practical and cost-effective interventions to slow global warming – as well as to provide a host of other forest products and environmental services.

However, rural poverty, weak law enforcement, and escalating demand for food and fuel continue to drive forest destruction at an alarming rate – in the Asia-Pacific region alone, some 3.7 million hectares of natural forest are lost every year. This also threatens millions of already vulnerable rural livelihoods, often undermining traditional and customary rights to vital forest resources. Carbon financing may provide promising new opportunities for maintaining and even improving the health of the world's forests and, if designed well, for reducing poverty. But if schemes such as REDD (Reducing Emissions from Deforestation and Forest Degradation) fail to deliver tangible benefits to Asia-Pacific's forest-dependent people, then the social and economic impacts could be severe.

Ultimately, if carbon financing schemes do not meet the needs and interests of local people, forest-related mitigation efforts will fail.





As forests in the Asia-Pacific region can potentially store a large proportion of global carbon dioxide emissions, the need for healthy and sustainably managed forest ecosystems cannot be understated nor undersold. But we must go beyond carbon to promote and 'sell' biodiversity, watershed conservation, and sustainable forest management as an essential holistic package.

Local people hold the key to healthy forests in this region. They have the closest direct stake in forest resources and will affect the outcome of any forest management strategy, including those aimed at climate change mitigation. For carbon financing to succeed, it should make use of the lessons learned from three decades of community forestry experience and actively engage local people in decision making, planning, and management.



Lessons from payments for environmental services (PES) schemes reveal that carbon financing presents both risks and opportunities for local people; it could also constrain their effective participation. Maximizing the opportunities and addressing the risks and constraints requires early and active community involvement, especially in negotiating roles, responsibilities, and benefits.

Benefits from carbon financing must expand rather than replace local people's existing benefits. Strong grassroots institutions and clear, secure, and strong rights to forests are critical prerequisites. Meaningful local participation, shared decision making, and high levels of transparency and accountability must be regarded as the minimum standard.

Intermediary organizations that will build capacity and help broker carbon financing agreements have key roles to play in securing equity and local participation, and will require support in carrying out these important functions.

However, until benefit-distribution arrangements, financing methods, and legal issues such as the impacts on land tenure and use rights are clarified, forest carbon will remain a risky business for both investors and local people.



New and bold measures

Highlights from the opening speeches

Vice Minister Hua Duc Nhi, Ministry of Agriculture and Rural Development, Vietnam

In almost all developing nations, deforestation and forest degradation are mainly caused by over-exploitation to supply growing demand for forest products by people. This includes change of forestland use for other purposes, including agriculture, industry, and urbanization. To address these problems, it is vital to have more effective regulations and economic instruments. However, this often results in greater costs for improving policy and management systems and professional capacity as well as opportunity costs for the loss of revenue from harvesting or using forestland for other purposes. Most of these costs are covered by the state budgets of developing countries or by forest owners who are from poor households and local communities.

Benefits from sustainable forest management are not limited to the forest owners of one country or one community, but can include international values such as carbon sequestration and existence values. Thus, it is the right time for us to create new solutions and financing mechanisms for sustainable forest management to respond to important questions such as: Who are beneficiaries of better forest management? Who is willing to pay for these benefits? Who has the ability to pay? Who is the carbon owner, and how will this service be paid for equitably to make sure that involved parties benefit from this service correspondingly and satisfactorily?

Carbon financing can only be a potential opportunity for forests and people if the rights of local communities and ethnic people are respected, governance is improved, and benefits are shared equitably.

Andrew Speedy, Food and Agriculture Organization of the United Nations (FAO) Representative, Vietnam

We need new and bold measures to ensure that forests and sustainable forest management become key elements of the solution. Forests and climate change are intimately related, with forests serving both as a source of carbon, and as a carbon sink. Forests store enormous amounts of carbon. In fact, the carbon contained in forests is more than that in the atmosphere. Deforestation alone accounts for 35% of carbon emissions in developing countries and 65% of carbon emissions in the least developed countries. The UK's Eliasch Review estimates that halving deforestation could result in a net global economic gain of US\$3.7 trillion annually by the year 2100, which makes it one of the most cost effective climate change mitigation measures available. The review concludes that the total cost of limiting global warming to two degrees Celsius can be reduced by 50% if forest-related emissions are included in the global climate regime.

In Bali in 2007, governments agreed to include REDD in the climate negotiation package. It is crucial that countries now agree at Copenhagen to include REDD in a post-2012 climate regime.

Many of the poorest people live in and around forested areas. The poor are often blamed for deforestation and forest degradation, and poverty alleviation continues to be a central tenet within the country's forest strategies... UN-REDD foresees a participatory role for local communities in forest monitoring, and this may also provide a basis for stronger involvement in government-sponsored schemes for Payments for Ecosystem Services. With appropriate benefitsharing arrangements from REDD and clarification of land tenure, local communities may also play a key role in efforts to tackle illegal logging and cross-border trade in tropical timber.





Dr. Yam Malla, Executive Director, RECOFTC – The Center for People and Forests

Forest user groups are aware that they are not only producing important forest products. They also provide a range of environmental services. Their efforts contribute to the regulation of water flows and biodiversity conservation... They can, perhaps unknowingly, also fix carbon in their forests and forest soils.

Support to community forestry remains vital. Yet, we cannot expect bilateral and multilateral donors to continue to provide financial assistance indefinitely. Instead, might forest carbon financing offer a real opportunity to sustain and expand the achievements made over the last 30 years?

I hope that you recognize the contributions local people can make to forests and forestry. They, like us, need ways to make a decent living. Underestimating and indeed undervaluing their efforts, their knowledge, and their skills will make it impossible to turn the opportunities carbon financing might offer into reality.

Forest carbon financing is not a silver bullet to the problems that confront us. However, I believe it can only be effective if we engage local people, strengthen their rights, improve systems of governance, and distribute benefits more equitably. Above all we must strive to market carbon that is socially and ethically just.

Towards a truly SUStainable region Highlights from the keynote address



Secretary Heherson T. Alvarez, Presidential Adviser on Climate Change, the Philippines

The world's forests, and especially old-growth forests like those found in our region, play a vital role in fighting global warming and climate change...the tropical forests of the Asia-Pacific region are acknowledged and valued as the carbon sinks of the world – rightly so as our forests are capable of absorbing more carbon dioxide in the form of biomass than any other region. Hence it should be recognized that the forests of the Asia-Pacific serve as the 'lungs of the earth' – our region comprising some 15% of the world's forest cover and containing 25% of the carbon in the terrestrial biosphere...Beyond such considerations, we also recognize that forests and their inherent biodiversity are instrumental for the survival of mankind.

In the Asia-Pacific region, around 20% of our poor rely on forests resources for their very survival. However, our forests are constantly under threat with some 3.7 million hectares of natural forests lost every year. This also threatens millions of already vulnerable rural livelihoods, often undermining local community rights and access to forest resources.

Deforestation, as we know, is often attributed to large-scale agriculture. In Southeast Asia alone, subsistence farming, timber exploitation, and large coffee and oil palm plantations drive the conversion of forests for agriculture...The fact that our original forest cover is diminishing endangers our rich biological resources and adds to the threat of air and water pollution. In light, therefore, of the huge stakes and risks involved with properly managing and preserving our region's precious forests cover, the task that falls on the shoulders of each and everyone of us... becomes all the more urgent.

First Regional Forum for People and Forests 5

REDD is a strong incentive to create partnerships among developed and developing countries seeking to address the problem of deforestation and forest degradation. However, besides reducing anthropogenic greenhouse gas emissions from deforestation and forest degradation, we should also address climate change and rural poverty, and at the same time, conserve biodiversity and sustain ecosystem services.

As a region that has, for the past decades, been making strides in establishing protection mechanisms for our forests not only for the sake of stopping deforestation and degradation but also for conserving and restoring our forest ecosystems through the effective participation of local communities, there is no question the Asia-Pacific region should have a lucid voice when it comes to pushing for a REDD+ mechanism which credits and supports past and ongoing efforts to conserve and enhance existing forest carbon stocks, as our region has. In this regard, the Asia-Pacific region, as the 'lungs of the earth,' cannot afford to be bypassed by the global community, as we rightly deserve an equal share of any potential financial and technological support for REDD+.

To date, there is no formal mechanism for REDD with international recognition under the Kyoto Protocol, but voluntary REDD projects are starting around the world in a solid effort to influence and anticipate a global REDD mechanism. Despite methodological issues, it is important that as early as now, we as potential REDD+ countries push for a set of overarching principles.

To conclude, this Forum reminds me and gives me hope for our job of challenging people's mindsets from the present traditional paradigms of economics to the new mindset of conservation, protection, and restoration to achieve our vision of sustainable development. Because, I believe, it is only by calibrating and reconfiguring our policies and actions to be in harmony with the rest of mankind can we move forward as a truly sustainable region. And that is why it is so important that nations in Asia and the Pacific should be here together to make sure such principles are considered and included in the new global climate change regime.



Documentary *The Burning Season*

Dorjee talks about billions and trillions of dollars, the question here is: how will those billions and trillions trickle down to the people that matter most? To the people whose livelihoods are dependent on the forest and the biodiversity. Kenn Mondiai

Executive Director, Partners with Melanesians Inc. Chairman of the Board, PNG Eco-forestry Forum Inc. Papua New Guinea

About the signing of the agreement with Aceh, even though they talk about a lot of money, up until now there is no money. So as an Indonesian citizen I feel sad because it has been publicized so much, but there is no money until now.

Dr. Nur Masripatin, Director, Centre for Social Economy and Forest Policy Research, Ministry of Forestry, Indonesia The film follows the real-life story of Dorjee Sun, a young, passionate, Australian lawyer cum social entrepreneur who is on a mission to save forests. With boundless enthusiasm he sets out to establish a voluntary carbon credit trading scheme on avoided deforestation. Dorjee's vision is a win-win scenario where forests are saved and money made. Of course, pulling it off won't be easy.

In parallel to Dorjee's jet setting (and carbon emitting) adventures to major trading capitals of the world, the film narrates several supporting stories. One looks at the challenges Achmadi faces. He is a smallholder farmer in Indonesia who is aware of, and saddened by, the environmental damage caused when he burns the forest to grow oil palms. With few earning options and a need to send his daughter to school, he asks tearfully, "What am I going to do and who cares about me? Who cares about a small farmer?"

In the next story we move from Achmadi's tears to the forlorn eyes of displaced baby orangutans – the ultimate emblem of rainforest destruction. Here we see disturbing images of disoriented, malnourished orangutans wandering through vast, smouldering wastelands where pristine forests have just been burnt. Lone Droscher-Nielsen, the manager of an orangutan sanctuary housing these 'environmental refugees,' wonders how she is going to cope with the flood of orangutans arriving on her doorstep. Forests are not really just about carbon – they are about a lot of other things, of course indigenous peoples' rights, biodiversity etc. and so we have to disabuse our mind that it is just about REDD, and that it's just about carbon. Vicky Tauli-Corpuz, Chair, UN Permanent Forum on Indigenous Issues

The more significant implementation issues are not addressed in that film. It sounds like the project is underway and it's all going well, but the reality is that it is a 30-plus year project. We're one year into the project. We don't have all the answers. There are so many issues. Derek Trau, Vice President, Carbon Conservation Back in the corporate carbon world, Dorjee convinces the Governor of Aceh, Indonesia, of the potential benefits of his scheme. The Governor awards Dorjee's company exclusive rights to carbon credits from avoided deforestation in Aceh. The Governor begins to set in place his vision of 'Green Aceh,' including assistance to farmers like Achmadi to earn a living from sustainable palm oil production. Next on Dorjee's hit list are the investors and carbon buyers, who take some convincing.

The story's final suspense centers on the build up to the 2007 COP13 climate change negotiations in Bali. Dorjee has nearly got bankers Merrill Lynch to invest in his carbon-trading scheme, but they won't sign until commitment to REDD is confirmed by the Conference of Parties. REDD is agreed to, the deal goes through. Dorjee, and the world it seems, let out a collective sigh of relief.

The film concludes with an epilogue, post-global financial crisis. Merrill Lynch and their new owners, Bank of America, assure viewers that their commitment to forest carbon credit trading remains. However, we hear nothing of Achamadi. Details of Dorjee's scheme are equally vague, although he assures a journalist that a "large share" of the profits from carbon trade will go to local people. Who they are, what proportion, and how this will be distributed are all left unexplained.

Today these key questions remain central to the REDD debate. How will REDD assist forest-dependent people? What are the benefits? How will they be distributed and who makes these decisions?

THE MILLION-DOLLAR QUESTION WHO OWNS THE CARBON?

(Or more accurately, who should be paid for reducing emissions and enhancing carbon stocks?)

Even where land ownership is indisputable, this does not automatically ensure that carbon payments are the title holder's. In New Zealand, for example, the Government's move to 'nationalize' carbon in commercial plantations caused great friction with the private forestry sector there.¹ In many Asia-Pacific countries, forest land tenure and ownership arrangements are diverse, complex, and often contested.

Without adequate solutions on this front, risky or unclear tenure arrangements will deter investment and reduce the chance of emission reductions. Indeed, carbon financing would likely worsen conflict in contested areas.

Local people using and managing forests, formally or otherwise, are central to this issue. If they perceive that their rights are not reflected fairly, they will have little motivation to help forest-carbon schemes succeed. In fact, local people may be more motivated to work *against* them. It is unlikely that mechanisms such as CDM and REDD can succeed without equitable outcomes. But before decisions on equitable benefit-sharing can be made, clarity about forest tenure is essential.

The question 'who owns the carbon?' initiated a panel discussion with perspectives from indigenous peoples, civil society, the private sector, and government. The discussion that followed was spurred by the issues raised (or neglected) by the screening of *The Burning Season.*

In late-2008, the New Zealand Parliament passed a bill devolving carbon credit ownership to forest owners.



We often get to the point where there is funding available for a project and the single hurdle we can't jump across is who is the owner of the land or has the rights to use the land and therefore the carbon. ...it's one of those issues that I would encourage all the stakeholders that are able to affect this to really work closely and come up with a solution fast because this is one of the biggest hurdles for REDD. For CDM it is a far clearer process and investors are far more comfortable investing in those projects. This is a big disadvantage for REDD and a big disadvantage for the forests.

Derek Trau Vice President, Carbon Conservation



In the context of Indonesia, the ownership of carbon depends on who has legal connection to that land. So it can be government, can be private, can be local communities including indigenous peoples. But we are not talking 100% of carbon ownership, but revenue sharing. When we talk about carbon, this is something related to climate conventions, this is a responsibility of national governments, that is why there is revenue sharing in this context...

Dr. Nur Masripatin Director, Centre for Social Economy and Forest Policy Research,

Ministry of Forestry, Indonesia

The ones who save the forests and protect the forests are the ones who own the carbon. They are the ones who should really get the benefits, but of course this is a highly contested issue, because the state would claim that they own it. But from the indigenous peoples' perspective, I don't think that the state can say that they own the carbon. Vicky Tauli-Corpuz

Chair, UN Permanent Forum on Indigenous Issues



The land belongs to the people, the local people. The forestry legislation [in Papua New Guinea] acknowledges that the trees that stand on the land stand with the communities. So carbon also should be owned by the people. Kenn Mondiai

Executive Director, Partners With Melanesians Inc. Chairman of the Board, PNG Eco-forestry Forum Inc. Papua New Guinea

Can carbon be 'owned'?

Carbon in forests cannot be physically extracted or transferred, and has no value outside the context of climate change. So what exactly is being sold when 'carbon credits' or 'carbon rights' change hands? In the context of climate change, carbon has value as an indicator of the changing levels of carbon dioxide in the atmosphere, in combination with all other sources of carbon around the world. It is essential that all parties understand these definitions before talking about carbon at the local level. Creating the impression of physical value can indeed have unintended consequences. For example in Papua New Guinea, some communities are led to expect 'sky money' (money for nothing) from selling their 'carbon rights.'



Making it work

Local people, payments for environmental services, and intermediaries

Based on the presentation by Dr. Sango Mahanty, Australian National University (ANU), Canberra, Australia

Assessing the livelihood impacts of Payments for Environmental Services (PES): Implications for avoided deforestation¹

As initiatives to reduce emissions from deforestation and forest degradation are developed in a number of countries with tropical forests, there is fear that these schemes might negatively impact rural livelihoods. Restricted forest access, recentralization of forest rights, elite capture, and/or inequitable benefit-sharing arrangements are among the concerns.

Although livelihoods have never been the primary focus of PES schemes, a team of researchers from ANU set out to examine the potential livelihood impacts of incentive payments for REDD. They investigated what the livelihood impacts of existing PES schemes have been, and what implications this might have for the design of REDD mechanisms.

This presentation drew from a paper of the same name, by Luca Tacconi, Sango Mahanty, and Helen Suich from ANU's Crawford School of Economics and Government.

"A PES system has been defined as a voluntary transaction, where a well-defined environmental service(s) is bought by a minimum of one buyer from a minimum of one seller, if and only if the seller secures the provision of the service" (Wunder, 2005).

The study looked at how PES schemes influenced the following types of capital:

- 1. Financial in terms of income generated
- 2. Social in terms of how schemes engaged with local institutions
- 3. Human in terms of health and education/capacity outco
- 4. Physical particularly infrastructure development
- Natural particularly changes to resource access rights and environmental conditions

Key lessons from these PES experiences should inform the design of REDD payment schemes. The research found that the PES schemes have resulted in a number of positive and negative impacts. Overall, PES schemes enabled participation by poorer households, although unclear land tenure and labor and financial capital shortages remained critical constraints to their participation. While PES provided some income to households, it was a relatively minor share of total household income. Importantly, however, payments were useful to households when made in a lump sum, especially if paid at a time when a household faced one-off costs such as annual school fees. In cases where payments were made at the community level, transaction costs were reduced and investment stimulated in local infrastructure and services (physical capital). Improved human capital was another outcome, although the long-term impact is uncertain. Social capital also improved when the schemes worked with existing community institutions.

The research found that few schemes monitored the impacts on the environmental services they sought to deliver. Furthermore, in some schemes, inappropriately front-loaded payments were made, which do not reflect the time frame of the contract, bringing into question the long-term sustainability of the scheme. Some social tensions have also emerged, particularly between those people who take part in schemes and receive payments and those who do not. One case reported that new land management practices – associated with plantation activities – could negatively impact existing gender roles and labor patterns within households, in some cases leading to intra-household conflict.



Despite weak monitoring systems, most of the case studies anecdotally observed improvements in their natural resources. On the other hand, the scale of impact was often small and the direct relationship to actions taken under the PES initiative was not always clear. The scale of monitoring generally focused only on the areas covered by the scheme and made it difficult to assess whether leakage occurred.

The capacity of local institutions to understand and negotiate new concepts and legal arrangements associated with PES was typically weak. Capacity building for local institutions was therefore an important focus for intermediary organizations and will be important for REDD. Such capacity building must be undertaken with knowledge of internal dynamics and interests if schemes are to avoid increased local



tensions. There is well-advanced thinking and methodologies on this issue in community-based forest management. Equity in access to schemes and in benefit distribution must also be considered early in REDD schemes to minimize conflict. Conflict management provisions should be considered in setting up agreements.

Since state-owned forests will be a major focus, the issue of changing resource access is likely to be more significant for REDD than for current PES schemes. Informal use of these areas and the multiple values associated with forests need to be understood and addressed. There may be some scope for learning here from the protected area context where efforts are incorporating small-scale informal resource use in achieving conservation objectives.

Key issues to be taken into account in REDD design

- Unless engagement by poor households is an explicit objective, it is less likely to happen.
- Broadening REDD to forests under non-private tenure may improve livelihood outcomes, but brings its own design challenges.
- There is a need to work with communities to increase benefit flows, to reduce transaction costs, and to improve local infrastructure.
- Assessing the opportunity, implementation, and transaction costs is crucial, and timely, matching benefits need to be provided to communities.

The important role of intermediaries

In the real world, the ideal concept of a direct market transaction between PES buyers and sellers, where payments are conditional on sellers meeting environmental targets, is rarely found. Intermediaries are often involved, facilitating agreements between buyers and sellers, and sometimes even acting as the buyer on behalf of other beneficiaries. The term PES is currently used to refer to a range of schemes including markets, hybrids of markets and regulatory approaches, and even development initiatives that combine financial incentives with other benefits for environmental services.

Within this range of models, intermediaries can play a crucial role in ensuring that PES and other carbon-financing schemes are fair and equitable to all stakeholders, but particularly the poor and vulnerable. Indeed, intermediaries can make the difference between whether or not a scheme is accessible to poorer households. The ANU research team found that in most cases, access by poor households was facilitated through specific efforts by intermediaries, including government and non-government organizations, who took steps to:

- Target socially disadvantaged households in identifying where to locate PES schemes;
- \uparrow Reduce transaction costs; and
- Facilitate market access and help participants to navigate contractual arrangements.

These critical functions in PES schemes had a direct bearing on the livelihood outcomes. Typically though, intermediaries funded such activities through retaining a share of PES income, which reduced local incomes. Implementation, monitoring, and evaluation of these schemes can be costly, potentially absorbing a large proportion of resources and funds.

The view from the buyer's side

REDD markets – Experience from the private sector

Based on the presentation by Kay Kallweit, Carbon Programs Manager, New Forests

Emerging carbon credit markets present significant opportunities. According to New Carbon Finance, in 2008 the total value of the carbon market was US\$120–\$130 billion, of which US\$20 billion was contributed by CDM projects despite much criticism of this mechanism. Overall, the trend is an upward one; the value of regulated carbon markets almost doubled in 2008 and further growth is expected with a post-Kyoto agreement. The voluntary market transacted a value of US\$400–US\$500 million in 2008.

Currently the carbon market is dominated by transactions made within the European Union Greenhouse Gas Emission Trading System (EU ETS). The role of forestry in this market has so far been, to all intents and purposes, nonexistent. The European Union has also ruled out the inclusion of forest carbon credits until 2020. Although it is conceivable that firm international agreement on forest carbon financing may lead to a change in the ETS position, it is currently very difficult to see how existing carbon markets will accommodate REDD credits.



Status of the global carbon market as of 2008 (in US\$)

Source: New Carbon Finance (2009)

There are four main types of carbon buyers. The most significant is heavy polluting industry, which has to manage immense liabilities regarding carbon emissions. One large multinational oil company estimates its potential liability at around 250 million tons of carbon – equivalent to 40% of Australia's total emissions. Buyers such as this need credits to fulfil their obligations, and to do so look to procure long-term, secure, low-cost supplies of carbon credits. Many of these companies have limited interest in the voluntary market because they need carbon credits that they can use to fulfil emission reduction commitments, which only compliance markets – those linked to the Kyoto Protocol – can provide.

With their interest in investment opportunities, banks are another major carbon credit buyer. From their perspective, REDD is a new market with potentially high returns. Banks are particularly keen on large-scale, cost-effective projects in areas with secure land tenure.

Private investors are also interested in carbon investment and include buyers with specific corporate social responsibility goals and sophisticated investors from the US who previously invested in high-tech industries. Private investors tend to seek carbon credits that are accredited via a transparent third-party standard. They are also interested in additional benefits such as high conservation values through biodiversity protection.

The final buyer is the World Bank, which is currently the only sizeable purchaser in the clean development mechanism/afforestation market. It has a specific focus on both community benefits to smallholders and biodiversity conservation.

Voluntary market opportunities currently provide pilot REDD projects with the momentum to move forward while complex mechanisms are being negotiated for compliance markets. It is in these voluntary markets that the basic 'ground rules' for REDD carbon trading are Voluntary and Regional Carbon Markets Growth



Sources: World Bank, International Emissions Trading Association (IETA), Ecosystem Marketplace, New Carbon Finance

being established. The framework to govern regulated REDD carbon markets will most likely borrow from the voluntary market.

How does the voluntary market work? Generally, it is trade between two parties using agreed criteria. These criteria are increasingly based on a transparent third party standard such as the Voluntary Carbon Standard (VCS). The VCS is comparable to the Clean Development Mechanism (CDM) standard, but is intended to be less bureaucratic. Furthermore, forestry has a central role in the VCS architecture whereas the CDM is more generic.

So how do forest-based carbon credits make it to the market? Firstly, a project must be developed in accordance with a pre-approved methodology. This requires substantial groundwork to determine carbon stocks, baseline scenarios, socioeconomic and environmental impacts, project finance and so forth. A third party then evaluates and validates the data. After validation, the project can be registered. The third, or a fourth, party then verifies the actual carbon sequestration/emissions reduction and then the project is issued with the respective amount of credits. The amount of credits depends on the accounting methodology and risk profile, or buffer (see below). The role of external parties is crucial to accreditation.

The main components of REDD carbon credit methodologies are as follows:

Baseline: This enables measurements of what would have happened without the project. The key question here is what is the rate of deforestation? For baselines of planned deforestation, the data required are relatively easy to collect and include an estimation of deforestation rates, the respective period, as well as proof of the likely scenario (a conversion plan, logging licenses etc.). For unplanned deforestation, the key issue is to determine the drivers of deforestation (farming, logging, fire etc.) and the speed of deforestation. Models are then created based on historical evidence. They require 'transparent assumptions' that detail how the estimated emission reductions were derived.

Additionality: Real emission reductions must be proven and it must be shown that they are in addition to business as usual scenarios. This is referred to as 'additionality,' though this remains a controversial issue as methodological guidance is vague.

- Leakage: This is a matter of accounting for displaced activities. The key questions here are whether the reduction in deforestation in one area has been offset by increased deforestation in another area, and if so, by how much? How can forest protection beyond the project area be ensured over time? Standard procedure in the voluntary market is that leakage amounts are subtracted from the credits.
- Buffer: Buffer stocks are usually used to address the non-permanence risk, the chance that the forest might disappear later (due to fire, illegal logging etc.) There are some existing guidelines on the appropriate amount to be held, and verifiers usually determine the final amount. For most projects, the buffer is between 20% and 40%.

New Forests' REDD projects in Papua/Indonesia have generated a number of lessons. In 2008, New Forests selected two 100,000 hectare project sites consisting of dense high value forest. These were zoned for conversion to oil palm or other agricultural uses by the Papuan Government. Baselines for these planned projects assume that oil palm would be economically attractive over the next 10 years on about 30–50% of the total area.

The total avoided emissions from these projects may be around 25–30 million tons of carbon dioxide equivalent (tCO2e) but due to a lack of any approved methodology and limited data availability to date, this number is indicative only. Detailed project development presents a number of key challenges:

- Collecting inventory data and establishing a robust baseline;
- Developing the financial structure including a trust fund;
- Financing the ongoing management and distribution of benefits to the communities; and
- Ensuring community support through a free, prior, and informed consent process.

In negotiating the financial structure and securing land tenure (i.e. the respective land-use licenses), the revenue share for the government has to be determined. It also has to ensure that private investors achieve returns that offset the high risks involved in this type of investment. Although still in the early stages, the process has generated some important lessons:

- From an investor perspective, areas with high deforestation rates are more attractive since emission reductions are higher in the short term and baselines can be evidenced more easily due to the imminent threat.
- Potaining adequate data is a real challenge.
- There may be numerous legal uncertainties including land tenure and rights to transact carbon credits; legal security is essential for private investment.
- The community consultation process can be time consuming and may reveal resistance to the project.
- Good relationships with non-government organizations and local authorities are crucial for project longevity.
- Communication and cooperation between project developers is important to get REDD projects working.

New Forest's experience indicates that private investment is needed to develop REDD projects and obtain valuable, practical lessons. Private capital can be deployed more quickly, and project development will give strong pointers to what works and where the problems lie. Private investors are willing to take on risks as long as there is some certainty on fundamental issues.

Key requirements for private investors are:

- Legal rights to transact in carbon;
- Legal arrangements for revenue sharing among government agencies/levels;
- Legal recognition of project activities even within national-level activities;
- Donor/grant/multilateral finance for information gathering, data analysis, and free, prior, and informed consent; and
- Community engagement.

In the end though, private investors can only go so far. Public or donor funding is essential to develop the overall framework for forest carbon credit markets.

The local perspective What's in it for us?

Based on the presentation by Ben Vickers, RECOFTC – The Center for People and Forests

In most forest areas in this region, local communities and indigenous peoples are inextricably linked to the fate of the ecosystem of which they are, essentially, a part. With the advent of the forest carbon market, it is natural for these people to ask: What's in it for us?

This question is crucial to the success of an international REDD mechanism. Forest carbon markets need forest people. Carbon will not be fixed, nor emissions avoided, unless local people are actively engaged in the measures needed to achieve this. Furthermore, carbon markets need local people to deliver the data required to verify the results that give forest carbon a marketable value.

But does the reverse also hold true? Do these people need the carbon markets? Or, to put it another way, does this new potential source of benefits provide motivation for local people to manage or protect forests any differently than before? Local people already look to forests for a wide range of benefits, mainly for subsistence and income generation, but also for environmental services and cultural values. Where they have been empowered to realize these benefits, the motivation for local people to engage actively in sustainable forest management is overwhelmingly apparent.

Community forestry is a tried-andtested approach for empowering local people to manage forests for their own benefit and for the benefit of others too. Well-designed community forestry programs enable people with the closest direct stake in forest resources – those dependent on them for their livelihood – to make inclusive and representative decisions.

Nepal's community forestry approach is widely regarded as successful. In the southeast of the country, a cost-benefit analysis of four Community Forestry User Groups (CFUGs) showed that the value of subsistence and income-generating products exceeded the cost of inputs by up to six times. At the same time, forest biomass increased. In the most productive locations, annual income from benefits equalled US\$80 per household.¹ With predictable costs and relatively low production risks, forest management proved an attractive investment for economically vulnerable households.

In the Nepal example, local communities were benefiting considerably even without carbon revenue. So how will forest carbon make a difference?

The Kyoto–Think Global Act Local (KTGAL) project has investigated community-based carbon accounting methodologies in eight countries around the world, including Nepal, India, and Papua New Guinea. Over a five-year period, it found that:

- Local forest management was better than centralized management in reducing degradation and enhancing forest carbon stocks.
- With relatively inexpensive training, local forest managers could produce the data required for forest carbon accounting.²

While KTGAL did not attempt to enter the carbon market, a recent analysis drew on its data to explore how forest carbon would affect the cost-benefit ratio within three CFUGs in Nepal.³ The analysis was undertaken for three scenarios:

- Business-as-usual: No carbon trading, benefits and costs remain the same.
- Carbon trading using the prevailing management strategy: Same benefits obtained from forests, plus carbon, with additional transaction and implementation costs (US\$2-3/hectare/year based on project experience).
- Carbon trading with discontinued forest product use: Previous benefits are treated as opportunity costs.

The KTGAL analysis used hypothetical carbon prices of US\$1 and US\$5/tCO₂e.⁴ The sites differed in forest size, number of households, and altitude. These three variables have predictable impacts. Large forest areas reduce transaction costs per carbon unit. The larger the user group, the more thinly benefits must be spread. And higher altitude forests generally sequester carbon at a lower rate, as they grow more slowly. Under Scenario 1 (Business-as-usual), the annual value of forest benefits per household ranged from US\$72-US\$128, comparable with the \$US80 estimate from the cost-benefit analysis mentioned above.

- ² 'Community Monitoring in REDD+', M. Skutsch et al in 'Realising REDD+', edited by A. Angelsen , CIFOR, December 2009.
- ³ 'The Cost of Carbon Abatement Through Community Forest Management in Nepal Himalaya', B. Karky and M. Skutsch, March 2009.
- ⁴ A conservative range at current prices.

Economic Impacts of Community Forestry in Siraha, Saptari and Udayapur districts of Nepal: Balancing Costs and Benefits', J. Statz, GTZ/GOPA-AGEG, 2004.

Potential income for CFUG households from carbon markets in Nepal (in US\$)

	Site	А		В		С		
	Forest area	383ha		96ha		240ha		
and the second s	No. of households	450		60		164		
and the second	Area per household	0.85ha		1.60ha		1.46ha		
4.	Altitude (meters above sea-level)	<mark>400m–</mark> 800m		1830m–1930m		3500m–4200m		
- P.	Carbon price US\$ per tonne CO ₂ e	\$1		\$5	\$1	\$5	\$1	\$5
Net annual	Scenario 1: Business-as-usual	\$128		\$128	\$72	\$72	\$85	\$85
gain US\$ per	Scenario 2: Carbon trading and continued	+\$4		+\$44	-\$24	+\$9	-\$8	+\$17
household	sustainable forest product use							
1 M 2	Scenario 3: Carbon trading with	-\$269		-\$205	-\$324	-\$266	-\$209	-\$171
A NEW A	discontinued forest product use							

Under Scenario 2, a carbon price of US\$1 is sufficient to provide a small net gain over business-as-usual only at site A, which has the largest, most productive forest. The carbon revenue there would comprise just 2% of net benefits. At sites B and C, the carbon revenue at this price does not cover the costs. At a price of US\$5, all three sites deliver higher revenues per household compared to Business-asusual, and carbon revenue comprises 10–25% of net benefits.

Under Scenario 3, opportunity costs leave all households well below the break-even point at both carbon prices. There is no financial incentive for local people to engage in carbon markets under such a scenario. The break even price is at least US\$15/tCO₃e.

There are two significant provisos regarding these results. First, additionality was not considered; Scenario 2 is therefore unrealistic. Changes in management (which almost certainly means the foregoing of some existing benefits) would be required before carbon could be brought to market. This pushes the break-even point upwards. Second, the study has looked at each community forest as an independent marketer of forest carbon, as if they were small-scale CDM projects, where 100% of costs and benefits accrue locally. This is also unrealistic. The costs of maintaining a national carbon account must be covered through carbon revenue, as other costs, such as marketing, will not be borne at the local level. Existing REDD pilot projects propose a share of benefits to local communities at well below 100%. For example, the Oddar Meanchey project in Cambodia proposes that a minimum of 50% of net income from carbon trading will accrue to local people.⁵ This pushes the break-even point still further upwards.

So, to return to our original question: Do these people need the carbon markets? The answer may well depend on what tenure arrangements local people have. These arrangements largely determine the level of existing benefits, and in essence, determine what local people potentially have to gain, or to lose, from involvement in REDD.

In the case of communities with secure tenure and use rights, carbon markets will be a very welcome additional benefit at the right price and under the right conditions. But such communities do not need the carbon market to make forest management a worthwhile investment. Indeed, there are potentially more benefits to lose than there are to gain. Any mechanism must be designed with this in mind, and at the very least, must 'Do No Harm' to existing local livelihoods.

Of course, such communities are not the majority in this region. More common are these categories:

- Secure tenure but limited use rights (especially restrictions on timber harvesting and sales);
- Insecure or traditional tenure; or
- Effective exclusion from forest resources.

Most rural communities in the Asia-Pacific fall into the second category – forest use is an integral part of their livelihoods, but they lack legal tenure and use rights. They are highly vulnerable to losing existing benefits.

How does the cost-benefit scenario change according to these categories? For groups with limited use rights, income from carbon, as a proportion of total benefits, will be greater than in groups with more complete use rights. Potential revenue from carbon at US\$5/tCO₂e would be roughly equivalent to the value of fuelwood, if the aforementioned cost benefit analyses from Nepal are taken as a guide. Carbon revenue might nearly double the value of the forest to local people, but only if there are no further restrictions on forest product extraction.

"At the very least, any mechanism must be designed to 'Do No Harm' to existing local livelihoods."

⁵ 'Communities and Carbon: Establishing a Community Forestry REDD Project in Cambodia', A. Bradley, PACT Cambodia, 2009.

With insecure tenure, the situation is much the same. These people still depend on and use forest products, and the loss of these benefits would count as a cost. Furthermore, their claim to a cut of the carbon revenue is less likely to be acknowledged.

In both these categories, local people would be just as able to conduct (and be paid for) carbon accounting, as piloted under the KTGAL project. For those communities that already have strong use rights, as in Papua New Guinea and Nepal, it will be important to enhance the skills required to manage and monitor forest resources efficiently, and provide sound technical and legal advice. Ultimately, it is in the interests of forestry practitioners in general to decisively shift the paradigm of state forestry officials from police force to service provider.

It is no surprise that many local people are wary of the carbon market, but they do hold a 'trump card.' Without them, there is no forest carbon market. And this is where the market's real value lies for them, not just in the potential added income, but in bringing the wider issue of benefit sharing of all forest resources back into focus. Negotiation of tenure and use rights, leading to a secure framework for local people to benefit from the whole suite of forest products, is the key to making forest carbon markets work. Key points:

- Local people already derive many benefits from forest management. Carbon may add to these, but the opportunity costs could be high.
- Those with the least secure rights have the highest potential to benefit (as a proportion of existing benefits) from carbon markets, but they also have the most to lose.
- Developing equitable and fair carbon revenue benefit-sharing arrangements is the key to unlocking and resolving forest resource benefit-sharing in general.
- Forest carbon markets may offer financial incentives that could provide an historic opportunity for Asia-Pacific countries to fundamentally strengthen forest governance and provide support services to local communities and indigenous peoples.



Trees, markets, and communities

Overview and regional perspective

Based on the presentation made by Patrick B. Durst, Senior Forestry Officer, FAO Regional Office for Asia and the Pacific

"Curbing deforestation is a highly cost-effective way to reduce emissions" (Stern Review 2006).

Prior to Stern's statement on forests it was difficult to get most people to recognize the full value of standing forests, let alone get them to pay for it. The situation has now changed significantly. Indeed, the potential of forests to attract money has already affected the way that people talk about forests and their management.

The emerging mechanism for reducing emissions from deforestation and forest degradation aims to put a financial value on the carbon stored in forests. REDD offers incentives to developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. Experience shows that an integrated approach to forestry-based climate change mitigation and adaptation activities is likely to be most effective. Such an approach seeks to include climate change objectives and activities into core forestry practices and an overall program of sustainable forest management.

In the Asia-Pacific region, forests and carbon markets present a mixed picture. Although there has been a net gain in forest cover of around 3 million hectares from 2000 to 2005, much of this is attributable to China's afforestation efforts. Remove China from the equation and the reported forest losses in the region total some 18.5 million hectares over the five-year period.

Forest area change	in Asia and the Pacific 2000–200
2 – 1.5%	decrease per year
1 – 1.5%	decrease per year
0.5 – 1%	decrease per year
0 – 0.5%	decrease per year
0 – 1%	decrease per year
> 1%	decrease per year
Source: Global Forest Resou	rces Assessment 2005 (FAO)

Forest area change in Asia and the Pacific 2000–2005

There are many potential opportunities to improve forest management and expand forest cover in the Asia-Pacific region. Although the establishment of large-scale conventional plantations has been a primary contributor to forest gains in the region, there is also a wealth of experience from community forestry and alternative approaches.

Recently there has been a rapid increase in the number of carbon financing projects in forestry. In addition to global environmental benefits, carbon markets potentially offer a valuable pro-poor mechanism, particularly for developing countries. They are expanding quickly too; in 2008 alone, forest carbon projects increased by 12%. Overall in that year, forestry projects accounted for 11% of over-the-counter (OTC)¹ transactions, including 22% of the Chicago Climate Exchange's.² Asia accounted for 45% of OTC transactions, and increased its presence on the Chicago Climate Exchange. Generally, the transactions on the voluntary carbon market are individually quite small.

Although voluntary markets present various challenges (e.g. they tend to be small in volume and are difficult to predict) they also offer many advantages for community-based forest owners. They tend to be innovative, inclusive, capable of providing immediate resources, and are expanding rapidly. Despite this, many communities are missing out on the opportunities the voluntary market can present. High transaction costs, lack of secure tenure, lack of information, lack of security for investors, and unclear costs and benefits are some of the impediments to greater community involvement.

This phrase is used in carbon trading as an umbrella term for the range of transactions that occur in voluntary markets.
The Chicago Climate Exchange is a voluntary, legally binding greenhouse gas reduction and trading system for emission sources and offset projects.

For voluntary carbon markets to be effective, pro-poor instruments that reward and support climate change mitigation activities and suitable mechanisms for linking communities to markets need to be developed. Furthermore, measures for reducing transaction costs need to be developed (simplified guidelines for determining baselines and monitoring emissions); access to information should be improved; and advisory services for small-scale forestry projects should be developed.

Fostering regional collaboration is essential to overcome these barriers. FAO is contributing to this through its Technical Cooperation Programme (TCP), which includes the project: Linking Communities in Southeast Asia to Forestry Related Voluntary Carbon Markets. This two-year initiative is working in Cambodia, Indonesia, Lao PDR, the Philippines, and Thailand to help develop forestry-related voluntary carbon market opportunities via capacity-building activities and information-sharing mechanisms.

The TCP project plans to:

- Develop 'pilot' model carbon offset forests to explore and test approaches.
- Create an on-line portal tailored for buyers and sellers of small-scale forest offsets.
- Develop simple, user-friendly guidelines for communities and small holders.
- Organize workshops, raise awareness, and streamline community-level carbon projects in national forestry strategies.

In Copenhagen and beyond, it is essential to remember that a great deal is at stake for forests and forestry. Reducing deforestation and forest degradation will not necessarily be simple or cheap. All stakeholders should take care to ensure that forestry can actually deliver on mounting expectations. Learning from the mistakes of the past (such as under A/R CDM) is essential.

Forestry is more than just REDD, and it is crucial that we seize the opportunity to integrate climate change mitigation and adaptation efforts into the goals and objectives of sustainable forest management. This means that carbon financing must take into account the multiple benefits of forests and provide various stakeholders, including local communities and other forestdependent people, with the right to participate and benefit. Ensuring participation and inclusion is the linchpin of REDD success. Clarifying roles, rights, and responsibilities early will help achieve this.

There are still long and difficult details to be negotiated. We must be fully aware of the implications for forests and forestry in the coming years to take full advantage of coming developments in climate change adaptation and mitigation.



Introducing UN-REDD

UN-REDD is a collaborative partnership between bodies of the UN including FAO, UNDP, UNEP, and participating countries. Initially funded by the Government of Norway, the objectives of UN-REDD are "to assist developing countries to 'get ready' to participate in future REDD mechanisms and to support the development of guidelines and standardized approaches based on sound science."

In August 2009, UN-REDD countries were Indonesia, Papua New Guinea, Vietnam, the Democratic Republic of Congo, Tanzania, Zambia, Bolivia, Panama, and Paraguay.

At the national scale, UN-REDD supports mechanisms for developing country-driven REDD strategies. At the global level, it seeks to help build international consensus on REDD processes and promote the informed and meaningful involvement of all stakeholders.

National-level activities include scoping and alliance building, strengthening forest monitoring and assessment, creating and supporting REDD dialogue, supporting the development of national REDD strategies, supporting the implementation of REDD measures, assisting with REDD data management, and supporting the development of payment structuring and distribution.

International activities include the development of REDD methodologies and capacity building. Work on methodologies involves monitoring, reporting and verification systems, and tools to carry out these functions.

To complement these efforts, UN-REDD is also building capacity to enable countries to effectively negotiate at global REDD negotiations. This includes sharing knowledge, enhancing awareness, and strengthening data availability and interpretation.

FAO's focus is particularly on the development of measurement, reporting, monitoring, and verification processes in support of REDD mechanisms. Case studies are also being documented to ensure that global guidelines and tools are well grounded in practical experience and field-based realities.

Vietnam

LESSONS AND CHALLENGES FROM UN-REDD EXPERIENCE

Based on the presentation made Dr. Pham Manh Cuong, Department of Forestry, Vietnam's Ministry of Agriculture and Rural Development

As a developing country, Vietnam is not obligated under the Kyoto Protocol to reduce its greenhouse gas emissions. Nevertheless, Vietnam is charging full steam ahead with mitigation activities and is busy getting ready for REDD. It was the first country to sign up to the Forest Carbon Partnership Facility¹ and one of the first countries to engage with the UN-REDD Programme. Forest cover in Vietnam has changed dramatically since the country's reunification in 1975. From 1995–2008 it increased from 28% to nearly 40%, mainly driven by afforestation via plantations. Meanwhile the quantity and quality of natural forests has greatly declined. Between 1999 and 2005, the area of natural forest classified as rich forest decreased by 10.2%, and medium quality forest reduced by 13.4%.

Launched at December 2007's COP-13 in Bali, the Facility has two separate mechanisms to build capacity for REDD in developing countries, and test programs of performancebased incentive payments in pilot countries – find out more at www.forestcarbonpartnership.org. While REDD aims to enhance carbon stocks and contribute to the sustainable management of Vietnam's forests, it is also expected to help the Government achieve other environmental and socioeconomic development objectives.

UN-REDD is already playing an important role in assisting the Government of Vietnam to develop an effective REDD regime and helping the country get 'REDD-ready' by 2012.

While still in its early days, the collaboration with UN-REDD has helped Vietnam gain greater institutional and technical capacity to coordinate and manage REDD activities. This increased capacity has also been of great use in implementing PES initiatives.

The country now has increased knowledge of approaches to reduce regional and in-country displacement of deforestation and forest degradation or 'leakage,' which is one of the big challenges for the REDD mechanism.

But to be fully REDD ready, much still needs to be done, including:

- Increasing political support and attention;
- Aligning multiple constituencies;
- Ensuring sustainability of programs and strategies;
- Securing sufficient finance to address drivers of deforestation and degradation;
- Implementing transparent, equitable, and practical payment systems to individual households;
- Building capacities to collect, analyze, synthesize, and report information so that change can be monitored; and
- Developing participatory carbon-stock monitoring, reporting, and verification systems.

As Vietnam prepares itself to implement REDD; it is learning valuable lessons:

- Success in REDD will require active participation of key stakeholders. Participation reduces the risks associated with the longer time frame involved in forestry projects and the substantial investment needed by the Government of Vietnam and the donor community.
- Efforts to enhance carbon sequestration must also yield co-benefits. These include improving biodiversity, local livelihoods, and forest governance so that climate change mitigation efforts also benefit people who live in and around forests.
- Intermediaries are needed to establish institutional linkages for support and cooperative learning. Vietnam is a signatory to numerous joint international initiatives, including UN-REDD and the Forest Carbon Partnership Facility, and hosts various other projects. In these early stages, donor support and harmonization is important, as is the coordination of national institutional arrangements.
- REDD strategies must be formulated at the national level. REDD will require enabling legal frameworks and sectoral collaboration and coordination, along with ongoing monitoring and evaluation. The complexity and high level of investment required for enacting these systems means that the government must take the lead. At the same time, the government recognizes that individual projects or pilot initiatives generate important lessons that the national program can learn from.

Learning from the region

During the past few years, forest projects relating to carbon financing and PES have mushroomed in a number of countries in the region. This on-the-ground experience generates important lessons for future improvements and for new mechanisms such as REDD.

Here we present the findings of four case studies highlighted during the Forum that reflected on CDM, REDD, and PES experiences on the ground.

China

World Bank carbon finance operation Guangxi Afforestation/Reforestation CDM Program

Based on the presentation made by Liu Jin, Senior Forestry Specialist, World Bank Beijing Office

Afforestation/Restoration projects under the Clean Development Mechanism face similar challenges as REDD, such as preventing leakage of deforestation to other areas, ensuring that conservation efforts are permanent, and engaging multiple stakeholders. Experiences from A/R CDM initiatives provide valuable lessons for REDD.

The Guangxi Zhuang Autonomous Region of China hosts the world's first A/R CDM program, which is currently the only type of forestry activity that can receive credits under the Kyoto Protocol's Clean Development Mechanism. Since 2006, two projects have been implemented under this program.

As pioneering initiatives, both projects aim to explore and demonstrate approaches and methodologies for credible carbon conservation and sequestration. The Pearl River Basin project's main goal was to create financial incentives for land users to invest in and manage marginal lands. It is hoped that success would attract a diverse portfolio of partners willing to invest in afforestation activities in marginal lands.

The Northwest Guangxi project aims to build upon the Pearl River Basin experiences by further demonstrating innovative practices for A/R CDM projects on marginal lands. The project was designed to yield multiple benefits, including contributions to:

- Mitigating carbon emissions,
- Biodiversity conservation, and
- Improving the livelihoods of local communities.

The World Bank has signed Emission Reduction Purchase Agreements to purchase the project's Certified Emissions Reductions (CERs) – the credits generated through sequestered/mitigated carbon. Afforestation activities are now underway.



Facilitating f	orest management in the Pearl River Basin (2006-2009)	Reforestation on degraded lands in Northwest Guangxi (2008-August 2009)		
Mitigates: Objective:	773,800 tons of CO ₂ Establish 4,000 hectares of plantations in Pearl River watershed	Mitigates: Objective:	1,448,400 tons of CO ₂ Establish 8,100 hectares of forest plantations on degraded lands	
Benefits:	New forest serves as buffer for protected areas, contributes to erosion control	Benefits:	New forest controls soil and water erosion, conserves biodiversity	
Beneficiaries:	5,000 households in 27 villages	Beneficiaries:	18,800 villagers	
Fact:	First A/R CDM project, and helped develop official methodology for future A/R CDM projects	Fact:	Will be certified according to international Climate, Community and Biodiversity (CCB) standards	

Project setup and design

The two operations were implemented in five counties, four of which were nationally designated poverty counties, with a large proportion of poor households living on degraded lands.

Both projects employ similar benefit-sharing arrangements, under which local farmers and communities contribute land and are paid for their labor on project activities such as tree planting. In return, local forest companies provide project finance and are also responsible for registering the CDM projects and organizing the sale of CERs. Farmers and the companies are expected to share the net income from forest products and revenue from the CER transactions.

As of 2009, around 3,500 hectares of plantation had been established in the watershed of the Pearl River Basin. Households and forest farms began receiving income from selling CERs in 2008 and 2009.

Lessons learned

As these projects were the first of their kind, several difficulties arose during implementation that impacted the projects' ability to deliver benefits to communities.

The lands selected had low productivity and were located in remote areas. Ultimately, project developers found that the remoteness increased implementation and transaction costs, while low productivity caused delays in generating and selling CERs as the plantations take significant time to establish and sequester measurable amounts of carbon.

Additionally, the project's strong emphasis on environmental benefits, such as erosion control and biodiversity enhancement, meant that commercially attractive species were not used. This indicates that while environmental goals would be achieved, communities could receive less income from the sale of forest products.



Cambodia Community forestry REDD project in Oddar Meanchey

Based on the presentation made by Long Ratanakoma, Deputy Chief of Community Forestry Office, Forestry Administration of Cambodia

Cambodia has one of the highest forest cover rates in the world at 59%, but just over 40 years ago it was at 73%.

Deforestation has raged across Cambodia during the past four decades, and is still accelerating today. Estimates indicate the annual deforestation rate averaged 0.34% between 1965 and 2006, and that for the recent period from 2002 to 2006, this has jumped to 0.50%.

REDD presents an opportunity to protect Cambodia's threatened tropical forests by providing much-needed financial incentives for stakeholders to do so.

Oddar Meanchey province hosts Cambodia's first REDD pilot project. Nearly 70% of the province's 663,000 hectares is under forest cover. However, the forests here are under threat due to demand for timber and land for agriculture and settlement. From 2002 to 2006, the annual deforestation rate in Oddar Meanchey was 2.1% – four times the national average.

Officially launched in March 2008, the project was designed under the premise that the best forest managers are local people living in and around forests, and that benefits should accrue to them.

Partners

- Forestry Administration, Royal Government of Cambodia
- 🗼 PACT Cambodia
- 🗼 Terra Global Capital
- ▲ Community Forestry International
- Clinton Climate Initiative
- Forest, Climate and Livelihood Research Network
- 🗼 🛛 Danida
- Children's Development Association
- Monks Community Forestry Association

Oddar Meanchey project facts

Total Carbon Sequestered:7.1 million metric tons over 30 yearsArea:67,783 hectaresBeneficiaries:13 community forestry groups – including
58 villages and 10,036 households

The Forestry Administration recognizes that a major goal of the project is to improve the livelihoods of these local people, and the project intends to achieve this by:

- Overcoming a lack of technical capacity: Developing countries often have weak capacity to fulfil technical requirements such as analyzing satellite imagery. While capacity building is necessary, technical requirements should also be closely aligned with a country's capabilities to perform them.
- Addressing drivers of deforestation: Illegal logging, land encroachment, and forest fires remain a problem. The project team has developed techniques that communities can use, such as developing land-use plans, using fuel-efficient stoves, and promoting community natural resource management projects and non-timber forest product enterprises.
- Revenue sharing: Communities will receive 50% of the net revenue from carbon credit sales.
- Securing tenure: Many community forests were still pending approval at the outset of the project. The project is helping local community forestry groups to secure tenure to manage their forests, under the Government *Prakas* (guidelines) on community forestry.
- Employment: Communities will be paid for providing services to the project, receiving compensation for helping with assisted natural regeneration and enrichment planting, forest patrolling, and fire control.

The Oddar Meanchey project is being certified according to the internationally recognized standards such as the Voluntary Carbon Standard and the Climate, Community & Biodiversity Alliance (CCBA). Carbon credits from the project are expected to be sold on the voluntary carbon market. As of August 2009, the project was ready for carbon monitoring, and had prepared for its first verification and validation process.

Challenges and lessons learned

The project began with insufficient start-up funds and continues to face funding uncertainties based on fluctuations in the voluntary carbon market. It recommends that other REDD projects begin with initial funds that cover the costs of at least the first two years.

If these challenges are overcome, the project will result in sustainable forest management, improved livelihoods, and increased income for forest-dependent communities.

More on this project

Community Forestry REDD Project: Oddar Meanchey, Cambodia. www.pactcambodia.org/Publications/ CFP/Carbonbrochure.pdf

Nepal

Community forestry lessons for carbon financing

Based on the presentation made by Dr. Bharat Pokharel, Director, Nepal Swiss Community Forestry Project

In 1957, Nepal's forests were nationalized, undermining the close relationship between local people and forests. Villagers lost traditional rights to a resource that they believed was theirs. The result of this tenure change was disastrous. Forest management became non-consultative and top-down, and deforestation and forest degradation widespread.

In 1978, the Government tried a different approach and began formally handing responsibility for forest management to communities – signalling the advent of community forestry in Nepal. Since then, Nepal's forest cover has dramatically increased on both public and private land. As of 2009, 1.25 million hectares, or 35% of Nepal's forests, are in the hands of nearly 15,000 forest user groups that comprise nearly 33% of Nepal's population.

Nepal provides one of the most striking examples of how the application of national community forestry programs can achieve dramatic increases in forest cover. Community forestry has not only reduced deforestation and forest degradation – it has begun to reverse it in some parts of the country, while proving itself as a potential vehicle to address other socioeconomic issues such as poverty alleviation.

Today, community forestry in Nepal is embracing its new potential role as a vehicle for carrying out climate change mitigation and adaptation activities. Nepal's three decades

of community forest management have resulted in the creation of systems and arrangements that will be needed to implement forest carbon activities. Community forestry offers:

- Strong local grassroots capacity to manage forests;
- Demonstrated positive contribution to poverty reduction;
- Institutionalized sustainable management of community forests; and
- Existing mechanisms for multi-stakeholder coordination and benefit-sharing, which can be adapted/improved for REDD.

Forest carbon financing presents a potential opportunity to sustain and expand the achievements made in community forestry over the last 30 years. As addressing climate change is now a major priority for the Government of Nepal, there is optimism that the role of forest user groups in forest management will be formally acknowledged in the country's constitution.

However, much needs to be done before Nepal and its community forestry can embark on a mutually beneficial relationship with forest carbon financing.

Prepare communities for REDD

Communities will have to undertake new kinds of forest management activities to fulfil REDD requirements as outlined by the UNFCCC. A bottom-up process of preparation and capacity building is needed to build readiness to conduct the necessary forest carbon inventories and Monitoring, Reporting, and Verification.

State engagement with the private sector

There is no forest carbon financing without finance, and Nepal will need to develop its strategy for engaging the private sector. The role of the State, working in cooperation with communities, will be vital for attracting private sector funding by ensuring that carbon financing incentives for forest protection, sustainable management, and carbon stock enhancement achieve maximum results.

Putting the plus in REDD

The move from REDD to REDD+ will make an enormous difference to countries such as Nepal that have already made strides in reducing deforestation and increasing their forest cover. Nepal will only benefit from REDD if agreements include REDD+ mechanisms. Nepal seeks to scale-up community forestry, and bring even more of its forest under community management. If REDD+ is agreed upon, not only will it help mitigate climate change, it will provide support for communities to continue the work of the past three decades – conserving, restoring, and sustainably managing Nepal's forests for future generations.

Vietnam Cao Phong A/R CDM project

Project collaborators

- 🗼 JICA
- Cao Phong District People's Committee
- Vietnam Forestry University
- 🛊 Honda Vietnam

The Cao Phong Afforestation/Reforestation CDM project is the first of its kind in Vietnam. Located a two hour drive west of Hanoi, the project aims to reforest just over 300 hectares of hilly terrain and provide income to local people through timber and carbon sales.

The original forest was cleared in the late 1970s to make way for intensive cropping, which ultimately led to degradation and eventual abandonment except for some grazing and shifting cultivation. The project, which began in late 2008, will run for 16 years – time enough to see the first harvest of the two species selected for the plantation (*Acacia mangium* and *A. auriculiformis*).

Three hundred and twenty households have rights to the land, and under the project are responsible for planting, tending, protecting, and various other plantation management duties. In return for their labour, households will receive 50% of revenue from carbon credit sales and 75% of proceeds from the timber.

On day two of the Forum, participants visited the site to discuss the project with farmers, project staff, and donors. Tree planting was well underway, and the local farmers involved had also planted green fodder around the site fringes for grazing, and helped install biogas tanks in the community to reduce fuel wood consumption.

Forum participants reported that it was quite apparent that the farmers lacked a solid understanding of the project. This was indicated by a lack of clarity in answers when farmers were asked about their specific responsibilities and the benefit-sharing arrangements under the project. It was uncertain what level of involvement farmers had in project design; it was indicated that they had participated in selecting the plantation species, but not in the design of the benefit-sharing model.

The project's funders, the Forest Development Fund, informed Forum participants that a primary concern was balancing the risks and opportunities faced by the project. On one hand, the site's original condition and available opportunities for local income generation made it ideal for A/R CDM. On the other hand, difficulties arose regarding ownership, commitment, and sustainability, as well as through the high costs of carbon validation.

Project staff expressed their surprise that the application process for A/R CDM projects was not as challenging as originally thought, though validation proved more difficult. Participants felt that the project would struggle to be cost-effective, with updated projections revealing low economic returns from the timber and carbon sales. Simply, at this small scale, it was felt the transaction costs were far too high to offset investment, which included nearly 3.5 billion dong (around US\$200,000) from Honda Vietnam.

Some of the key lessons participants identified included:

- Significant financial and technical support from donors may be required to help offset high transaction costs and make the project cost-effective.
- Key local level stakeholders should be involved from the beginning as much as possible, especially in clarifying roles and benefits.
- Careful consideration needs to be given to manage the differences between stakeholders, such as the information they possess, their goals, and their motivation.



Call for Action

On the final afternoon of the Forum, a Call for Action was debated and drafted, distilling what participants perceived as key actions needed to ensure community issues and concerns are properly considered in carbon financing initiatives. The Call for Action reflects a collective regional understanding of the opportunities, risks, and constraints posed by carbon financing and a roadmap for best expressing and addressing these.

Forum participants called for:

National governments to:

- Ensure community interests are represented during multi-stakeholder discussions involving communities, NGOs, UNFCCC delegates, and other key stakeholders.
- Make the national position on forests and carbon financing clear and transparent, including engaging media to raise public understanding and stimulate debate.
- Use regional mechanisms (e.g. ASEAN, SAARC) to develop consensus among countries.

- Accelerate the process of clarifying fair and secure access rights for local people to benefit from forests.
- Increase community, government, and intermediary capacity to design and implement REDD mechanisms.
- Establish cost-effective, transparent, equitable and 'community friendly' carbon payment systems.

International agencies to:

- Strategically target key information (including the outcomes of this Forum) to decision makers, UNFCCC delegates, and media.
- Provide a bridge between civil society groups in developing countries and UNFCCC delegates from developed countries, making them aware of the implications of carbon financing for local people in the Asia-Pacific.
- Seek to influence country positions, both developing and developed, to ensure that community interests are fully considered and addressed.
- Generate objective knowledge to inform policy making and implementation, and build capacity to research, analyze, disseminate, and use knowledge effectively at country levels.
- Strengthen South-South cooperation for capacity building and information sharing on matters of forests and climate change.
- Encourage both developed and developing country governments to fulfill their commitments and obligations to support REDD-readiness in developing countries.

Civil society to:

- Facilitate national and sub-national civil society consultations, working closely with national governments to prepare for the COP15 negotiations and beyond.
- Mobilize key groups with special interests and skills including religious organizations and academia as strategic partners to influence the debate.
- Review the negotiating text for future climate change arrangements, providing timely and constructive feedback promoting community interests.

Private sector to:

- Maximize transparency in forestry and carbon financing arrangements to build trust among stakeholders.
- Adopt clearly defined social responsibility roles, particularly promoting the concept of more socially responsible carbon trading.



Moving into action

The Forum continues to stimulate work on, and raise awareness about, the social implications of carbon financing initiatives. Hopefully, this will be reflected in the final design and implementation of mechanisms such as REDD+, and help them to realize not only environmental goals, but social and economic opportunities too.

Shortly after the Forum and in response to the Call for Action, RECOFTC organized two events to raise awareness on the linkages between local people and carbon financing. Both were held in Bangkok during the UNFCCC's climate negotiations in the first week of October 2009.

One was a social evening that directly brought together UNFCCC delegates from the region with civil society representatives from the REDD-Net initiative.¹ The informal structure of this event was designed to foster dynamic interaction and opportunities for relationship building between these two key stakeholder groups.

The other was a press event for media, the public, and RECOFTC partners, held on October 1 at the Foreign Correspondents Club of Thailand. The event "Unlocking climate change mitigation: Do local people hold the key?" saw the launch of a brief of the same title² and resulted in coverage by print and online media.

Visit www.redd-net.org to find out about this initiative.

² To view this document, go to www.recoftc.org and click on publications.

Key speakers from the Forum attended as expert panellists to share their thoughts and to respond to questions from the floor. Here are some highlights:

Local people make or break forest management. If we have learned anything during the last 25-30 years, it is that we need to be very thorough in involving local people in forest management. Without that, we set ourselves up for failure. We've experienced the failure of top-down decision making, but we have also learned how to bring in stakeholders to the process and effectively influence decision making.

Patrick B. Durst, Senior Forestry Officer, FAO Regional Office for Asia and the Pacific

For the past 50 years the world has really failed in managing forests. The ones making decisions have looked at them only in terms of a single commodity – timber...the forest custodians have been excluded from making decisions on how forests should be managed. Vicky Tauli-Corpuz, Chair, UN Permanent Forum on Indigenous Issues

The many big failures in forest protection and biodiversity conservation have been because local people's needs, aspirations, skills, and knowledge were, quite simply, ignored. In Nepal, community forestry has transformed about a million hectares of largely degraded forests into much healthier ecosystems. This means more carbon capture, increased biodiversity, and more forest resources for local livelihoods. Ben Vickers, RECOFTC – The Center for People and Forests

RECOFTC

PO Box 1111, Kasetsart Post Office Bangkok 10903, Thailand Tel: +66 (0)2 940 5700 Fax: +66 (0)2 561 4880 Email: info@recoftc.org Website: www.recoftc.org

FAO

Regional Office for Asia and the Pacific Forestry Technical Department Group 39 Phra Atit Road, Bangkok 10200, Thailand Tel: +66 (0)2 697 4000 Fax: +66 (0)2 697 4445 Email: patrick.durst@fao.org Website: www.fao.org/world/regional/rap/forestry.asp

FSSP

Forest Sector Support Partnership Coordination Office 3rd floor, Building A8, No. 10 Nguyen Cong Hoan St. Ba Dinh Dist., Hanoi, Vietnam Tel: (84-4) 3762.9412 Fax: (84-4) 3771.1431 Email: van.fssp@hnvnnvn Website: www.vietnamforestry.orgvn







