



When REDD+ goes national

A review of realities, opportunities and challenges

Leo Peskett and Maria Brockhaus

- The development of national REDD+ strategies has progressed. Common challenges include establishing appropriate national institutions that link into ongoing processes; ensuring high level government commitment; achieving strong coordination within governments and between state and non-state actors; designing mechanisms to ensure participation and benefit sharing; and establishing monitoring, reporting and verification (MRV) systems.
- The different agendas of actors involved in policy formulation at the national level reflect those at the international level. Conflicting interests could make it difficult to overcome the key challenges and hamper coordination, which could reduce efficiency in formulating and implementing REDD+ actions.
- Issues such as participation, land tenure and other reforms are key issues in developing effective REDD+. But it is unclear to what extent these are mere rhetoric or whether they represent genuine motivation to address such issues the context of REDD+.

The politics of REDD+

Concerns about climate change at the international level have resulted in massive interest in tackling the drivers of deforestation and degradation. But REDD+ is also fast becoming a reality in national politics and on the ground. Despite the broad consensus over the role of forest emissions in global climate change, there is much less agreement over how emissions should be included as part of a global climate agreement and what national efforts are needed for REDD+ to make a difference.

Disagreements reflect different concerns and agendas. Concerns among developing countries with respect to an international REDD+ mechanism vary from the possible negative impacts on economic growth and loss of national sovereignty, to being left out of future compensation mechanisms because of the terms on which they will be established. Developed-country concerns range from the need to tap into the low-cost abatement potential of REDD+, to the environmental integrity and economic implications of including REDD+ within mechanisms such as international carbon markets. Critics in several areas have voiced concerns about potentially large financial flows leading to misuse, corruption, displacement of poor or indigenous people and possibly perverse incentives (Griffiths 2007; Lawlor *et al.* 2009). The result is a multitude of debates at different scales of what REDD+ could and should be.

Moving from the international to the national policy arena, we find a similar diversity in the debates. REDD+ strategies and policies are currently being formulated in a number of countries. Some REDD+ policy decisions are induced by international actors such as the UN-REDD Programme and the Forest Carbon Partnership Facility (FCPF) managed by the World Bank. Others derive from the design of Readiness Plan Idea Notes (R-PINs) and Readiness Preparation Proposals (R-PPs). Domestic REDD+ debates are similarly shaped by a variety of more or less powerful actors, operating at different scales and embedded among markets, hierarchies, coalitions, networks and the state. The debates are driven by a multitude of interests, strategies and 'beliefs'. To fully understand the outputs and outcomes of the REDD+ policy process, we must analyse the 'discourse, political interests and the agency of multiple actors' (Keeley and Scoones 1999; see also Hajer 1996).

This chapter first briefly describes the various agendas that have arisen in the global REDD+ debate. The main part of the chapter is a review of processes within REDD+ countries, with snapshots of the realities in Bolivia, Cameroon, Indonesia, Tanzania and Vietnam. We seek to address such questions as:

- What is shaping REDD+ at the national level, besides nationally translated international negotiations and debates?
- In which directions are the early national REDD+ strategies moving?

- What are the key challenges in developing and implementing such strategies and policies?

The REDD+ game: Who is playing and why?

Political decision-making processes rarely produce optimal outcomes. They are not controlled by formal Weberian political and administrative hierarchies, nor do they follow neo-economic ideas of purely market-organised supply and demand. Rather, the process of public policy is embedded in a decentralised network of well – or less-well – organised interests and actors at multiple levels, both governmental and nongovernmental (Mayntz 1993; Schneider 2003). Policy making is not always solution oriented or evidence based. Policy making around REDD+ is no exception, whether internationally or nationally, and will not always lead to the most effective, efficient and equitable REDD+ policy decisions.

Formal discussions at the international level initially focused primarily on technical and methodological issues. However, few issues are purely technical and they have been rapidly translated into political bargaining. New issues, particularly related to the magnitude and sources of international funding for REDD+, have also moved high on the REDD+ agenda. At the international level, the REDD+ debate is commonly divided into a number of key areas of contention (see also Chapter 2; Angelsen 2008b; Meridian Institute 2009a):

- **Scope:** relative emphasis of deforestation and degradation *vs.* carbon stock enhancement; types of activities to be accounted for; forest definitions; inclusion of sustainable forest management; natural regeneration; and afforestation and reforestation;
- **Scale:** level of accounting and crediting to be recognised in an international agreement; sub-national *vs.* national *vs.* nested approaches;
- **Financial mechanisms:** funding sources and delivery mechanisms (different international funds *vs.* carbon market integration *vs.* hybrid solutions, such as auctioning Assigned Amounts Units); governance and institutional structure of international REDD+ finance; level of funding required to implement REDD+;
- **Reference levels:** criteria and procedures to use for establishing reference levels; ‘rewarding high deforestation’ by using historical baselines; interpretation of ‘national circumstances’; interpretation of the principle of ‘common but differentiated responsibilities’;
- **Participation of indigenous people and local communities:** type and extent of safeguards to be included and appropriate benefit-sharing arrangements; and
- **Co-benefits:** relative emphasis on climate benefits *vs.* co-benefits, in particular poverty alleviation and sustainable development.

These areas of contention have emerged because the main actors in the debate – governments in developed and developing countries, international organisations, NGOs, the private sector and local and indigenous groups – hold different positions. The positions reflect interests and goals that stretch far beyond climate goals, and they influence the key debates on the global REDD+ architecture and their potential outcomes. These include the direct economic benefits of participating in REDD+, concerns about cost efficiency and environmental integrity, national sovereignty, perceptions of fairness and social justice, and public relations and relationship with political constituencies (see Table 3.1).

To add to this complexity, questions are increasingly being asked about the linkages between REDD+ and broader climate change mitigation architecture, in particular nationally appropriate mitigation actions (NAMAs), the types of funding sources and mechanisms that could be used to support REDD+, and how MRV of both support and actions is handled (von der Goltz 2009).

The result has broadened the REDD+ debate to incorporate different agendas. This is seen in the expanding scope from avoided deforestation, through RED and REDD, toward REDD+, and proposals such as the ‘phased approach’ (Chapter 2), which in some ways relaxes the rules surrounding REDD+, enhancing participation and postponing some difficult decisions.

While debates about REDD+ at the national level are, in general, far less mature, many of the same actors are involved and similar drivers appear to dominate the emerging discourses. However, added layers of complexity need to be understood for how they may affect successful implementation. Finer disaggregation of actors such as governments is particularly important. They cannot be seen as one unit, but rather as a set of different actors with individual interests and an individual mix of drivers for their involvement in REDD+. The interplay between international, national and subnational actors is also an increasingly important issue. The following section outlines some of the important debates and issues in five early-starting REDD+ countries.¹

When REDD+ enters national politics

Snapshots from Bolivia, Cameroon, Indonesia, Tanzania and Vietnam (Boxes 3.1–3.5) outline key processes and challenges in national REDD+ processes. The case studies reflect ongoing debate and discourse in these countries among the different actors with interests in REDD+. These include: different government institutions at national and subnational levels; international, national and local environment and development NGOs; affected communities;

¹ In addition to being early starters, these countries were selected mainly because they are included in a global comparative research project on REDD+ by CIFOR and partners. Other countries might be equally or more advanced in their national REDD+ processes.

Table 3.1. Interests in the REDD+ agenda and their influence on different actors' positions on some key aspects of REDD+

Drivers	Influence on actors' positions on key REDD+ building blocks
Economic benefits	<ul style="list-style-type: none"> • Drives many developing country governments with low deforestation rates and high degradation to expand the scope from avoided deforestation to REDD+ • Drives conservation NGOs because of links to financing protected areas, biodiversity conservation etc., and to include forest conservation • Drives private sector positions on using systems based on markets and projects • May drive some local communities and indigenous people to engage with REDD+ because of the perceived benefits
Cost efficiency	<ul style="list-style-type: none"> • Drives many developed country government positions on the use of offsets and the interest in market-based systems for REDD+ (see FCCC/KP/AWG/2009/MISC.1, page 39), but also avoids transfers beyond actual costs of REDD+ • Drives private sector positions on the use of project-based systems for REDD+, which may be easier than working through governments (IETA 2009)
Environmental integrity	<ul style="list-style-type: none"> • Drives opposition from anti-market NGOs to the use of offsets and market-based systems (e.g., Bullock <i>et al.</i> 2009) • Drives positions on the scope of REDD+ in relation to sustainable forest management including logging or conversion to plantations
National sovereignty	<ul style="list-style-type: none"> • Drives many developing country government positions on offsets, scale, safeguards relating to indigenous peoples and development of MRV systems involving third parties
Fairness and social justice	<ul style="list-style-type: none"> • Drives pro-market NGO positions on the use of social safeguards for co-benefits in REDD+ (e.g., The Nature Conservancy 2009) • Drives anti-market NGO opposition to offsets and market-based approaches • Drives local and indigenous peoples' concerns for the development of social safeguards and co-benefit approaches in project and programme design
Political positioning , public relations	<ul style="list-style-type: none"> • Drives some developed country government positions (e.g., the EU in relation to NGO lobby and desire to be seen as progressive; Bozmoski and Hepburn 2009) on use of offsets and market systems. Also a key impetus for developing country governments positions on co-benefits and socio-economic development • Positive public relations drives private sector interest in systems (e.g., standards) to demonstrate co-benefits

the private sector; and international donor organisations. The snapshots give an indication of the different priorities given to specific policy issues.

The five countries differ in important ways. They cover different stages on the forest transition curve (see Box 1.2). Bolivia could be considered as being early in its forest transition, with more than 50% forest cover and relatively medium rates of deforestation (FAO 2007). Indonesia, Tanzania, Cameroon and Vietnam all have forest cover on 40% to 50% of their land, but Indonesia has had much higher rates of deforestation during the past two decades. Tanzania and Cameroon have lower rates, but above average rates of tropical deforestation, while Vietnam has reported an increase in overall forest cover (although deforestation is still occurring at subnational levels).

The governance systems also differ, but all have gone through or are in the midst of decentralisation processes, except Cameroon, where decentralisation is still in a very early stage). Tanzania has a long history of decentralised planning. In Indonesia, this process has been underway for a decade but is facing challenges, especially in the forest sector. Bolivia began a decentralisation process in the 1990s but has seen recent changes toward market sceptical governance systems, which will also affect its position in international REDD+ debates. Vietnam is in a process of decentralisation, but power and planning authorities have not yet fully arrived at the local level. The country's governance structure still remains rather centralised, but efforts to empower local communities are underway.

Box 3.1. REDD+ realities in Bolivia

Peter Cronkleton and Bernardo Peredo-Videa

Although Bolivia was an early starter in national REDD strategy development, institutional and political shifts have significantly reoriented the country's policy. Since 2006 Bolivia's government has advocated a strong role for forests in international climate change negotiations. In early 2008, Bolivia submitted an R-PIN to the Forest Carbon Partnership Facility developed by a technical committee consisting of representatives of the National Climate Change Programme (NCCP) in collaboration with NGOs and civil society. Toward the end of 2008, the government of Evo Morales more forcefully asserted policy positions that questioned the regulatory power of markets and the underlying capitalist logic supporting such market beliefs.

In 2009, the government's stronger policy orientation dramatically changed the course of the national REDD strategy and shifted institutional

responsibilities for REDD. The government's new position rejected participation in market-based REDD mechanisms; instead, the strategy will rely on fund-based approaches. This stand provoked some criticism from departmental and municipal governments that had anticipated benefits from REDD markets.

Developing a coherent national REDD process under the new institutional structure will be a challenge because responsibility for climate change and forests has been split between ministries. The Ministry of Environment and Water is the focal point for REDD, specifically through the Vice Ministry of Environment, Biodiversity and Climate Change, where the NCCP is now housed. Forestry issues are under the mandate of the Ministry of Rural Development and Lands through the Vice Ministry of Forest Management and Development. The roles and jurisdictions of participating agencies are not entirely clear, and much effort will be needed to avoid contradictory actions, replication or intra-agency conflict. As of mid-2009, the NCCP, restaffed after the institutional shift, was working to define responsibilities and programmes in alignment with the government's strategy.

Progress in defining forest property rights is facilitating policy making. Bolivia's 1996 tenure reform law formally recognises indigenous communal properties (TCOs), and a new forestry law promoting sustainable forest management recognises some rights of private and communal landowners to forest resources. Nevertheless, work remains to finalise reforms and consolidate new property rights.

There are also initiatives to implement subnational REDD demonstration activities. A prominent one is the 'Subnational Indigenous REDD Programme in the Bolivian Amazon' organised by the NGO FAN and the national indigenous federation CIDOB. The high-profile role of CIDOB reflects its long history as a representative organisation, but also the fact that indigenous people control substantial forest area. The initiative, funded by the Moore Foundation and the Dutch and Danish governments, will involve 6 million hectares in three TCOs, six municipal governments and national agencies responsible for forest monitoring. Bolivia also hosts the Noel Kempff Project, one of the world's early avoided deforestation projects, funded by the private sector and implemented by The Nature Conservancy.

The final scope and design of the Bolivia REDD strategy are uncertain, but the government's commitment to smallholders and indigenous people gives reason for some optimism.

Comparing REDD+ realities: What can we learn?

The country snapshots highlight common themes emerging in evolving REDD+ systems. Recurring issues are scope, scale and financial mechanisms, as debated at the international level, but the national focus tends to be much more on how and by whom REDD+ is implemented, and related benefit sharing. In this comparative analysis, we critically review those themes by highlighting some of the interests driving the national processes, and discuss the challenges associated with the trends in the emerging REDD+ realities.

Box 3.2. REDD+ realities in Indonesia

Daniel Murdiyarso

The earliest step in the Indonesian REDD+ process was the formation of the Indonesian Forest–Climate Alliance (IFCA) before COP13 in Bali in December 2007. Supported by several bilateral donors (e.g., GTZ, DFID, AusAID) and the World Bank, the multistakeholder group built a national framework for long-term implementation and to identify outstanding methodological issues.

Indonesia took up the challenge to enhance its preparedness by developing policies and strategies to implement REDD+ at the national level by engaging with multilateral initiatives, such as the Forest Carbon Partnership Facility and the UN-REDD programme.

These early efforts, particularly during the IFCA process, have led to the establishment of a regulatory framework and national institutions, including the National Council for Climate Change (NCCC) under the President's Office and the REDD Committee under the Ministry of Forestry. But their performance and effectiveness, in relation to their authority and coordinating roles, are untested. The commitment of the different government agencies involved is dependent on – and often limited by – the formal mandate they have. Coordination across government agencies, coordination between central and local governments and improvement of institutional capacity remain huge challenges for Indonesia, which started decentralising relatively recently.

In the meantime, three regulations dealing with REDD+ project development, implementation and issuance of permits were enacted to ease the way for project developers, investors and hosts to start crafting their project idea notes, even though the regulation dealing with benefit sharing was contested by a variety of stakeholders including local governments, and might be revised. Since then, a number of pilot projects have been recognised. They

have been developed in protected areas in Central and East Kalimantan provinces with the involvement of the central and provincial governments. However, the government has failed to acknowledge numerous projects initiated by local governments, local NGOs and private companies/financiers, which can potentially implement REDD+ effectively. This is partly because of the late arrival of the regulatory framework and preparedness of institutions to implement REDD.

The largest challenges faced by project developers are related to capacity in implementing the projects. During the preparedness phase, 2009–2012, Indonesia will have to address issues related to the rights and responsibilities of local communities, land tenure insecurity faced by smallholders and forest rent enjoyed by large landholders. This is particularly crucial to ensure equal distribution of forests and carbon benefits. Strengthening tenure systems and clarifying property rights can improve forest governance and raise the incomes of local communities. Nevertheless, some NGOs (e.g., AMAN, Sinar Resmi) have expressed concern that REDD+ could further marginalise forest-dependent people and those with customary rights. Large-scale land acquisition remains a threat to smallholders with no formal legality.

Building capacity in implementing methods to assess carbon stocks (C stocks) and their changes over time to establish reference levels is also crucial. Cost-efficient MRV of C stocks will eventually improve benefits for project hosts. Although there will be a national-level carbon accounting system, known as NCAS, much needs to be done regarding data harmonisation and sharing protocols across participating agencies, the so-called information nodes. The infrastructure for data flow from central to regional and local nodes does not exist. As NCAS is top-down and technology intensive, there is a need to accommodate the participation of local communities in monitoring C stocks with more appropriate technology. Resources available from public funding during the preparedness phase should go toward improving the skills and bargaining position of local communities.

Institutions and links to ongoing policy processes

In most cases international organisations are the primary drivers of activity surrounding REDD+, particularly in relation to the FCPF (in around 40 countries, and all five countries in this chapter), and to a lesser extent to UN-REDD. New institutions that have developed alongside these processes include steering committees, national working groups and councils for climate change. These are often housed within forestry departments, or form subgroups of ministries mandated to deal more broadly with climate change

issues. The countries' processes are also very similar: The main policy tools are the FCPF R-PIN, to qualify for the process, and the R-PP, to detail how finance will be used. Such approaches have had varying levels of success: there are still few R-PPs and some countries, such as Panama and Papua New Guinea, have suffered major setbacks because processes moved ahead too quickly. These strong international drivers and the standardisation of processes raise questions about the degree to which country ownership is being achieved within evolving REDD+ processes.

Box 3.3. REDD+ realities in Vietnam

Minh Ha Hoang Thi and Pham Thu Thuy

The Vietnamese government emphasises that REDD and REDD+ should enhance sustainable forest management, biodiversity conservation and forest carbon stocks, all within current environment and socio-economic development strategies. Since being selected in 2008 as a participant in FCPF, Vietnam has built a REDD road map, which proposes the country's central highlands and the northern central provinces for REDD pilot projects, because of their high rates of deforestation and high density of minority groups. In September 2009, the UN-REDD Programme, supported sharing early lessons learned among ASEAN members to build capacity, especially in countries in the Lower Mekong Basin. It will also establish the central highlands province of Lam Dong as a REDD pilot site.

The road map starts with strengthening coordination among ministries; one of the main constraints identified to implementing payments for environmental services (PES) and REDD in Vietnam were overlaps between the mandates of different ministries and weak cross-sectoral coordination. The Ministry of Natural Resources and Environment is the national focal agency for climate change activities in Vietnam, whereas governmental capacities for REDD are seated in the Department of Forestry at the Ministry of Agriculture and Rural Development (MARD). Although mandate division between the two ministries is clear and could potentially ease coordination, it may create difficulties in making any cross-sectoral action happen.

REDD in Vietnam is managed by a Climate Change Mitigation and Adaptation steering committee under MARD. A REDD National Network and working group have been established to enable the wider participation of stakeholders. The ongoing consultation process to plan REDD has only included central government bodies, with few consultations in the pilot areas or other sections of the public. Indigenous people, including ethnic minorities, however, are often at the centre of the discussions because it is recognised that the success of REDD projects depends on the application of

lessons from earlier upland programmes on how to empower indigenous people. International organisations support this interest, especially those that have been actively involved in REDD consultation, networking and method development processes, such as JICA, World Agroforestry Centre, CIFOR, Winrock International, GTZ, RECOFTC and SNV. Yet the government seems to perceive these activities, especially those driven by international and national NGOs, to be opposing government-led REDD activities.

The REDD strategy proposes that payments be channelled to three groups: forest-dependent rural communities, natural resource management boards and local forest protection and enforcement agencies. Disbursement of payments to communities will be linked to inventory work and REDD success. The plan is for payments to be directed toward officially recognised groups (so far only government bodies) even at the community level. Nevertheless, it is unclear whether the benefit-sharing mechanism developed by the government will be based on performance or fixed payments. Vietnam lacks supportive policies, mechanisms and tested guidelines to achieve an effective, transparent and practical payment system to individual households. Several actions are planned to tackle these challenges with support from donors such as Norad, GTZ, USDA and the EU.

Other challenges, as noted in Vietnam's R-PIN, include the lack of tenure clarity, lack of money for tenure allocation programmes, high opportunity costs for land conversion and limited data on deforestation trends because of the lack of coordination and technology within the governmental departments. Data on deforestation trends in Vietnam are lacking and inaccurate for many reasons, including fragmentation of existing monitoring systems across government departments; application of low-resolution remote-sensing data in forest cover mapping; weaknesses in forest cover reporting systems from the local to the national level; and inconsistent use of forest classification systems between forest inventory cycles. Discussions underway include plans for local community groups to conduct monitoring to feed into national statistics (to be audited by the national REDD group) once tenure allocation to minorities has taken place.

Harmonisation of REDD+ with other environment and development strategies has emerged as a theme both in the snapshots presented here and in other REDD+ countries. Options for ensuring harmonisation are raised formally in many REDD+ planning documents. Existing laws, regulations and policy instruments are being proposed for implementing REDD+. The countries discussed in this chapter are at very different stages with respect to how such harmonisation could work; compare, for example, Bolivia and

Indonesia. The level of activity on REDD+ compared with other aspects of climate change also indicates some disparity between REDD+ and other mitigation sectors. This may raise the risk that REDD+ is not well integrated into broader climate change strategies if and when they emerge.

Pilot projects and demonstration activities are the preferred approach for learning how to develop REDD+. However, confusion is evident in how these can inform future national REDD+ programmes or how 'parallel' approaches, as discussed in the case of Bolivia, link to national approaches. Institutions and a framework to ensure lessons learned from pilots in the countries have not been observed.

Box 3.4. REDD+ realities in Cameroon

Denis Sonwa and Peter Minang

The Cameroon government has expressed strong interest in engaging in REDD+ activities, but related processes are still at a very early stage. Cameroon is also participating in Congo Basin submissions and the Coalition for Rainforest Nations (CFRN). An R-PIN was submitted in 2008, and in June 2009 a 'REDD cellule' was established to coordinate preparing the R-Plan. The committee is headed by the national focal point for the UNFCCC. Cameroon hosts a Central African Forest Commission (COMIFAC) REDD+ pilot project supported by the German Development Bank (KfW) and implemented by GTZ. A new pilot project on payments for environmental systems, implemented by the national Centre for Environment and Development (CED), has also started.

The main drivers of deforestation and degradation in Cameroon are land conversion for agriculture and logging. In an institutional environment which has excellent policies on paper but limited enforcement, expectations are high that REDD+ can reduce deforestation and degradation by providing alternative incomes. However, clarity is needed on who will bear which REDD+ costs and how they will be compensated. However, in a forestry sector with both legal and illegal logging, some resistance to the implementation of REDD+ can be expected. As with other countries in the Congo Basin, Cameroon is receiving great interest from Asian logging companies.

Indigenous people's rights to land and trees is one issue needing clarification, because of overlapping and conflicting customary and statutory rights. National and international NGOs have limited influence in forest policy making, but they have been very active in highlighting the rights of

communities and voicing environmental concerns (e.g., on the construction of the Chad Cameroon Pipeline). Civil society organisations have also been active in REDD+ capacity-building activities.

As in other countries in the Congo Basin, Cameroon faces difficulties in terms of capacity (human and technical) for MRV across all levels. Proposals suggest participatory MRV at the local level. Lessons on planning and implementing management plans in community forests can provide insights that could be useful in MRV. The CED is already working with indigenous people to use GPS technology to map forest landscapes. The ASB consortium has generated relevant basic ecological information and economic analyses (opportunity costs and tradeoffs for REDD) of deforestation and land use and land cover change analysis for the humid forest zone of Cameroon. The Centre National de Cartographie and forest department could be useful in generating some basic information, but in general the country needs support in for improved MRV.

The current forest tax payment scheme is viewed as a possible financial distribution mechanism that can provide lessons for future REDD+ benefit sharing, with its 50–40–10 principle: 50% of the income goes to the national administration, 40% to the communal office and 10% is directly managed by rural communities living around the logging area.

Coordination across ministries is a precondition for successful REDD+ implementation. The Ministry of Environment and Protection is in charge of climate change and the Ministry of Forests and Wildlife is in charge of forest management; both are represented in the REDD cell. But the exclusion of ministries such as Finance, Agriculture, Mining and Planning could lead to cross-ministerial conflicts and limit the potential for success. The multistakeholder steering committee of the project REDD-KFW-GTZ-MINEP-COMIFAC can serve as an example for future coordination.

Coordination and commitment

Coordination and level of government commitment emerges as a key challenge in all cases, with coordination between ministries a particular focus in national REDD+ processes. Coordination between international and national actors and between national and subnational actors features less prominently, although this will be key for REDD+ success (Chapters 5, 9 and 14).

Government commitment and coordination. High level commitment to REDD+ and strong cross-sectoral coordination are likely to be prerequisites for

successful REDD+ implementation. Some governments have made REDD+ a priority with strong involvement from key ministries such as finance, while in others, ensuring meaningful participation from important sectors such as agriculture and mining is proving difficult. In many cases there appears to be limited high level commitment for REDD+. Forest Commissions and other agencies that represent the country in the UNFCCC or FCPF push for REDD+, but there is limited support at Cabinet level.

There have been significant efforts to enhance coordination in most cases, with the establishment of cross-ministry coordination processes for REDD+. However, changes in government policies (e.g., decentralisation or new institutional structures established for dealing with climate change) may cause coordination problems. For example, responsibilities for climate change and forests are split between ministries in many countries. These divisions may be exacerbated by differences in interests between different parts of government. Even within ministries, REDD+ may lead to tensions, for example, between production and conservation branches, where REDD+ could be construed as a threat to business as usual.

Similar issues play out between different levels of government. The case of Indonesia illustrates the ongoing challenges in authority and power sharing between central and local governments.

Box 3.5. REDD+ realities in Tanzania

Pius Z. Yanda

At the international level, the Tanzanian government is calling for an approach to REDD+ that 'establishes a pathway to engage in voluntary nationally appropriate mitigation actions (NAMAs) by developing countries in the context of sustainable development' (FCCC/AWGLCA/2009/MISC.1/Add.4). Tanzania sees a strong alignment between REDD+ and national development goals, including poverty reduction. The emphasis is on developing an inclusive approach to REDD+ that takes into account national circumstances in terms of scope of emissions sources included, baseline setting and capacity to monitor, report and verify. There are concerns, however, that little is known about the demand side of carbon markets and REDD+ could end up like the Clean Development Mechanism (CDM), which has yielded few benefits for the country so far. Safeguards need to be created to ensure price stability if markets are used. Other sources of financing will be required to support REDD, particularly in the short term.

At the national level, REDD+ discussions are rapidly leading to action. The Norwegian government has been a key driver of REDD processes, giving financial support of NOK 500 million (US \$90 million) over five years (2008–2012), with 20% of this given to the UN-REDD Programme in 2009. REDD+ is administered by a National REDD Task Force (established under the broader National Climate Change Steering Committee), which is in charge of developing a national strategy for REDD. A Trust Fund for REDD, a semi-autonomous National Carbon Monitoring Centre (NCCM) and new integrated methods to quantify co-benefits are proposed. There is an emphasis on linking these to existing policies and processes, including participatory forest management, fire management systems and sustainable harvesting.

Participatory processes are being used to develop the strategy involving stakeholder consultations at zonal, district and local levels. At the local level, the focus is on forest-dependent communities, particularly those that have been practising participatory forest management. Other stakeholders' engagements include consultation with public and private sectors. There will also be in-depth interactions with forest-dependent communities during the annual meeting of the network of forest-dependent communities in Tanzania (MJUMITA). NGO pilot projects are also engaging with rural communities in various parts of the country. One of these is the Tanzania Forest Conservation Group, which plans to implement REDD+ through the existing Participatory Forest Management institutions, with around 18% of funding going directly to communities depending on their performance in reducing emissions. All these interactions will provide inputs useful for the development of the national REDD+ strategy.

There are major challenges to overcome to develop a REDD+ strategy that contributes to the goals of sustainable management of forest resources and poverty reduction. The greatest challenges include:

- establishing baselines with a paucity of accurate historical data;
- developing internal benefit-sharing systems for funds that pass through government;
- overcoming land tenure issues particularly relating to poorly demarcated 'general land' that may leave villages susceptible to external investment pressures; and
- addressing drivers of deforestation while enhancing livelihoods of the rural communities that depend on natural resources for their livelihoods.

State versus non-state actors: The greatest tensions arise perhaps in differences in position between state and non-state actors. The main concerns are from civil society organisations over the risk of further marginalisation in terms of rights and tenure related to REDD+ and who will hold the power in terms of managing and distributing benefits. The state still dominates many of the current national REDD+ proposals.

Similar challenges are arising between the positions of the state and the private sector. This emerges mainly in the area of subnational versus national approaches to REDD+. In some cases, the state has yet to recognise subnational approaches, has been slow to develop regulations surrounding these approaches (only Indonesia has such regulations) or is actively opposed to market systems in which the private sector could feature more prominently (e.g., Bolivia). In some cases, subnational demonstration projects are being developed in parallel with national strategies. This may be partly due to international and local pressure to develop workable demonstrations, but it is unclear how coordination may work between national and subnational approaches, which could raise further difficulties.

There are also differences in the positions of international and state actors in the development of REDD+, which may raise difficulties for overcoming implementation challenges. For example, in the cases of Vietnam and Cameroon, it is implied that donor and international NGO interests surrounding the discourse on participation, benefit sharing and tenure security could undermine the development of national strategies for REDD+, unless carefully managed.

Regional and international coordination between governments that may be suppliers of REDD+ emissions reductions or not subject to emissions caps (e.g., regional trade in Asia affecting REDD+ implementation in Vietnam, or Chinese private sector interests in investing in logging operations in Cameroon) is a key issue that has seemingly received little attention as yet.

Benefit sharing and participation

Participation and rights, particularly of indigenous peoples and local forest stewards, are among the most prominent issues in national REDD+ processes. These concerns have primarily been driven by international NGOs and national civil society organisations. They fear that existing efforts to preserve forests will not be recognised in REDD+ systems, that governments will retain financial benefits for themselves or, worse, that new risks will be introduced (e.g., incentives for much more heavy-handed forest protection related to REDD+). The country cases, especially Indonesia, Vietnam and Bolivia, highlight that these risks are real.

Formal processes for benefit sharing have not been discussed in detail in most cases, although different approaches are becoming apparent in national plans. One of the apparent tensions is over the role of government and non-government structures. For example, proposals in Vietnam and Indonesia have raised concerns about benefits either not reaching local levels or being allocated through ineffective government systems at the local level. But, as noted in Chapter 12, expectations about the magnitude of future REDD+ benefits and rents to share might well be unrealistically high.

An interesting trend is that in most of the countries, the focus of REDD+ is very much on forests, with benefit sharing, for example, being managed through existing community forestry arrangements or PES-type systems. There appears to be less discussion about the broader reforms that may be implemented under REDD+ (e.g., in agriculture or energy). These need to be considered in benefit sharing systems, as do their implications, such as their welfare effects. There is also a tendency to talk about 'payments' and channelling performance-related finance from national to local levels, whereas in fact many of the benefits and costs from REDD+ may be non-pecuniary.

At a macrolevel, countries differ in their positions on market-based and fund-based systems. This is particularly apparent comparing Bolivia, which has rejected market-based approaches, and Indonesia, which have embraced a market approach. But these basic observations become more complicated when looking at the realities. The Noel Kempff Project, for example, is an operating market-based system in Bolivia. It is not clear how governments view the role they would play in implementing market-based approaches, but in countries such as Vietnam, current proposals would see a strong role for the state in terms of interacting with markets and channelling finances to in-country projects and probably in terms of interacting with markets, if market approaches are adopted; in Indonesia, however, the regulations appear to allow for more direct market interaction.

In the five countries discussed here, and in most REDD+ countries, significant emphasis is placed on participatory development of REDD+ systems. Processes and systems have tried to enhance participation, particularly in the development of national designs related to FCPF and the UN-REDD Programme. There have been some concerns about how representative these processes are, given that in some cases they have tended to be dominated by government representatives (e.g., Vietnam), have involved large numbers of external consultants (e.g., Indonesia) and have not been held in areas where REDD+ will actually be implemented. Nonetheless, in most cases there are plans to further develop consultation processes and build capacity at the local level.

Monitoring, reporting and verification systems (MRV)

Data availability and technical capacities to measure and monitor emissions reductions are clearly a key issue for all countries. There is recognition that existing systems are inadequate and that capacity to develop and administer such systems needs to be enhanced. National systems under development are likely to take a long time to evolve to the level where REDD+ can be implemented with accuracy; consider the cases of Indonesia and Vietnam, for example. Cameroon faces major human capacity shortages.

The countries presented here are looking toward a role for participatory MRV approaches for carbon stocks, partly to increase participation and partly to improve MRV systems more quickly from the bottom up (see Chapter 8). Such approaches have been piloted in many countries, but they may only be applicable once land allocation has occurred (e.g., Vietnam) and with significant public investments in training and appropriate technology. Unresolved differences over forest definitions (i.e., which forest types are applicable under REDD+), which can significantly affect benefits and their distribution, are another key barrier that needs to be overcome in most countries before debates about implementing MRV can be carried out.

Moving ahead with REDD+ at the national level

The approaches and associated challenges emerging across all countries involved in developing REDD+ are proving similar. Most prominent among these are the evolving institutions, and challenges relating to coordination and high level government commitment, benefit sharing, participation and MRV systems. Some of the main differences relate to government positions on international issues such as market-based and fund-based approaches and the rate at which they are moving forward in terms of ongoing policy challenges. REDD+ debates at the national level have also become embedded in political and institutional realities in the individual countries, and are therefore starting to gain unique national flavours.

Economic benefits are a key driver in national debates, with high expectations from many actors (including government, private sector, NGOs and communities), and competition for benefits despite a lack of clarity about what they will be (see Chapter 12). Fairness and social justice, a key impetus behind the positions of some NGOs, have also prominently entered national debates. International actors are a major impetus for REDD+ development at the national level and bring an additional set of interests, such as the need for cost-effective and rapid climate change solutions, which may arguably be less prominent without their presence. It is clear that the interests of powerful

actors with high expectations will have to be balanced to achieve effectiveness, efficiency and equity.

Despite some agreement on the main challenges to be overcome to make REDD+ a reality, these different drivers and positions of different actors may make this difficult. This is particularly the case surrounding the issue of coordination, where the signs are that the differences between actors are pulling the implementation of REDD+ in a number of different directions.

More fundamental is the question of how far the attention (or lack of attention) to certain issues is representative of action. For example, the issue of participation is getting high levels of attention in REDD+ processes and national strategies. This is welcomed from an equity standpoint, but the evidence from existing REDD+ processes suggests it is questionable how much participation is being achieved. From an environmental standpoint, the fact that the underlying drivers of deforestation (particularly macro-economic drivers) do not appear to be at the forefront of debates in the countries reviewed may also be an indication of interests and priorities detached from climatic core objectives of the REDD+ debate.

What is the prognosis for moving ahead with REDD+ at the national level? Progress may be slower than first anticipated in many countries given the coordination problems, uncertainty about what the international REDD+ architecture will look like, the power struggles that are likely to continue to emerge and the processes required to overcome those struggles. In the international debate, such issues have to some extent been dealt with by broadening the agenda to incorporate different interests and the development of compromise solutions that postpone decisions or transfer them to the national level, rather than resolving major differences. At the national level, where the realities of REDD+ implementation are much closer, this is not an option. To ensure that all actors needed for implementing REDD+ are engaged, difficult compromises will have to be made which may see narrowing of the application of REDD+, slowing down certain processes and finding innovative ways to balance different interests.

References

- Adeney, J. M., Christensen Jr, N. L. and Pimm, S. L. 2009 Reserves protect against deforestation fires in the Amazon. *PLoS ONE* 4(4): e5014.
- Agrawal, A. 2001 Common property institutions and sustainable governance of resources. *World Development* 29(10): 1649-1672.
- Agrawal, A. 2005 *Environmentality*. Duke University Press, Raleigh, NC, USA. 344p.
- Agrawal, A. 2007 Forests, governance, and sustainability: common property theory and its contributions. *International Journal of the Commons* 1(1): 51-76.
- Agrawal, A., Chhatre, A. and Hardin, R. 2008 Changing governance of the world's forests. *Science* 320(5882): 1460-1462.
- Agrawal, A. and Gibson, C. C. 1999 Enchantment and disenchantment: the role of community in natural resource conservation. *World Development* 27(4): 629-649.
- Agrawal, A. and Goyal, S. 2001 Group size and collective action: third-party monitoring in common-pool resources. *Comparative Political Studies* 34(1): 63-93.

- Agrawal, A. and Ostrom, E. 2001 Collective action, property rights, and decentralization in resource use in India and Nepal. *Politics and Society* 29(4): 485-514.
- Agrawal, A. and Redford, K. 2009 Conservation and displacement: an overview. *Conservation and Society* 7(1): 1-10.
- Ählström, J. and Sjöström, E. 2005 CSOs and business partnerships: strategies for interaction. *Business Strategy and the Environment* 14(4): 230-240.
- Alencar, A., Nepstad, D. and Vera-Diaz, M. C. 2006 Forest understory fire in the Brazilian Amazon in ENSO and non-ENSO years: area burned and committed carbon emissions. *Earth Interactions* 10 (Paper No. 6).
- Alencar, A., Solorzano, L. and Nepstad, D. C. 2004 Modeling forest understory fires in an eastern Amazonian landscape. *Ecological Application* 14(4): 139-149.
- Alston, L., Libecap, G. and Mueller, B. 1999 Titles, conflict, and land use: the development of property rights and land reform on the Brazilian Amazon frontier. University of Michigan Press, Ann Arbor, MI, USA.
- Alvarado, L. X. R. and Wertz-Kanounnikoff, S. 2007 Why are we seeing 'REDD'? An analysis of the international debate on reducing emissions from deforestation and degradation in developing countries. *Analyses*. Institut du développement durable et des relations internationales, Paris. 28p.
- Amsberg, J. V. 1998 Economic parameters of deforestation. *World Bank Economic Review* 12(1): 133-153.
- Anaya, S. J. and Grossman, C. 2002 The case of *Awas Tingni v. Nicaragua*: a new step in the international law of indigenous peoples. *Arizona Journal of International and Comparative Law* 19(1): 1-15.
- Andam, K. S., Ferraro, P. J. and Holland, M. B. 2009 What are the social impacts of land use restrictions on local communities? Empirical evidence from Costa Rica. Paper contributed to the Conference of the International Association of Agricultural Economists. Beijing, China, 16-22 August 2009.
- Andam, K. S., Ferraro, P. J., Pfaff, A., Sanchez-Azofeifa, G. A. and Robalino, J. A. 2008 Measuring the effectiveness of protected area networks in reducing deforestation. *Proceedings of the National Academy of Sciences* 105(42): 16089-16094.
- Anderson, K. 2009 Distorted agricultural incentives and economic development: Asia's experience. *World Economy* 32(3): 351-384.
- Andersson, K. P. and Gibson, C. C. 2004 Decentralization reforms: help or hindrance to forest conservation? Draft presented to the Conference on

- the International Association of Common Property (IASCP) in Oaxaca, Mexico, 9-13 August.
- Andersson, K. and Gibson, C. C. 2007 Decentralized governance and environmental change: local institutional moderation of deforestation in Bolivia. *Journal of Policy Analysis and Management* 26(1): 99-123.
- Angelsen, A. 1999 Agricultural expansion and deforestation: modelling the impact of population, market forces and property rights. *Journal of Development Economics* 58: 185-218.
- Angelsen, A. 2007 Forest cover change in space and time: combining von Thünen and the forest transition. World Bank Policy Research Working Paper 4117. The World Bank, Washington, DC.
- Angelsen, A. 2008a How do we set the reference levels for REDD payments? *In: Angelsen, A. (ed.) Moving ahead with REDD: issues, options and implications*, 53-64. CIFOR, Bogor, Indonesia.
- Angelsen, A. (ed.) 2008b *Moving ahead with REDD: issues, options and implications*. CIFOR, Bogor, Indonesia. 156p.
- Angelsen, A. and Kaimowitz, D. 1999 Rethinking the causes of deforestation: lessons from economic models. *World Bank Research Observer* 14(1): 73-98.
- Angelsen, A. and Kaimowitz, D. (eds) 2001 *Agricultural technologies and tropical deforestation*. CAB International, Wallingford, UK.
- Angelsen, A. and Wertz-Kanounnikoff, S. 2008 What are the key design issues for REDD and the criteria for assessing options? *In: Angelsen, A. (ed.) Moving ahead with REDD: issues, options and implications*. CIFOR, Bogor, Indonesia.
- Angelsen, A., Streck, C., Peskett, L., Brown, J. and Luttrell, C. 2008 What is the right scale for REDD? *In: Angelsen, A. (ed.) Moving ahead with REDD: issues, options and implications*, 31-40. CIFOR, Bogor, Indonesia.
- Antal, M. J. and Gronli, M. 2003 The art, science, and technology of charcoal production. *Industrial & Engineering Chemistry Research* 42(8): 1619-1640.
- Applegate, G., Putz, F. E. and Snook, L. K. 2004 Who pays for and who benefits from improved timber harvesting practices in the tropics: lessons learned and information gaps. CIFOR, Bogor, Indonesia.
- Araujo, C., Bonjean, C. A., Combes, J.-L., Combes Motel, P. and Reis, E. J. 2009 Property rights and deforestation in the Brazilian Amazon. *Ecological Economics* 68(8-9): 2461-2468.
- Arifin, B. 2005 Institutional constraints and opportunities in developing environmental service markets: lessons from institutional studies on RUPES in Indonesia. World Agroforestry Centre, Bogor, Indonesia.

- Arnold, J. E. M. and Stewart, W. C. 1991 Common property resource management in India. Oxford Forestry Institute, University of Oxford, Oxford.
- Arnold, J. E. M., Kohlin, G. and Persson, R. 2006 Woodfuels, livelihoods, and policy interventions: changing perspectives. *World Development* 34(3): 596-611.
- Arriagada, R. A. 2008 Private provision of public goods: applying matching methods to evaluate payments for ecosystem services in Costa Rica. PhD dissertation. North Carolina State University, Raleigh, NC, USA.
- Asner, G. P., Knapp, D. E., Broadbent, E. N., Oliveira, P. J. C., Keller, M. and Silva, J. N. 2005 Selective logging in the Brazilian Amazon. *Science* 310(5747): 480-482.
- Asquith, N. M., Vargas Ríos, M. T. and Smith, J. 2002 Can forest-protection carbon projects improve rural livelihoods? Analysis of the Noel Kempff Mercado climate action project, Bolivia. *Mitigation and Adaptation Strategies for Global Change* 7(4): 323-337.
- Auld, G., Gulbrandsen, L. H. and McDermott, C. L. 2008. Certification schemes and the impacts on forests and forestry. *Annual Review of Environment and Resources* 33: 187-211.
- Baland, J.-M. and Platteau, J.-P. 1996 Halting degradation of natural resources: is there a role for rural communities? Food and Agriculture Organization of the United Nations, Rome. 423p.
- Baland, J.-M. and Platteau, J.-P. 1999 The ambiguous impact of inequality on local resource management. *World Development* 27(5): 773-788.
- Ballesteros, M. A., Nakhooda, S. and Werksman, J. 2009 Power, responsibility, and accountability: re-thinking the legitimacy of institutions for climate finance. WRI Working Paper. World Resources Institute, Washington, DC. 57p. Available from: <http://www.wri.org>.
- Bandiaky, S. 2008 Gender inequality in Malidino Biodiversity Reserve, Senegal: political parties and the 'village approach'. *Conservation and Society* 6(1): 62-73.
- Banerjee, O., Macpherson, A. J. and Alavalapati, J. 2009 Toward a policy of sustainable forest management in Brazil: a historical analysis. *The Journal of Environment Development* 18(2): 130-153.
- Barber, C. V. and Schweithelm, J. 2000 Trial by fire: forest fires and the forestry policy in Indonesia's era of crisis and reform. World Resources Institute, Washington, DC.
- Barbier, E. B., Damania, R. and Léonard, D. 2005 Corruption, trade and resource conversion. *Journal of Environmental Economics and Management* 50(2): 276-299.

- Barnett, T. E. 1990 The Barnett report: a summary of the report of the commission of inquiry into aspects of the timber industry in Papua New Guinea. Asia-Pacific Action Group, Hobart, Tasmania.
- Barr, C. A., Dermawan, A., Purnomo, H. and Komarudin, H. In press. Financial governance and Indonesia's reforestation fund: a political economic analysis of lessons for REDD. CIFOR, Bogor, Indonesia.
- Barrett, C. B. and Arcese, P. 1995 Are integrated conservation–development projects (ICDPs) sustainable? On the conservation of large mammals in Sub-Saharan Africa. *World Development* 23(7): 1073-1084.
- Bauen, A. and Kaltschmitt, M. 2001 Reduction of energy related CO₂ emissions – the potential contribution of biomass. *In: Proceedings of 1st World Conference on Biomass for Energy and Industry, Sevilla, Spain, 5-9 June 2000, Vol. II, 1354-1357.*
- Becker, G. S. 1968 Crime and punishment: an economic approach. *Journal of Political Economy* 76(2): 169.
- Becker, L. C. 2001 Seeing green in Mali's woods: colonial legacy, forest use, and local control. *Annals of the Association of American Geographers* 91(3): 504-526.
- Benecke, G., Friberg, L., Lederer, M. and Schröder, M. 2008 From public–private partnership to market: the clean development mechanism (CDM) as a new form of governance in climate protection. Sonderforschungsbereich, Berlin.
- Benneer, L. S. and Coglianese, C. 2005 Measuring progress: program evaluation of environmental policies. *Environment: Science and Policy for Sustainable Development* 47(2): 22-39.
- Bennett, M. T. 2009 Markets for ecosystem services in China. An exploration of China's 'eco-compensation' and other market-based environmental policies. *Forest Trends, Washington, DC.* 86p.
- Bento, A., Towe, C. and Geoghegan, J. 2007 The effects of moratoria on residential development: evidence from a matching approach. *American Journal of Agricultural Economics* 89(5): 1211-1218.
- Bertault, J.-G. and Sist, P. 1997 An experimental comparison of different harvesting intensities with reduced-impact and conventional logging in East Kalimantan, Indonesia. *Forest Ecology and Management* 94(1-3): 209-218.
- Bezemer, D. and Headey, D. 2008 Agriculture, development, and urban bias. *World Development* 36(8): 1342-1364.
- Bhattacharya, S. C. and Abdul Salam, P. 2002 Low greenhouse gas biomass options for cooking in the developing countries. *Biomass and Bioenergy* 22(4): 305-317.

- Biermann, F., Chan, S., Mert, A. and Pattberg, P. 2007 Multi-stakeholder partnerships for sustainable development: does the promise hold? *In*: Glasbergen, P., Biermann, F. and Mol, A. (eds) Partnerships, governance and sustainable development: reflections on theory and practice. Edward Elgar, Cheltenham, UK.
- Bond, I., Grieg-Gran, M., Wertz-Kanounnikoff, S., Hazlewood, P., Wunder, S. and Angelsen, A. 2009 Incentives to sustain forest ecosystem services: a review and lessons for REDD. Natural Resources Issues No. 16. International Institute for Environment and Development, London with CIFOR, Bogor, Indonesia and World Resources Institute, Washington, DC. 47p.
- Boserup, E. 1965 The conditions of agricultural growth. The economics of agrarian change under population pressure. Aldine, Chicago, IL, USA.
- Bozmoski, A. and Hepburn, C. 2009 The interminable politics of forest carbon: an EU outlook. Background paper for forest carbon finance summit 2009: making forest carbon markets work. Washington, DC. 6-8 March 2009.
- Brandon, K., Redford, K. and Sanderson, S. (eds) 1998 Parks in peril: people, politics, and protected areas. Island Press, Covelo, CA, USA.
- Bray, D. B., Ellis, E. A., Armijo-Canto, N. and Beck, C. T. 2004 The institutional drivers of sustainable landscapes: a case study of the 'Mayan Zone' in Quintana Roo, Mexico. *Land Use Policy* 21(4): 333-346.
- Broadhead, J., Bahdon, J. and Whiteman, A. 2001 Woodfuel consumption modeling and results. Annex 2. *In*: Past trends and future prospects for the utilization of wood for energy. GFPOS/WP/05, global forest products outlook study. Food and Agriculture Organization of the United Nations, Rome.
- Brock, K. and Coulibaly, N. G. 1999 Sustainable rural livelihoods in Mali. IDS Research Report No. 35. Institute of Development Studies, Brighton, UK.
- Brockington, D., Igoe, J. and Schmidt-Soltau, K. 2006 Conservation, human rights, and poverty reduction. *Conservation Biology* 20(1): 250-252.
- Brondizio, E. S. 2008 The Amazonian Caboclo and the Açaí palm: forest farmers in the global market. New York Botanical Garden Press, New York.
- Brown, D., Seymour, F. and Peskett, L. 2008 How do we achieve REDD co-benefits and avoid doing harm? *In*: Angelsen, A. (ed.) Moving ahead with REDD: issues, options and implications, 107-118. CIFOR, Bogor, Indonesia.

- Brown, G. M. 2000 Renewable natural resource management and use without markets. *Journal of Economic Literature* 38(4): 875-914.
- Brown, K. and Pearce, D. W. E. 1994 The causes and consequences of tropical deforestation: the economic and statistical analysis of factors giving rise to the loss of tropical forests. UBC Press, London. 338p.
- Bruce, J. 1998 Learning from comparative experience with agrarian reform. Presented to International Conference on Land Tenure in the Developing World. Cape Town, South Africa, 27–29 January 1998.
- Bruner, A. G., Gullison, R. E., Rice, R. E. and Fonseca, G. A. B. da 2001 Effectiveness of parks in protecting tropical biodiversity. *Science* 291: 125-128.
- Brunswick Research 2009 WWF 2009 forest carbon investor survey: research summary. Available from: http://assets.panda.org/downloads/2009_forest_carbon_investor_research_report.pdf (12 Nov. 2009).
- Bullock, S., Childs, M. and Picken, T. 2009 A dangerous distraction. Why offsetting is failing the climate and people: the evidence. Friends of the Earth, London.
- Bulte, E. H., Damania, R. and López, R. 2007 On the gains of committing to inefficiency: corruption, deforestation and low land productivity in Latin America. *Journal of Environmental Economics and Management* 54(3): 277-295.
- Börner, J., Wunder, S., Wertz-Kanounnikoff, S., Rüginitz-Tito, M., Pereira, L. and Nascimento, N. In press. Direct conservation payments in the Brazilian Amazon: scope and equity implications. *Ecological Economics* in press.
- Campbell, A., Miles, L., Lysenko, I., Hughes, A. and Gibbs, H. 2008 Carbon storage in protected areas: technical report. The United Nations Environment Programme World Conservation Monitoring Centre, Cambridge, UK.
- Campbell, B. M. (ed.) 1996 The Miombo in transition: woodlands and welfare in Africa. CIFOR, Bogor, Indonesia.
- Casson, A. and Obidzinski, K. 2007 From new order to regional autonomy: shifting dynamics of illegal logging in Kalimantan, Indonesia. In: Tacconi, L. (ed.) *Illegal logging: law enforcement, livelihoods and the timber trade*. Earthscan, London.
- Cavendish, W. 2000 Empirical regularities in the poverty–environment relationship of rural households: evidence from Zimbabwe. *World Development* 28(11): 1979-2000.
- CCBA 2008 Climate, community and biodiversity project design standards. 2nd ed. The Climate, Community, and Biodiversity Alliance, Arlington,

- VA, USA. Available from: http://www.climate-standards.org/standards/pdf/ccb_standards_second_edition_december_2008.pdf.
- Cerbu, G., Minang, P., Swallow, B. and Meadu, V. 2009 Global survey of REDD projects: what implications for global climate objectives? ASB Policy Brief No. 12. ASB Partnership for the Tropical Forest Margins, Nairobi, Kenya. Available from: www.asb.cgiar.org.
- Cerutti, P. O. and Tacconi, L. 2008 Forests, illegality, and livelihoods: the case of Cameroon. *Society & Natural Resources* 21(9): 845-853.
- Cerutti, P. O., Nasi, R. and Tacconi, L. 2008 Sustainable forest management in Cameroon needs more than approved forest management plans. *Ecology and Society* 13(2): 36.
- CGD 2009 Cash on delivery: progress-based aid for education. Center for Global Development. Available from: http://www.cgdev.org/section/initiatives/_active/codaaid (12 Nov. 2009).
- Chapin, M., Lamb, Z. and Threlkeld, B. 2005 Mapping indigenous lands. *Annual Review of Anthropology* 34: 619-638.
- Charnley, S. and Poe, M. 2007 Community forestry in theory and practice: where are we now? *Annual Review of Anthropology* 32: 301-336.
- Chazdon, R. L. 2008 Beyond deforestation: restoring forests and ecosystem services on degraded lands. *Science* 320(5882): 1458-1460.
- Chhatre, A. 2007 Accountability in decentralization and the democratic context: theory and evidence from India. Representation, Equity and Environment Working Paper No. 23. World Resources Institute, Washington, DC.
- Chhatre, A. and Agrawal, A. 2008 Forest commons and local enforcement. *Proceedings of the National Academy of Sciences* 105(36): 13186-13191.
- Chhatre, A. and Agrawal, A. 2009 Trade-offs and synergies between carbon storage and livelihood benefits from forest commons. *Proceedings of the National Academy of Sciences* 106(42): 17667-17670.
- Chidumayo, E. N. 1989 Land use, deforestation and reforestation in the Zambian Copperbelt. *Land Degradation and Development* 1(3): 209-216.
- Chomitz, K. M., Buys, P., De Luca, G., Thomas, T. and Wertz-Kanounnikoff, S. 2007 At loggerheads? Agricultural expansion, poverty reduction, and environment in the tropical forests. A World Bank Policy Research Report. The World Bank, Washington, DC.
- Coad, L., Campbell, A., Clark, S., Bolt, K., Roe, D. and Miles, L. 2008 Protecting the future: carbon, forests, protected areas and local livelihoods. Revised ed. The United Nations Environment Programme World Conservation Monitoring Centre, Cambridge, UK.

- Colchester, M. 2006 Forest peoples, customary use and state forests: the case for reform. Paper to 11th Biennial Congress of the International Association for the Study of Common Property. Bali, Indonesia. 19-22 June 2006.
- Colchester, M. 2007 Beyond tenure: rights-based approaches to people and forests: some lessons from the Forest Peoples Programme. Paper to the International Conference on Poverty Reduction in Forests: Tenure, Markets and Policy Reforms, Bangkok, Thailand, 3-7 September 2007. Forest Peoples Programme, London.
- Colchester, M., Boscolo, M., Contreras-Hermosilla, A., Del Gatto, F., Dempsey, J., Lescuyer, G., Obidzinski, K., Pommier, D., Richards, M., Sembiring, S. N. *et al.* 2006 Justice in the forest: rural livelihoods and forest law enforcement. CIFOR, Bogor, Indonesia.
- Colfer, C. J. P. 2005 The complex forest: communities, uncertainty, and adaptive collaborative management. Resources of the Future, Washington, DC and CIFOR, Bogor, Indonesia. 370p.
- Collomb, J. G. and Bikie, H. 2001 1999–2000 Allocation of logging permits in Cameroon: fine-tuning central Africa's first auction system. Global Forest Watch Cameroon and World Resources Institute, Washington, DC.
- Contreras, A. 2003 Creating space for local forest management: the case of the Philippines. *In*: Edmunds, D. and Wollenburg, E. (eds) Local forest management: the impacts of devolution policies, 127-149. Earthscan, London.
- Contreras-Hermosilla, A. 1997 The 'cut-and-run' course of corruption in the forestry sector. *Journal of Forestry* 95: 33-36.
- Contreras-Hermosilla, A. 2000 The underlying causes of forest decline. Occasional Paper No. 30. CIFOR, Bogor, Indonesia.
- Contreras-Hermosilla, A. and Vargas Rios, M. T. 2002 Social, environmental and economic dimensions of forest policy reforms in Bolivia. *Forest Trends*, Washington, DC and CIFOR, Bogor, Indonesia.
- Conyers, D. 2001 Whose elephants are they? Decentralization of control over wildlife management through the CAMPFIRE programme in Binga District, Zimbabwe. Working Paper No. 31. World Research Institute, Washington, DC.
- Cooke, P., Köhlin, G. and Hyde, W. F. 2008 Fuelwood, forests and community management – evidence from household studies. *Environment and Development Economics* 13(01): 103-135.
- Coomes, O. T., Grimard, F., Potvin, C. and Sima, P. 2008 The fate of the tropical forest: carbon or cattle? *Ecological Economics* 65(2): 207-212.

- Corbera, E., Kosoy, N. and Martínez Tuna, M. 2007 Equity implications of marketing ecosystem services in protected areas and rural communities: case studies from Meso-America. *Global Environmental Change* 17(3-4): 365-380.
- Costello, C., Gaines, S. D. and Lynham, J. 2008 Can catch shares prevent fisheries collapse? *Science* 321(5896): 1678-1681.
- Cotula, L., Vermeulen, S., Leonard, R. and Keeley, J. 2009 Land grab or development opportunity? Agricultural investment and international land deals in Africa. International Institute for Environment and Development, London and Food and Agriculture Organization of the United Nations and International Fund for Agricultural Development, Rome. 120p. Available from: <ftp://ftp.fao.org/docrep/fao/011/ak241e/ak241e.pdf>.
- Coughenour, C. 2003 Innovating conservation agriculture: the case of no-till cropping. *Rural Sociology* 68(2): 278-304.
- Cronkleton, P., Pacheco, P., Iburguen, R. and Albornoz, M. A. 2009 Reformas en la tenencia de la tierra y los bosques: la gestión comunal en las tierras bajas de Bolivia. CIFOR and Centro de Estudios para el Desarrollo Laboral y Agrario, La Paz, Bolivia.
- Crook, R. C. and Sverrisson, A. S. 2001 Decentralization and poverty-alleviation in developing countries: a comparative analysis, or is West Bengal unique? IDS Working Paper No. 130. Institute of Development Studies Brighton, UK.
- Culas, R. J. 2007 Deforestation and the environmental Kuznets curve: an institutional perspective. *Ecological Economics* 61(2-3): 429-437.
- Curran, L. M., Trigg, S. N., McDonald, A. K., Astiani, D., Hardiono, Y. M., Siregar, P., Caniago, I. and Kasischke, E. 2004 Lowland forest loss in protected areas of Indonesian Borneo. *Science* 303(5660): 1000-1003.
- Dachang, L. and Edmunds, D. 2003 The promises and limitations of devolution and local forest management in China. *In*: Edmunds, D. and Wollenburg, E. (eds) *Local forest management: the impacts of devolution policies*, 20-54. Earthscan, London.
- Dahal, G. R., Larson, A. M. and Pacheco, P. In press. Outcomes of reform for livelihoods, forest condition and equity. *In*: Larson, A. M., Barry, D., Dahal, G. R. and Colfer, C. J. P. (eds) *Forests for people: community rights and forest tenure reform*. Earthscan, London.
- Damania, R., Fredriksson, P. G. and List, J. A. 2003 Trade liberalization, corruption, and environmental policy formation: theory and evidence. *Journal of Environmental Economics and Management* 46(3): 490-512.
- Danielsen, F., Burgess, N. D., Balmford, A., Donald, P. F., Funder, M., Jones, J. P. G., Alviola, P., Balete, D. S., Blomley, T., Brashares, J.

- et al.* 2009 Local participation in natural resource monitoring: a characterization of approaches. *Conservation Biology* 23(1): 31-42.
- Davis, C., Daviet, F., Nakhooda, S. and Thuault, A. 2009 A review of 25 readiness plan idea notes from the World Bank Forest Carbon Partnership Facility. WRI Working Paper. World Resources Institute, Washington, DC.
- de Graaf, N. R. 2000 Reduced impact logging as part of the domestication of neotropical rainforest. *International Forestry Review* 2(1): 40-44.
- de Jong, W. 2001 The impact of rubber on the forest landscape in Borneo. *In: Angelsen, A. and Kaimowitz, D. (eds) Agricultural technologies and tropical deforestation.* CAB International, Wallingford, UK.
- de Mendonça, M. J. C., Vera Diaz, M. d. C., Nepstad, D., Seroa da Motta, R., Alencar, A., Gomes, J. C. and Ortiz, R. A. 2004 The economic cost of the use of fire in the Amazon. *Ecological Economics* 49(1): 89-105.
- de Sherbinin, A. 2002 A guide to land-use and land-use cover change (LUCC). A collaborative effort of SEDAC and the IGBP/IHDP LUCC Project. Columbia University, New York. http://sedac.ciesin.columbia.edu/tg/guide_frame.jsp?rd=LU&ds=1 (1 Nov. 2009).
- DeFries, R., Hansen, A., Newton, A. C. and Hansen, M. C. 2005 Increasing isolation of protected areas in tropical forests over the past twenty years. *Ecological Applications* 15(1): 19-26.
- Dietz, T., Ostrom, E. and Stern, P. C. 2003 The struggle to govern the commons. *Science* 302(5652): 1907-1912.
- Djogo, T. and Syaf, R. 2003 Decentralization without accountability: power and authority over local forest governance in Indonesia. *In: Suryanata, D., Fox, J. and Brennan, S. (eds) Issues of decentralization and federation in forest governance: proceedings from the Tenth Workshop on Community-based Management of Forestlands, 9-25.* East-West Center, Honolulu, Hawaii.
- Dugan, P. C., Durst, P. B., Ganz, D. J. and McKenzie, P. J. 2003 Advancing assisted natural regeneration (ANR) in Asia and the Pacific. FAO Regional Office for Asia and the Pacific, Bangkok, Thailand.
- Durst, P. B., McKenzie, P. J., Brown, C. L. and Appanah, S. 2006 Challenges facing certification and eco-labelling of forest products in developing countries. *International Forestry Review* 8(2): 193-200.
- Dutschke, M. 2009 The climate stabilization fund: global auctioning of emission allowances to help forests and people. *In: Filho, W. L. and Mannke, F. (eds) Interdisciplinary aspects of climate change, 103-120.* Peter Lang Scientific, Frankfurt and New York.

- Dutschke, M. and Wertz-Kanounnikoff, S. 2008 Financing REDD: linking country needs and financing sources. Infobrief No.17. CIFOR, Bogor, Indonesia.
- Dutschke, M., Wertz-Kanounnikoff, S., Peskett, L., Luttrell, C., Streck, C. and Brown, J. 2008 Mapping potential sources of REDD financing to different needs and national circumstances. CIFOR, Bogor, Indonesia, Amazon Environmental Research Institute, Brasilia, and Overseas Development Institute, London.
- Dykstra, D. and Elias 2003 RIL becomes real in Brazil. International Tropical Timber Organization Tropical Forest Update 13/4.
- Ebeling, J. and Yasué, M. 2009 The effectiveness of market-based conservation in the tropics: forest certification in Ecuador and Bolivia. *Journal of Environmental Management* 90(2): 1145-1153.
- EC 2008 Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Com(2008) 645/3. European Commission, Brussels.
- Echavarría, M., Vogel, J., Albán, M. and Meneses, F. 2004 The impacts of payments for watershed services in Ecuador. *Markets for Environmental Services* 4. International Institute for Environment and Development, London. 61p.
- EcoSecurities 2009 The forest carbon offsetting survey 2009. EcoSecurities, Dublin, Ireland. Available from: http://www.ecosecurities.com/Standalone/Forest_Carbon_Offsetting_Trends_Survey_2009/default.aspx.
- Elbow, K., Furth, R., Knox, A., Bohrer, K., Hobbs, M., Leisz, S. and Williams, M. 1998 Synthesis of trends and issues raised by land tenure country profiles of West African countries, 1996. *In*: Bruce, J. (ed.) *Country profiles of land tenure: Africa, 1996*. Research Paper No. 130. Land Tenure Center, University of Wisconsin, Madison, WI, USA. Available from: http://pdf.wri.org/ref/elbow_98_synthesis.pdf (1 Nov. 2009).
- Elías, S. and Whittman, H. 2005 State, forest and community: decentralization of forest administration in Guatemala. *In*: Pierce, C. and Capistrano, D. (eds) *The politics of decentralization: forests, power and people*, 282-296. Earthscan, London.
- Eliasch, J. 2008 Climate change: financing global forests. The Eliasch review. Office of Climate Change, London.
- Ellsworth, L. and White, A. 2004 Deeper roots: strengthening community tenure security and community livelihoods. Ford Foundation, New

- York. Available from: http://www.fordfound.org/pdfs/impact/deeper_roots.pdf.
- Elmqvist, T., Pyykönen, M., Tengö, M., Rakotondraso, F., Rabakonandrianina, E. and Radimilahy, C. 2007 Patterns of loss and regeneration of tropical dry forest in Madagascar: the social institutional context. *PLoS ONE* 2(5): e402.
- Evans, J. and Turnbull, J. W. 2004 *Plantation forestry in the tropics: the role, silviculture, and use of planted forests for industrial, social, environmental, and agroforestry purposes*. 3rd ed. Oxford University Press, Oxford. 467p.
- Ezzine de Blas, D. and Ruiz Pérez, M. 2008 Prospects for reduced impact logging in Central African logging concessions. *Forest Ecology and Management* 256(7): 1509-1516.
- Fan, C. S., Lin, C. and Treisman, D. 2009 Political decentralization and corruption: evidence from around the world. *Journal of Public Economics* 93(1-2): 14-34.
- FAO 1985 *Tropical forestry action plan*. Food and Agriculture Organization of the United Nations, Rome. <http://www.ciesin.columbia.edu/docs/002-162/002-162.html>.
- FAO 2001 *State of the world's forests 2001*. Food and Agriculture Organization of the United Nations, Rome.
- FAO 2005 *Best practices for improving law compliance in the forestry sector*. Forestry Paper No. 145. Food and Agriculture Organization of the United Nations, Rome.
- FAO 2006 *Global forest resource assessment 2005. Progress towards sustainable forest management*. Food and Agriculture Organization of the United Nations, Rome.
- FAO 2009a FAOSTAT. Food and Agricultural Organization of the United Nations, Rome. <http://faostat.fao.org/default.aspx> (22 Sep. 2009).
- FAO 2009b FAOSTAT. Food and Agriculture Organization of the United Nations, Rome. <http://faostat.fao.org/site/626/default.aspx#ancor> (9 Oct. 2009).
- FAO 2009c *Forest tenure assessment*. Food and Agriculture Organization of the United Nations, Rome. <http://www.fao.org/forestry/tenure/en/> (1 Nov. 2009).
- Ferraro, P. 2009 Regional review of payments for watershed services: Sub-Saharan Africa. *Journal of Sustainable Forestry* 28(3-4): 525-550.
- Ferraro, P. J. and Pattanayak, S. K. 2006 Money for nothing? A call for empirical evaluation of biodiversity conservation investments. *PLoS Biology* 4(4): 482-488.

- Finley-Brook, M. 2007 Indigenous land tenure insecurity fosters illegal logging in Nicaragua. *International Forestry Review* 9(4): 850-864.
- Fitzpatrick, D. 2006 Evolution and chaos in property rights systems: the third world tragedy. *Yale Law Journal* 115: 996-1048.
- Forest Carbon Partnership Facility (FCPF) 2009 REDD implementation framework. Presented to Global Dialogues on R-PP Preparation, 13–14 August. (www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Oct2009/Day%202_2%20REDD_Implementation_Framework.pdf).
- Forest Peoples Programme (FPP) 2008 The Forest Carbon Partnership Facility: facilitating the weakening of indigenous peoples' rights to lands and resources. Forest Peoples Programme, Moreton-in-Marsh, UK.
- Forest Peoples Programme (FPP) 2007 Making FPIC – free, prior and informed consent – work: challenges and prospects for indigenous peoples. FPIC Working Papers. Forest Peoples Programme, Moreton-in-Marsh, UK.
- Forsyth, T. 2007 Promoting the 'development dividend' of climate technology transfer: can cross-sector partnerships help? *World Development* 35(10): 1684-1698.
- Forsyth, T. and Walker, A. 2008 Forest guardians, forest destroyers: the politics of environmental knowledge in northern Thailand. University of Washington Press, Seattle, WA, USA.
- Fox, J. 2002 Siam mapped and mapping in Cambodia: boundaries, sovereignty, and indigenous conceptions of space. *Society and Natural Resources* 15: 65-78.
- Fox, J. 2008 The production of forests: tree cover transitions in Thailand, Laos, and southern China. Paper to the Social Life of Forests conference. University of Chicago, Chicago, IL, USA, May 2008.
- Friends of the Earth 2009 Cana Bois: plundering protected areas in Cameroon for the European market. Friends of the Earth, Yaoundé, Cameroon.
- Fronzel, M. and Schmidt, C. M. 2005 Evaluating environmental programs: the perspective of modern evaluation research. *Ecological Economics* 55(4): 515-526.
- Gaston, K. J., Jackson, S. F., Cantú-Salazar, L. and Cruz-Piñón, G. 2008 The ecological performance of protected areas. *Annual Review of Ecology, Evolution, and Systematics* 39(1): 93-113.
- Gaveau, D. L. A., Epting, J., Lyne, O., Linkie, M., Kumara, I., Kanninen, M. and Leader-Williams, N. 2009 Evaluating whether protected areas reduce tropical deforestation in Sumatra. *Journal of Biogeography* 36(11): 2165-2175.

- Gebremedhin, B., Pender, J. and Tesfay, G. 2003 Community natural resource management: the case of woodlots in northern Ethiopia. *Environment and Development Economics* 8(1): 129-148.
- GEF 1998 GEF evaluation of experience with conservation trust funds. GEF/C.12/Inf.6. Global Environment Facility, Washington, DC.
- Geist, H. J. and Lambin, E. F. 2001 What drives tropical deforestation? A meta-analysis of proximate and underlying causes of deforestation based on subnational case study evidence. CC Report Series No. 4. Land-Use and Land-Cover Change International Project Office, Louvain-la-Neuve, Belgium. 115p.
- Geist, H. J. and Lambin, E. F. 2002 Proximate causes and underlying driving forces of tropical deforestation. *BioScience* 52(2): 143-150.
- Ghimire, K. B. and Pimbert, M. P. (eds) 1997 Social change and conservation. Earthscan, London. 352p.
- Gibbs, H. K., Brown, S., Niles, J. O. and Foley, J. A. 2007 Monitoring and estimating tropical forest carbon stocks: making REDD a reality. *Environmental Research Letters* 4(2): 045023.
- Gibson, C. C., Williams, J. T. and Ostrom, E. 2005 Local enforcement and better forests. *World Development* 33(2): 273-284.
- Giglio, L., Csizsar, I., Restás, Á., Morisette, J. T., Schroeder, W., Morton, D. and Justice, C. O. 2008 Active fire detection and characterization with the advanced spaceborne thermal emission and reflection radiometer (ASTER). *Remote Sensing of Environment* 112(6): 3055-3063.
- Glasbergen, P. 2007 Setting the scene: the partnership paradigm in the making. *In: Glasbergen, P., Biermann, F. and Mol, A. (eds) Partnerships, governance and sustainable development: reflections on theory and practice*, 1-25. Edward Elgar, Cheltenham, UK.
- Global Witness 2009 Honest engagement: transparency and civil society participation in REDD. Global Witness, London.
- GOFC-GOLD 2009 Reducing greenhouse gas emissions from deforestation and degradation in developing countries: a sourcebook of methods and procedures for monitoring, measuring and reporting, GOFC-GOLD Report version COP14-2. GOFC-GOLD Project Office, Natural Resources Canada, Alberta, Canada. <http://www.gofc-gold.uni-jena.de/redd>.
- Goldstein, M. and Udry, C. 2008 The profits of power: land rights and agricultural investment in Ghana. *Journal of Political Economy* 116(6): 981-1022.
- Gould, K. A., Carter, D. R. and Shrestha, R. K. 2006 Extra-legal land market dynamics on a Guatemalan agricultural frontier: implications for neoliberal land policies. *Land Use Policy* 23(4): 408-420

- Government of Vietnam 2008 Readiness plan ideas note (RPIN). The Forest Carbon Partnership Facility Washington, DC. <http://www.forestcarbonpartnership.org/fcp/VN>.
- Granda, P. 2005 Carbon sink plantations in the Ecuadorian Andes: impacts of the Dutch FACE-PROFAFOR monoculture tree plantations' project on indigenous and peasant communities. WRM Series on Tree Plantations No. 1. World Rainforest Movement, Montevideo, Uruguay.
- Grassi, G., Monni, S., Federici, S., Achard, F. and Mollicone, D. 2008 Applying the conservativeness principle to REDD to deal with the uncertainties of the estimates. *Environmental Research Letters* 3(3): 035005.
- Gray, J. A. 2002 Forest concession policies and revenue systems: country experience and policy changes for sustainable tropical forestry. World Bank Technical Paper No. 522. The World Bank, Washington, DC.
- Greenpeace 2007 Carving up the Congo. Greenpeace, London. <http://www.greenpeace.org.uk/media/reports/carving-up-the-congo>.
- Greenpeace 2009 Summary of the 'REDD from the Conservation Perspective' report. Commissioned by Greenpeace from the University of Freiburg Institute of Forest Policy. <http://www.greenpeace.org/raw/content/usa/press-center/reports4/greenpeace-summary-of-the-red.pdf>.
- Griffiths, T. 2005 Indigenous peoples and the World Bank: experiences with participation. Forest Peoples Programme, Moreton-in-Marsh, UK.
- Griffiths, T. 2008 Seeing 'REDD'? Forests, climate change mitigation and the rights of indigenous peoples and local communities. Update for Poznan (UNFCCC COP 14). Forest Peoples Programme, Moreton-in-Marsh, UK.
- Griffiths, T. 2007 Seeing 'RED'? 'Avoided deforestation' and the rights of indigenous peoples and local communities. Forest Peoples Programme, Moreton-in-Marsh, UK. <http://www.forestpeoples.org/>.
- Grindeff, I. 2009. Eco firm pays out for PNG carbon trading. *The Age*, 18 June. <http://news.theage.com.au/breaking-news-world/eco-firm-pays-out-for-png-carbon-trading-20090618-cj1r.html>.
- Grondard, N., Loisel, C., Martinet, A. and Routier, J. B. 2008 Analysis of 7 outstanding issues for the inclusion of tropical forests in the international climate governance. Office National des Forêts, Paris.
- Guariguata, M. R., Cornelius, J. P., Locatelli, B., Forner, C. and Sánchez-Azofeifa, G. A. 2008 Mitigation needs adaptation: tropical forestry and climate change. *Mitigation and Adaptation Strategies for Climate Change* 13(8): 793-808.

- Gupta, G. and Köhlin, G. 2006 Preferences for domestic fuel: analysis with socio-economic factors and rankings in Kolkata, India. *Ecological Economics* 57(1): 107-121.
- Gupta, A. and Siebert, U. 2004 Combating forest corruption: the forest integrity network. *Journal of Sustainable Forestry* 19(1-3): 337-349.
- Gustafsson, O., Krusa, M., Zencak, Z., Sheesley, R. J., Granat, L., Engstrom, E., Praveen, P. S., Rao, P. S. P., Leck, C. and Rodhe, H. 2009 Brown clouds over South Asia: biomass or fossil fuel combustion? *Science* 323(5913): 495-498.
- Hajer, M. 1996 Ecological modernization as cultural politics. *In*: Lash, S., Szerszynski, B. and Wynne, B. (eds) *Risk, environment and modernity: towards a new ecology*, 246-268. Sage, London.
- Hajer, M. and Wagenaar, H. (eds) 2003 *Deliberative policy analysis: understanding governance in the network society*. Cambridge University Press, Cambridge, UK.
- Hamilton, K., Sjardin, M., Shapiro, A. and Marcello, T. 2009 Fortifying the foundation: state of the voluntary carbon markets 2009. Ecosystem Marketplace, New York and New Carbon Finance, Washington, DC. http://ecosystemmarketplace.com/documents/cms_documents/StateOfTheVoluntaryCarbonMarkets_2009.pdf (12 Nov. 2009).
- Hansen, C. P. and Treue, T. 2008 Assessing illegal logging in Ghana. *International Forestry Review* 10(4): 573-590.
- Harvey C., Zerbock O., Papageorgiou S. and Parra A. [in press]. What is needed to make REDD work on the ground? Lessons learned from pilot forest carbon initiatives. Conservation International, Arlington, Virginia, USA.
- Healey, J. R., Price, C. and Tay, J. 2000 The cost of carbon retention by reduced impact logging. *Forest Ecology and Management* 139(1-3): 237-255.
- Henman, J., Hamburg, S. and Vega, A. S. 2008 Feasibility and barriers to entry for small-scale CDM forest carbon projects: a case study from the northeastern Peruvian Amazon. *The Carbon & Climate Law Review* 2(3): 254-263.
- Herold, M. 2009 An assessment of national forest monitoring capabilities in tropical non-Annex I countries: recommendations for capacity building. The Prince's Rainforests Project, London, and the Government of Norway, Oslo, Norway. 62p. http://princes.3cdn.net/8453c17981d0ae3cc8_q0m6vsqxd.pdf (4 Nov. 2009).
- Heyman, J. and Ariely, D. 2004 Effort for payment. A tale of two markets. *Psychological Science* 15(11): 787-793.

- Hofstad, O. 1997 Woodland deforestation by charcoal supply to Dar es Salaam. *Journal of Environmental Economics and Management* 33: 17-32.
- Hofstad, O. 2008 A theoretical analysis of illegal wood harvesting as predation – with two Ugandan illustrations. *Scandinavian Forest Economics* 42: 441-452.
- Holck, M. 2008 Participatory forest monitoring: an assessment of the accuracy of simple cost-effective methods. *Biodiversity and Conservation* 17(8): 2023-2036.
- Holden, S. 2001 A century of technological change and deforestation in the miombo woodlands of northern Zambia. *In: Angelsen, A. and Kaimowitz, D. (eds) Agricultural technologies and tropical deforestation.* CAB International, Wallingford, UK.
- Holland, J. M. 2004 The environmental consequences of adopting conservation tillage in Europe: reviewing the evidence. *Agriculture, Ecosystems & Environment* 103(1): 1-25.
- Holmes, T. P., Blate, G. M., Zweede, J. C., Pereira, R., Barreto, P., Boltz, F. and Bauch, R. 2002 Financial and ecological indicators of reduced impact logging performance in the eastern Amazon. *Forest Ecology and Management* 163(1-3): 93-110.
- Honey-Rosés, J. 2009 Illegal logging in common property forests. *Society & Natural Resources: An International Journal* 22(10): 916-930.
- Huang, M., Upadhyaya, S. K., Jindal, R. and Kerr, J. 2009 Payments for watershed services in Asia: a review of current initiatives. *Journal of Sustainable Forestry* 28(3): 551-575.
- Huther, J. and Shah, A. 2000 Anti-corruption policies and programs: a framework for evaluation. Policy Research Working Paper 2501. The World Bank, Washington, DC.
- Hutton, J. M., Adams, W. M. and Murombedzi, J. C. 2005 Back to the barriers? Changing narratives in biodiversity conservation. *Forum for Development Studies* 17: 365-380.
- Ibrekk, H. O. and Studsrød, J. E. 2009 Review of the embassy's development assistance portfolio: environment and climate change. 'Greening and climate proofing of the portfolio'. Norad Report 1/2009 discussion. Norwegian Agency for Development Cooperation, Oslo. 39p.
- IEA 2006 World energy outlook. International Energy Agency, Paris.
- IETA 2009 IETA's principles for reducing emissions and enhancing sequestration in the land-use sector. International Emissions Trading Association, Geneva. <http://www.ieta.org/ieta/www/pages/getfile.php?docID=3278> (24 Nov. 2009).

- ILO 1990 Occupational safety and health in forestry. International Labour Organization, Geneva.
- Ingram, J., Stevens, T., Clements, T., Hatchwell, M., Krueger, L., Victurine, R., Holmes, C. and Wilkie, D. 2009 WCS REDD project development guide. TransLinks. <http://www.translinks.org/ToolsandTrainingMaterials/tabid/2064/language/en-US/Default.aspx> (13 Nov. 2009).
- IPCC 2003 Good practice guidance for land use, land-use change and forestry. Penman, J. *et al.* (eds). National Greenhouse Gas Inventories Programme, Institute for Global Environmental Strategies, Kanagawa, Japan.
- IPCC 2006 IPCC Guidelines for national greenhouse gas inventories. Eggleston, H. S., Buendia, L., Miwa, K., Ngara, T. and Tanabe, K. (eds). National Greenhouse Gas Inventories Programme, Institute for Global Environmental Strategies, Kanagawa, Japan.
- IPCC 2007 IPCC fourth assessment report. Report by Working Group I, The physical science basis. Cambridge University Press, Cambridge, UK.
- IWG-IFR 2009 Report of the informal working group on interim finance for REDD+. Informal Working Group on Interim Finance for REDD. http://www.unredd.net/index.php?option=com_docman&task=doc_details&Itemid=&gid=1096 (12 Nov. 2009).
- Jack, B. K., Leimona, B. and Ferraro, P. 2009 A revealed preference approach to estimating supply curves for ecosystem services: use of auctions to set payments for soil erosion control in Indonesia. *Conservation Biology* 23(2): 359-367.
- Jagger, P. 2008 Forest incomes after Uganda's forest sector reform: are the poor gaining? CGIAR Systemwide Program on Collective Action and Property Rights (CAPRI). Working Paper Series No. 92. International Food Policy Research Institute, Washington, DC.
- Jagger, P. 2009 Forest sector reform, livelihoods and sustainability in western Uganda. *In*: German, L., Karsenty, A. and Tiani, A. M. (eds) *Governing Africa's forests in a globalized world*. Earthscan, Washington, DC and CIFOR, Bogor, Indonesia.
- Jagger, P., Pender, J. and Gebremedhin, B. 2005 Trading off environmental sustainability for empowerment and income: woodlot devolution in northern Ethiopia. *World Development* 33(9): 1491-1510.
- Jayasuriya, S. 2001 Agriculture and deforestation in tropical Asia: an analytical framework. *In*: Angelsen, A. and Kaimowitz, D. (eds) *Agricultural technologies and tropical deforestation*. CAB International, Wallingford, UK.

- Jindal, R., Swallow, B. and Kerr, J. 2008 Forestry-based carbon sequestration projects in Africa: potential benefits and challenges. *Natural Resources Forum* 32(2): 116-130.
- Johns, T. and Johnson, E. 2009 An overview of readiness for REDD: a compilation of readiness activities prepared on behalf of the Forum on Readiness for REDD, Version 1.2. The Woods Hole Research Center Falmouth, MA, USA. <http://www.whrc.org/Policy/REDD/> (12 Nov. 2009).
- Johns, J. S., Barreto, P. and Uhl, C. 1996 Logging damage during planned and unplanned logging operations in the eastern Amazon. *Forest Ecology and Management* 89(1-3): 59-77.
- Johns, T., Merry, F., Stickler, C., Nepstad, D., Laporte, N. and Goetza, S. 2008 A three-fund approach to incorporating government, public and private forest stewards into a REDD funding mechanism. *International Forestry Review* 10(3): 458-464.
- Jumbe, C. and Angelsen, A. 2006 Do the poor benefit from devolution policies? Evidence from forest co-management in Malawi. *Land Economics* 82(4): 562-581.
- K: TGAL 2008 Progress report. Kyoto: Think Global, Act Local. University of Twente, Enschede, Netherlands. Unpublished project material.
- Kaimowitz, D. 2003 Forest law enforcement and rural livelihoods. *International Forestry Review* 5(3): 199-210.
- Kaimowitz, D. and Angelsen, A. 1998 Economic models of tropical deforestation. A review. CIFOR, Bogor, Indonesia. 139p.
- Kaimowitz, D. and Angelsen, A. 2008 Will livestock intensification help save Latin America's forests? *Journal of Sustainable Forestry* 27(1-2): 6-24.
- Kaimowitz, D., Byron, N. and Sunderlin, W. D. 1998 Public policies to reduce inappropriate tropical deforestation. *In: Lutz, E. (ed.) Agriculture and environment: perspectives on sustainable rural development.* The World Bank, Washington, DC.
- Kalumiana, O. S. and Kisakye, R. 2001 Study on the establishment of a sustainable charcoal production and licensing system in Masindi and Nakasongola Districts. Report prepared for ACDI/VOCA EPED Project. Masindi, Uganda.
- Kammen, D. M. 2000 Case study #1: research, development and commercialization of the Kenya Ceramic Jiko (KCJ), methodological and technological issues in technology transfer. Cambridge University Press, Cambridge, UK and New York.
- Kanninen, M., Murdiyarsa, D., Seymour, F., Angelsen, A., Wunder, S. and German, L. 2007 Do trees grow on money? The implications

- of deforestation research for policies to promote REDD. Forest Perspectives 4. CIFOR, Bogor, Indonesia.
- Karky, B. S. 2008 The economics of reducing emissions from community managed forest in Nepal Himalaya. PhD Thesis, University of Twente, Enschede, Netherlands.
- Karousakis, K. 2007 Incentives to reduce GHG emissions from deforestation: lessons from Costa Rica and Mexico. Organisation for Economic Cooperation and Development, Paris.
- Karsenty, A. In press. Forest taxation regime for tropical forests: lessons from central Africa. *International Forestry Review*.
- Karsenty, A., Drigo, I. G., Piketty, M.-G. and Singer, B. 2008 Regulating industrial forest concessions in central Africa and South America. *Forest Ecology and Management* 256(7): 1498-1508.
- Kaufmann, D., Kraay, A. and Mastruzzi, M. 2006 Governance matters V: governance indicators for 1996-2005. World Bank Policy Research Working Paper 4012. The World Bank, Washington, DC.
- Kaufmann, D., Kraay, A. and Mastruzzi, M. 2008 Governance matters VIII: aggregate and individual governance indicators, 1996-2008. Policy Research Working Paper 4978. The World Bank, Washington, DC. 105p.
- Keeley, J. and Scoones, I. 1999 Understanding environmental policy processes: a review. IDS Working Papers 89. Institute of Development Studies, Brighton, UK.
- Kern, K. and Bulkeley, H. 2009 Cities, Europeanization and multi-level governance: governing climate change through transnational municipal networks. *Journal of Common Market Studies* 47(2): 309-332.
- Killick, T. 2004 Politics, evidence and the new aid agenda. *Development Policy Review* 22(1): 5-29.
- Kishor, N. and Damania, R. 2007 Crime and justice in the Garden of Eden: improving governance and reducing corruption in the forestry sector. *In*: Campos, E. J. and Pradhan, S. (eds) *The many faces of corruption*. The World Bank, Washington, DC.
- Knöpfle, M. 2004 A study on charcoal supply in Kampala. Ministry of Energy and Mineral Development, Kampala, Uganda. 68p.
- Koerberle, S., Walliser, J. and Stavreski, Z. (eds) 2006 Budget support as more effective aid? Recent experiences and emerging lessons. The World Bank, Washington, DC. 524p.
- Kohlin, G. and Parks, P. J. 2001 Spatial variability and disincentives to harvest. *Land Economics* 77(2): 206-218.

- Kolstad, I. and Søreide, T. 2009 Corruption in natural resource management: implications for policy makers. *Resources Policy* 34(4): 214-226.
- Kolstad, I. and Wiig, A. 2009 Is transparency the key to reducing corruption in resource-rich countries? *World Development* 37(3): 521-532.
- Koyuncu, C. and Yilmaz, R. 2009 The impact of corruption on deforestation: a cross-country evidence. *The Journal of Developing Areas* 42(2): 213-222.
- Krueger, A. O., Schiff, M. and Valdes, A. 1988 Agricultural incentives in developing countries: measuring the effect of sectoral and economy wide policies. *World Bank Economic Review* 2(3): 255-271.
- Lamloom, S. H. and Savidge, R. A. 2003 A reassessment of carbon content in wood: variation within and between 41 North American species. *Biomass and Bioenergy* 25(4): 381-388.
- Landell-Mills, N. and Porras, I. T. 2002 Silver bullet or fools' gold? A global review of markets for forest environmental services and their impact on the poor. Instruments for Sustainable Private Sector Forestry Series. International Institute for Environment and Development, London.
- Larmour, P. 2007 A short introduction to corruption and anti corruption. CIES e-Working Paper No. 37. CIES-ISCTE Centre for Research and Studies in Sociology, Lisbon, Portugal.
- Larsen, C. S. 2003 Promoting aboriginal territoriality through interethnic alliances: the case of the Cheslatta T'en in northern British Columbia. *Human Organization* 62(1): 74-84.
- Larsen, H. O., Olsen, C. S. and Boon, T. E. 2000 The non-timber forest policy process in Nepal: actors, objectives and power. *Forest Policy and Economics* 1(3-4): 267-281.
- Larson, A. M. 2002 Natural resources and decentralization in Nicaragua: are local governments up to the job? *World Development* 30(1): 17-31.
- Larson, A. M. 2003 Decentralisation and forest management in Latin America: towards a working model. *Public Administration and Development* 23(3): 211-226.
- Larson, A. M. 2005a Democratic decentralization in the forestry sector: lessons learned from Africa, Asia and Latin America. *In*: Pierce, C. and Capistrano, D. (eds) *The politics of decentralization: forests, power and people*, 32-62. Earthscan, London.
- Larson, A. M. 2005b Formal decentralization and the imperative of decentralization 'from below': a case study of natural resource management in Nicaragua. *In*: Ribot, J. C. and Larson, A. M. (eds) *Democratic decentralization through a natural resource lens*, 55-70. Routledge, London.

- Larson, A. M. 2008 Indigenous peoples, representation and citizenship in Guatemalan forestry. *Conservation and Society* 6(1): 35-48.
- Larson, A. M. and Ribot, J. C. 2005 Democratic decentralisation through a natural resource lens: an introduction. *In: Ribot, J. C. and Larson, A. M. (eds) Democratic decentralization through a natural resource lens*, chap. 1. Routledge, London.
- Larson, A. and Ribot, J. 2007 The poverty of forestry policy: double standards on an uneven playing field. *Sustainability Science* 2(2): 189-204.
- Larson, A. M. and Soto, F. 2008 Decentralization of natural resource governance regimes. *Annual Review of Environment and Resources* 33(1): 213-239.
- Larson, A., Barry, D., Cronkleton, P. and Pacheco, P. 2008 Tenure rights and beyond: community access to forest resources in Latin America. Occasional Paper No. 50. CIFOR, Bogor, Indonesia.
- Larson, A., Barry, D., Dahal, G. R. and Colfer, C. J. P. (eds) In press-a. *Forests for people: community rights and forest tenure reform*. Earthscan, London.
- Larson, A. M., Marfo, E., Cronkleton, P. and Pulhin, J. M. In press-b. Authority relations under new forest tenure arrangements. *In: Larson, A. M., Barry, D., Dahal, G. R. and Colfer, C. J. P. (eds) Forests for people: community rights and forest tenure reform*. Earthscan, London.
- Larwanou, M., Abdoulaye, M. and Reij, C. 2006 Etude de la régénération naturelle assistée dans la Région de Zinder (Niger): une première exploration d'un phénomène spectaculaire. <http://www.frameweb.org/CommunityBrowser.aspx?id=2801&lang=en-US> (10 Oct. 2009).
- Laurance, W. 2009 Roads to rainforests ruin. *New Scientist* 203(2723): 24-25.
- Lawlor, K, Olander, L. P., Weinthal, E. 2009 Reducing emissions from deforestation: options for policymakers. Working paper, Nicholas Institute for Environmental Policy Solutions, Durham, NC, USA
- Lawson, A., Booth, D., Msuya, M., Wangwe, S. and Williamson, T. 2005 Does general budget support work? Evidence from Tanzania. Overseas Development Institute, London, and Daima Associates, Dar es Salaam, Tanzania. <http://www.odi.org.uk/resources/download/2346-8-page-summary.pdf>.
- Le Billon, P. 2000 The political ecology of transition in Cambodia 1989–1999: war, peace and forest exploitation. *Development and Change* 31(4): 785-805.
- Leeuw, F. and Vaessen, J. 2009 Impact evaluations and development: NONIE guidance on impact evaluation. The World Bank, Washington,

- DC. <http://www.worldbank.org/ieg/nonie/guidance.html>
(12 Nov. 2009).
- Lele, U., Kumar, N., Husain, S. A., Zazueta, A. and Kelly, L. 2000 The World Bank forest strategy: striking the right balance. The World Bank, Washington, DC. 153p.
- Lentini, M., Schulze, M. and Zweede, J. In press. Os desafios ao sistema de concessões de florestas públicas na Amazonia. *Ciencia Hoje*.
- Letcher, S. G. and Chazdon, R. L. 2009 Rapid recovery of biomass, species richness, and species composition in a forest chronosequence in northeastern Costa Rica. *Biotropica* 41(5): 608-617.
- Leverington, F., Hockings, M. and Lemos Costa, K. 2008 Management effectiveness evaluation in protected areas. Report for the project global study into management effectiveness evaluation of protected areas. The World Conservation Union, World Commission on Protected Areas, The Nature Conservancy, World Wide Fund for Nature, University of Queensland, Gatton, Australia. 70p.
- Levin, K., McDermott, C. and Cashore, B. 2008 The climate regime as global forest governance: can reduced emissions from deforestation and forest degradation (REDD) initiatives pass a 'dual effectiveness' test? *International Forestry Review* 10(3): 538-549
- Lincoln, P. 2008. Stalled gaps or rapid recovery – the influence of damage on post-logging forest dynamics and carbon balance. PhD Thesis, University of Aberdeen, UK.
- Linder, S. 2000 Coming to terms with the public-private partnership: a grammar of multiple meanings. *In: Rosenau, T. (ed.) Public-private policy partnerships*, 19-36. MIT Press, Cambridge, MA, USA.
- Lloyd, B. and Subbarao, S. 2009 Development challenges under the Clean Development Mechanism (CDM) – can renewable energy initiatives be put in place before peak oil? *Energy Policy* 37(1): 237-245.
- Lopez, R. A. and Hathie, I. 2000 The structure of government intervention in African agriculture. *Journal of Development Studies* 37(1): 57-72.
- Lovera, S. 2008 The hottest REDD issues: rights, equity, development, deforestation and governance by indigenous peoples and local communities. Commission on Environmental, Economic and Social Policies and Global Forest Coalition, Gland, Switzerland.
- Luoga, E. J., Witkowski, E. T. F. and Balkwill, K. 2002 Harvested and standing wood stocks in protected and communal miombo woodlands of eastern Tanzania. *Forest Ecology and Management* 164(1-3): 15-30.
- Luttrell, C., Schreckenberg, K. and Peskett, L. 2007 The implications of carbon financing for pro-poor community forestry. *Forestry Briefing*

14. Overseas Development Institute, London. <http://www.odi.org.uk/resources/download/438.pdf>.
- Lynch, O. J. and Talbott, K. 1995 *Balancing acts: community based forest management and national law in Asia and the Pacific*. World Resources Institute, Washington, DC. 188p.
- Madeira, E. M. 2009 *REDD in design: assessment of planned first generation activities in Indonesia to reduce emissions from deforestation and degradation (REDD)*. RFF Discussion Paper 09-49. Resources for the Future, Washington, DC.
- MacDicken, K. G. 1997 *A guide to monitoring carbon storage in forestry and agroforestry projects*. Winrock International Institute for Agricultural Development, Arlington, VA, USA. <http://www.fcarbonsinks.gov.cn/thjl/Winrock%20International%20%E7%A2%B3%E7%9B%91%E6%B5%8B%E6%8C%87%E5%8D%97.pdf>.
- Macpherson, A. J. 2007. *Following the rules: a bioeconomic policy simulation of a Brazilian forest concession*. PhD Thesis, University of Florida, Gainesville, FL, USA.
- Magrath, W. B., Grandalski, R. L., Stuckey, G. L., Vikanes, G. B. and Wilkinson, G. R. 2007 *Timber theft prevention: introduction to security for forest managers*. East Asia and Pacific Region Sustainable Development Discussion Paper. The World Bank, Washington, DC.
- Mahar, D. and Ducrot, E. 1998 *Land-use zoning on tropical frontiers. Emerging lessons from the Brazilian Amazon*. Economic Development Institute, The World Bank, Washington, DC.
- Manor, J. 2000 *Local government in South Africa: potential disaster despite genuine promise*. Paper prepared for the Department for International Development. Institute for Development Studies, Brighton, UK.
- Manor, J. 2004 *User communities: a potentially damaging second wave of decentralization?* *European Journal of Development Research* 16(1): 192-213.
- March, J. G. and Olsen, J. P. 1995 *Democratic governance*. The Free Press, New York.
- Marfo, E., Colfer, C. J. P., Kante, B. and Elías, S. Forthcoming. *From discourse to policy: the practical interface of statutory and customary land and forest rights*. *In*: Larson, A. M., Barry, D., Dahal, G. R. and Colfer, C. J. P. (eds) *Forests for people: community rights and forest tenure reform*. Earthscan, London.
- Margoluis, R., Stem, C., Salafsky, N. and Brown, M. 2009 *Design alternatives for evaluating the impact of conservation projects*. *New Directions for Evaluation* 2009(122): 85-96.
- Mather, A. 1992 *The forest transition*. *Area* 24: 367-379.

- Mather, A. S. 2007 Recent Asian forest transitions in relation to forest transition theory. *International Forestry Review* 9(1): 491-502.
- Matope, J. J. 2000 Blantyre city environmental profile. Blantyre City Assembly/UNDP. <http://74.125.77.132/search?q=cache:ceicj1VQn9sJ:staging.unchs.org/cdrom/governance/html/books%255Cbcep.df+forest+degradation+Blantyre&cd=5&hl=no&ct=clnk&gl=no&client=firefox-a#56> (9 Nov. 2009).
- Mauro, P. 1995 Corruption and growth. *The Quarterly Journal of Economics* 110(3): 681-712.
- Mawhood, P. 1983 *Local government in the Third World*. John Wiley, Chichester, UK.
- Mayntz, R. 1993 Policy-netzwerke und die logik von verhandlungssystemen. *In: Hertier, A. (ed.) Policy-analyse. Kritik und neuorientierung*, 39-56. Politische Vierteljahresschrift, Opladen, Germany.
- McKean, M. A. 1992 Success on the commons: a comparative examination of institutions for common property resource management. *Journal of Theoretical Politics* 4(3): 247-281.
- McKinsey & Company 2009 Pathways to a low-carbon economy. Version 2.0 of the global greenhouse gas abatement cost curve. McKinsey & Company. 190p.
- McShane, T. and Wells, M. (eds) 2004 *Getting biodiversity projects to work: towards more effective conservation and development*. Columbia University Press, New York. 464p.
- Mello, R. and Pires, E. C. S. 2004 Valoração econômica do uso de técnicas de prevenção e controle de queimadas em cenários de produção familiar na Amazônia: um estudo de caso em comunidades rurais de Paragominas, Pará, Brasil. IPAM/CSF/CI, Belém, Brazil.
- Méndez, F. and Sepúlveda, F. 2006 Corruption, growth and political regimes: cross country evidence. *European Journal of Political Economy* 22(1): 82-98.
- Mendonça, M. J. C., Vera-Diaz, M. C., Nepstad, D., da Motta, R. S., Alencar, A., Gomes, J. C. and Ortiz, R. A. 2004 The economic cost of the use of fire in the Amazon. *Ecological Economics* 49(1): 89-105
- Meridian Institute 2009a Reducing emissions from deforestation and forest degradation: an options assessment report. Prepared for the Government of Norway, by Angelsen, A., Brown, S., Loisel, C., Peskett, L., Streck, C. and Zarin, D. <http://www.REDD-OAR.org>.
- Meridian Institute 2009b REDD+ institutional options assessment. Prepared for the Government of Norway, by Streck, C., Gomez-Echeverri, L., Gutman, P., Loisel, C. and Werksman, J. <http://www.REDD-OAR.org>.

- Merry, F. D., Amacher, G. S., Pokorny, B., Lima, E., Scholz, I., Nepstad, D. C. and Zweede, J. C. 2003 Some doubts about concession in Brazil. *International Tropical Timber Organization Tropical Forest Update* 13(3): 7-9.
- Meyfroidt, P. and Lambin, E. F. 2009 Forest transition in Vietnam and displacement of deforestation abroad. *Proceedings of the National Academy of Sciences* 106(38): 16139-16144.
- Minang, P., McCall, M. and Bressers, H. 2007 Community capacity for implementing Clean Development Mechanism projects within community forests in Cameroon. *Environmental Management* 39(5): 615-630.
- Moeliono, M., Wollenberg, E. and Limberg, G. (eds) 2008 *The decentralization of forest governance: politics, economics and the fight for control of forests in Indonesian Borneo*. Earthscan, London.
- Monela, G. C., O'ktingati, A. and Kiwele, P. M. 1993 Socio-economic aspects of charcoal consumption and environmental consequences along the Dar es Salaam–Morogoro highway, Tanzania. *Forest Ecology and Management* 58(3-4): 249-258.
- Moore, H. and Vaughan, M. 1994 *Cutting down trees: gender, nutrition, and agricultural change in the Northern Province of Zambia*. Heinemann, Portsmouth, NH, USA.
- Munslow, B., Katerere, Y., Ferf, A. and O'Keefe, P. 1988 *The fuelwood trap. A study of the SADCC region*. Earthscan, London.
- MWLE 2002 *National biomass study*. Technical report. Forest Department, Ministry of Water, Lands and Environment, Kampala, Uganda. 118p.
- Nagendra, H. 2008 Do parks work? Impact of protected areas on land cover clearing. *AMBIO: A Journal of the Human Environment* 37(5): 330-337.
- Namara, A. and Nsabagasani, X. 2003 *Decentralization and wildlife management: devolving rights or shedding responsibility? Bwindi Impenetrable National Park, Uganda*. Environmental Governance in Africa Working Paper No. 9. World Resources Institute, Washington, DC.
- Namaalwa, J., Hofstad, O. and Sankhayan, P. L. 2009 Achieving sustainable charcoal supply from woodlands to urban consumers in Kampala, Uganda. *International Forestry Review* 11(1): 64-78.
- Naughton-Treves, L., Holland, M. B. and Brandon, K. 2005 The role of protected areas in conserving biodiversity and sustaining local livelihoods. *Annual Review of Environment and Resources* 30(1): 219-252.

- Nelson, A. and Chomitz, K. M. 2009 Protected area effectiveness in reducing tropical deforestation: a global analysis of the impact of protection status. Evaluation Brief 7. The World Bank, Washington, DC. 31p.
- Nelson, J. 2002 Building partnerships. United Nations, New York.
- Nepstad, D., Carvalho, G., Cristina Barros, A., Alencar, A., Paulo Capobianco, J., Bishop, J., Moutinho, P., Lefebvre, P., Lopes Silva, U. and Prins, E. 2001 Road paving, fire regime feedbacks, and the future of Amazon forests. *Forest Ecology and Management* 154(3): 395-407.
- Nepstad, D., Schwartzman, S., Bamberger, B., Santilli, M., Ray, D., Schlesinger, P., Lefebvre, P., Alencar, A., Prinz, E., Fiske, G. and Rolla, A. 2006 Inhibition of Amazon deforestation and fire by parks and indigenous lands. *Conservation Biology* 20(1): 65-73.
- Niles, J. O., Boyd, W., Lawlow, K., Madeira, E. M. and Olander, L. 2009 Experience on the ground, in the forests. International Forest Carbon and the Climate Change Challenge Series – Brief No. 6. Nicholas Institute, Duke University, Durham, NC, USA.
- Norris, R. (ed.) 2000 The IPG handbook on environmental funds: a resource book for the design and operation of environmental funds. Pact Publications, New York.
- Ntsebeza, L. 1999 Land tenure reform in South Africa: an example from the Eastern Cape Province. Issue Paper No. 82. Drylands Programme, International Institute for Environment and Development, London.
- Ntsebeza, L. 2002 Decentralization and natural resource management in rural South Africa: problems and prospects. Paper to the Conference on Decentralization and the Environment, Bellagio, Italy, 18-22 February 2002.
- Oleas, R. and Barragán, L. 2003 Environmental funds as a mechanism for conservation and sustainable development in Latin America and the Caribbean. http://www.conservationfinance.org/Documents/CF_related_papers/Diagnostic-English_13ago03.pdf (10 Nov. 2009).
- OSCE 2004 Best practises in combating corruption. Organization for Security and Co-operation in Europe, Vienna, Austria.
- Ostrom, E. 1990 *Governing the commons: the evolution of institutions for collective action*. Cambridge University Press, New York.
- Ostrom, E. 2003 How types of goods and property rights jointly affect collective action. *Journal of Theoretical Politics* 15(3): 239-270.
- Ostrom, E. 2005 *Understanding institutional diversity*. Princeton University Press, Princeton, NJ, USA.

- Ostrom, E. 2007 A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences* 104(39): 15181-15187.
- Ostrom, E. 2009 A general framework for analyzing sustainability of social-ecological systems. *Science* 325(5939): 419-422.
- Pacheco, P. 2003 Municipalidades y participación local en la gestión forestal en Bolivia. *In: Ferroukhi, L. (ed.) Gestión forestal municipal en América Latina*. CIFOR, Bogor, Indonesia.
- Pagiola, S. 2008 Payments for environmental services in Costa Rica. *Ecological Economics* 65(4): 712-724.
- Palm, C., Tomich, T., Van Noordwijk, M., Vosti, S., Gockowski, J., Alegre, J. and Verchot, L. 2004 Mitigating GHG emissions in the humid tropics: case studies from the Alternatives to Slash-and-Burn Program (ASB). *Environment, Development and Sustainability* 6(1): 145-162.
- Palmer, C. and Engel, S. 2007 For better or for worse? Local impacts of the decentralization of Indonesia's forest sector. *World Development* 35(12): 2131-2149.
- Parker, C. 2008 Co-benefits of the voluntary and compliance carbon markets. MSc Thesis, Imperial College, University of London, London.
- Parker, C., Mitchell, A., Trivedi, M. and Mardas, M. 2009 The little REDD+ book. Global Canopy Programme, Oxford, UK.
- Parsons, J. J. 1972 Spread of African pasture grasses to the American tropics. *Journal of Range Management* 25(1): 12-17.
- Pattanayak, S. K. 2009 Rough guide to impact evaluation of environmental and development programs. SANDEE Working Paper No. 40-09. South Asian Network for Development and Environmental Economics, Kathmandu, Nepal.
- Pattanayak, S. K., Wunder, S. and Ferraro, P. J. 2009 Show me the money: do payments supply ecosystem services in developing countries? Personal communication, November 2009.
- Pearce, D., Putz, F. E. and Vanclay, J. K. 2003 Sustainable forestry in the tropics: panacea or folly? *Forest Ecology and Management* 172(2-3): 229-247.
- Pedroni, L., Dutschke, M., Streck, C. and Porrúa, M. E. 2009 Creating incentives for avoiding further deforestation: the nested approach. *Climate Policy* 9(2): 207-220.
- Peluso, N. 1995 Whose woods are these? Counter-mapping forest territories in Kalimantan, Indonesia. *Antipode* 27(4): 383-406.
- Peña-Claros, M., Fredericksen, T. S., Alarcón, A., Blate, G. M., Choque, U., Leño, C., Licona, J. C., Mostacedo, B., Pariona, W., Villegas, Z. and Putz, F. E. 2008a Beyond reduced-impact logging: silvicultural

- treatments to increase growth rates of tropical trees. *Forest Ecology and Management* 256(7): 1458-1467.
- Peña-Claros, M., Peters, E. M., Justiniano, M. J., Bongers, F., Blate, G. M., Fredericksen, T. S. and Putz, F. E. 2008b Regeneration of commercial tree species following silvicultural treatments in a moist tropical forest. *Forest Ecology and Management* 255(3-4): 1283-1293.
- Peskett, L. and Harkin, Z. 2007 Risks and responsibility in reduced emissions from deforestation and degradation. *Forestry Briefing* 15. Overseas Development Institute, London. <http://www.odi.org.uk/resources/details.asp?id=426&title=risk-responsibility-reduced-emissions-deforestation-degradation>.
- Peskett, L., Huberman, D., Bowen-Jones, E., Edwards, G. and Brown, J. 2008 Making REDD work for the poor. Briefing paper prepared on behalf of the Poverty Environment Partnership (PEP). Overseas Development Institute, London.
- Pfaff, A., Robalino, J. and Sanchez-Azofeifa, G. 2008 Payments for environmental services: empirical analysis for Costa Rica. Terry Sanford Institute of Public Policy, Duke University, Durham, NC, USA.
- Pinard, M. A. and Cropper, W. P. 2000 Simulated effects of logging on carbon storage in dipterocarp forest. *Journal of Applied Ecology* 37(2): 267-283.
- Pinard, M. A. and Putz, F. E. 1996 Retaining forest biomass by reducing logging damage. *Biotropica* 28(3): 278-295.
- Pinard, M. A., Putz, F. E. and Licona, J. C. 1999 Tree mortality and vine proliferation following a wildfire in a subhumid tropical forest in eastern Bolivia. *Forest Ecology and Management* 116(1-3): 247-252.
- Pokorny, B., Sabogal, C., Silva, J. N. M., Bernardo, P., Souza, J. and Zweede, J. 2005 Compliance with reduced-impact harvesting guidelines by timber enterprises in *terra firme* forests of the Brazilian Amazon. *International Forestry Review* 7(1): 9-20.
- Porras, I., Grieg-Gran, M. and Neves, N. 2008 All that glitters: a review of payments for watershed services in developing countries. *Natural Resource Issues* No 11. International Institute for Environment and Development, London. 130p.
- Porter, G. and Young, E. 1998 Decentralized environmental management and popular participation in coastal Ghana. *Journal of International Development* 10(4): 515-526.
- Poteete, A. R. and Ostrom, E. 2004 Heterogeneity, group size and collective action: the role of institutions in forest management. *Development and Change* 35(3): 435-461.

- Project Catalyst 2009 Towards a global climate agreement. Synthesis Briefing Paper. Climate Works Foundation, San Francisco, CA. http://www.project-catalyst.info/images/publications/synthesis_paper.pdf. 35p.
- Pulhin, J., Larson, A. and Pacheco, P. In press. Regulations as barriers to community benefits in tenure reform. *In*: Larson, A., Barry, D., Dahal, G. R. and Colfer, C. J. P. (eds) *Forests for people: community rights and forest tenure reform*. Earthscan, London.
- Putz, F. E. and Redford, K. H. 2009 Dangers of carbon-based conservation. *Global Environmental Change* 19(4): 400-401.
- Putz, F. E., Dykstra, D. P. and Heinrich, R. 2000 Why poor logging practices persist in the Tropics. *Conservation Biology* 14(4): 951-956.
- Putz, F. E., Sist, P., Fredericksen, T. and Dykstra, D. 2008a Reduced-impact logging: challenges and opportunities. *Forest Ecology and Management* 256(7): 1427-1433.
- Putz, F. E., Zuidema, P. A., Pinard, M. A., Boot, R. G. A., Sayer, J. A., Sheil, D., Sist, P., Elias and Vanclay, J. K. 2008b Improved tropical forest management for carbon retention. *PLoS Biol* 6(7): 1368-1369.
- Raffles, H. 1999 Local theory: nature and the making of an Amazonian place. *Cultural Anthropology* 14(3): 323-360.
- Ranganathan, J., Daniels, R. J. R., Chandran, M. D. S., Ehrlich, P. R. and Daily, G. C. 2008 Sustaining biodiversity in ancient tropical countryside. *Proceedings of the National Academy of Sciences* 105(46): 17852-17854.
- RedLAC 2008 Measuring the impact of environmental funds on biodiversity: perspectives from the Latin America and Caribbean Network of Environmental Funds. The Latin American and Caribbean Network of Environmental Funds (RedLAC), Rio de Janeiro, Brazil.
- REM 2006 Rapport de l'observateur independant no. 31/OI/REM. Resource Extraction Monitoring (REM), Yaoundé, Cameroon.
- Repetto, R. and Gillis, M. (eds) 1988 *Public policies and the misuse of forest resources*. Cambridge University Press, Cambridge, UK. 432p.
- Resosudarmo, I. A. P. 2005 Closer to people and trees: will decentralization work for the people and forests of Indonesia? *In*: Ribot, J. C. and Larson, A. M. (eds) *Democratic decentralization through a natural resource lens*, 110-132. Routledge, London.
- Ribot, J. C. 2001 Integral local development: 'accommodating multiple interests' through entrustment and accountable representation. *International Journal of Agricultural Resources, Governance and Ecology* 1(3): 306-326.

- Ribot, J. C. 2002 Democratic decentralization of natural resources: institutionalizing popular participation. World Resources Institute, Washington, DC.
- Ribot, J. C. 2003 Democratic decentralisation of natural resources: institutional choice and discretionary power transfers in Sub-Saharan Africa. *Public Administration and Development* 23(1): 53-65.
- Ribot, J. C. 2004 Waiting for democracy: the politics of choice in natural resource decentralization. World Resources Institute, Washington, DC. 140p.
- Ribot, J. C. 2008 Building local democracy through natural resources interventions: an environmentalist's responsibility. A policy brief. World Resources Institute, Washington, DC.
- Ribot, J. C. 2009 Forestry and democratic decentralization in Sub-Saharan Africa: a rough review. *In: German, L., Karsenty, A. and Tiani, A. M. (eds) Governing Africa's forests in a globalized world, 29-55. Earthscan, Washington, DC, and CIFOR, Bogor, Indonesia.*
- Ribot, J. C. and Oyono, R. 2005 The politics of decentralization. *In: Wisner, B., Toulmin, C. and Chitiga, R. (eds) Toward a new map of Africa, 205-228. Earthscan, London.*
- Ribot, J. C. and Oyono, R. 2006 Introduction: decentralisation and livelihoods in Africa. *In: Ribot, J. C. and Oyono, R. (eds) African development , special issue, Implementing progressive new natural resources laws, 1-19.*
- Ribot, J. C., Agrawal, A. and Larson, A. M. 2006 Recentralizing while decentralizing: how national governments reappropriate forest resources. *World Development* 34(11): 1864-1886.
- Ribot, J. C., Cchatre, A. and Lankina, T. 2008 Institutional choice and recognition in the formation and consolidation of local democracy. *Conservation and Society* 6(1): 1-11.
- Rice, R. E., Gullison, R. E. and Reid, J. W. 1997 Can sustainable management save tropical forests? *Scientific American* 276(4): 44-49.
- Richards, M. 2000 Can sustainable tropical forestry be made profitable? The potential and limitations of innovative incentive mechanisms. *World Development* 28(6): 1001-1016.
- Richards, M. and Costa, P. M. 1999 Can tropical forestry be made profitable by internalizing the externalities? *ODI Natural Resource Perspectives* 46: 1-6.
- Richards, M., Wells, A., Del Gatto, F., Contreras-Hermosilla, A. and Pommier, D. 2003 Impacts of illegality and barriers to legality: a diagnostic analysis of illegal logging in Honduras and Nicaragua. *International Forestry Review* 5(3): 282-292.

- Robbins, P. 1998 Paper forests: imagining and deploying exogenous ecologies in arid India. *Geoforum* 29(1): 69-86.
- Roberts, D. 2009 Securing finance for biofuels – where is the money coming from? Presentation to the World Biofuels Markets Conference. Brussels, Belgium, 16–18 March 2009.
- Rock, M. T. and Bonnett, H. 2004 The comparative politics of corruption: accounting for the East Asian paradox in empirical studies of corruption, growth and investment. *World Development* 32(6): 999-1017.
- Rørstad, P. K., Vatn, A. and Kvakkestad, V. 2007 Why do transaction costs of agricultural policies vary? *Agricultural Economics* 36(1): 1-11.
- Ross, M. L. 2001 Timber booms and institutional breakdown in Southeast Asia. Cambridge University Press, Cambridge, UK.
- RRI 2008 Seeing people through the trees: scaling up efforts to advance rights and address poverty, conflict and climate change. Rights and Resources Initiative, Washington, DC.
- RRI and RFN 2008 Foundations for effectiveness: a framework for ensuring effective climate change mitigation and adaptation in forest areas without undermining human rights and development. Policy Brief. Rights and Resources Initiative, Washington, DC and Rainforest Foundation Norway, Oslo, Norway.
- Rudel, T. K. 2007 Changing agents of deforestation: from state-initiated to enterprise driven processes, 1970–2000. *Land Use Policy* 24(1): 35-41.
- Rudel, T. and Horowitz, B. 1993 Tropical deforestation: small farmers and land clearing in the Ecuadorian Amazon. Colombia University Press, New York.
- Rudel, T. K., Coomes, O. T., Moran, E., Achard, F., Angelsen, A., Xu, J. and Lambin, E. 2005 Forest transitions: towards a global understanding of land use change. *Global Environmental Change* 15(1): 23-31.
- Ruf, F. 2001 Tree crops and deforestation and reforestation agents: the case of cocoa in Côte d'Ivoire and Sulawesi. *In*: Angelsen, A. and Kaimowitz, D. (eds) *Agricultural technologies and tropical deforestation*, 291-315. CAB International, Wallingford, UK.
- Sabogal, C., Pokorny, B., Silva, N., Bernardo, P., Massih, F., Boscolo, M., Lentini, M., Sobral, L. and Veríssimo, A. 2006 Manejo florestal empresarial na Amazônia Brasileira. Restrições e oportunidades para a adoção de boas práticas de manejo. CIFOR, Belem, Brazil. 71p.
- Sachs, J. D. 2005 *The end of poverty: how can we make it happen in our life time?* Penguin Books, London.
- Salafsky, N. R., Margoluis, R. and Redford, K. 2001 Adaptive management: a tool for conservation practitioners. Biodiversity Support Program,

- Washington, DC. <http://www.worldwildlife.org/bsp/publications/aam/112/titlepage.htm> (12 Nov. 2009).
- Sander, K. and Zeller, M. 2007 Protected area management and local benefits: a case study from Madagascar. *In*: Tscharrntke, T., Leuschner, C., Zeller, M., Guhardja, E. and Bidin, A. (eds) *Stability of tropical rainforest margins*, 363-385. Springer, Berlin.
- Santilli, M., Moutinho, P., Schwartzman, S., Nepstad, D., Curran, L. and Nobre, C. 2005 Tropical deforestation and the Kyoto Protocol: an editorial essay. *Climatic Change* 71(3): 267-276.
- Sargent, C. and Bass, S. (eds) 1992 *Plantation politics – forest plantations in development*. Earthscan, London.
- Sarin, M., Singh, N., Sundar, N. and Bhogal, R. 2003 Devolution as a threat to democratic decision-making in forestry? Findings from three states in India. *In*: Edmunds, D. (ed.) *Local forest management: the impacts of devolution policies*, 55-126. Earthscan, London.
- Sasaki, N. and Putz, F. E. 2009 Critical need for new definitions of 'forest' and 'forest degradation' in global climate change agreements. *Conservation Letters* 2(5): 226-232.
- Saunders, J., Ebeling, J. and Nussbaum, R. 2008 *Reduced emissions from deforestation and forest degradation (REDD): lessons from a governance perspective*. Proforest, Oxford, UK. (Available from: www.proforest.net.)
- Schlager, E. and Ostrom, E. 1992 Property-rights regimes and natural resources: a conceptual analysis. *Land Economics* 68(3): 249-262.
- Schmitt, C. B., Burgess, N. D., Coad, L., Belokurov, A., Besançon, C., Boisrobert, L., Campbell, A., Fish, L., Gliddon, D., Humphries, K. *et al.* 2009 Global analysis of the protection status of the world's forests. *Biological Conservation* 142(10): 2122-2130.
- Schneider, V. 2003 Akteurskonstellationen und netzwerke in der politikentwicklung. *In*: Schubert, K. and Bandelow, N. C. (eds) *Lehrbuch der politikfeldanalyse*, 107-146. Oldenbourg, München, Germany.
- Schroeder, R. 1999 *Shady practices: agroforestry and gender politics in The Gambia*. University of California Press, Berkeley, CA, USA.
- Schulze, M., Grogan, J. and Vidal, E. 2008 Technical challenges to sustainable forest management in concessions on public lands in the Brazilian Amazon. *Journal of Sustainable Forestry* 26(1): 61-75.
- Schwartzman, S. 2009 *Brazil national and state REDD*. EDF Policy Brief. Environmental Defense Fund, New York. http://www.environmentaldefensefund.com/documents/10438_Brazil_national_and_state_REDD_report.pdf (13 Nov. 2009).

- Schwarze, R., Niles, J. O. and Olander, J. 2002 Understanding and managing leakage in forest-based greenhouse-gas-mitigation projects. *Philosophical Transactions of the Royal Society of London A* 360: 1685-1703.
- Scott, W. R. 1995 *Institutions and organizations*. Sage, Thousand Oaks, CA, USA.
- Scricciu, S. S. 2007 Can economic causes of tropical deforestation be identified at a global level? *Ecological Economics* 62(3-4): 603-612.
- Seymour, F. J. In press. Forests, climate change, and human rights: managing risks and trade-offs. *In: Humphreys, S. (ed.) Human rights and climate change*. Cambridge University Press, Cambridge, UK.
- Seymour, F. and Dubash, N. 2000 Right conditions: The World Bank, structural adjustment, and forest policy reform. World Resources Institute, Washington, DC. 156p.
- Shackleton, S. E. and Campbell, B. M. 2001 Devolution in natural resource management: institutional arrangements and power shifts. A synthesis of case studies from southern Africa. SADC Wildlife Sector Natural Resource Management Programme, Lilongwe, Malawi and WWF (Southern Africa), Harare, Zimbabwe.
- Shah, A. 2006 Corruption and decentralized public governance. World Bank Policy Research Working Paper No. 3824. The World Bank, Washington, DC.
- Shively, G. E. 2001 Agricultural change, rural labor markets, and forest clearing: an illustrative case from the Philippines. *Land Economics* 77(2): 268-284.
- Shively, G. and Pagiola, S. 2004 Agricultural intensification, local labor markets, and deforestation in the Philippines. *Environment and Development Economics* 9(2): 241-266
- Shrestha, R. A. M., Alavalapati, J., Seidl, A., Weber, K. and Suselo, T. R. I. 2007 Estimating the local cost of protecting Koshi Tappu wildlife reserve, Nepal: a contingent valuation approach. *Environment, Development and Sustainability* 9(4): 413-426.
- Sims, K. 2008 Evaluating the local socio-economic impacts of protected areas: a system level comparison group approach. Global Environment Facility Impact Evaluation Information Document No. 14. Global Environment Facility, Washington, DC.
- Sist, P. and Bertault, J.-G. 1998 Reduced impact logging experiments: impact of harvesting intensities and logging techniques on stand damage. *In: Bertault, J. G. and Kadir, K. (eds) Silvicultural research in a lowland mixed dipterocarp forest of East Kalimantan*, 139-161. Centre de coopération internationale en recherche agronomique pour le développement (CIRAD-Forêt), Montpellier, France.

- Skutsch, M. 2005 Reducing carbon transaction costs in community based forestry management. *Climate Policy* 5: 433-443.
- Skutsch, M., Karky, B., Zahabu, E., McCall, M. and Peters-Guarin, G. 2009a Community measurement of carbon stock change for REDD. *In: Collaborative Partnership on Forest, special study on forest degradation*. FAO, Rome
- Skutsch, M., Zahabu, E. and Karky, B. 2009b Community forest management under REDD: policy conditions for equitable governance. Paper prepared for the 13th World Forestry Congress: Forests in development, a vital balance. Buenos Aires, Argentina. 18-25 October 2009.
- Smith, J., Colan, V., Sabogal, C. and Snook, L. 2006 Why policy reforms fail to improve logging practices: the role of governance and norms in Peru. *Forest Policy and Economics* 8(4): 458-469.
- Smith, J., Obidzinski, K., Subarudi, S. and Suramenggala, I. 2003a Illegal logging, collusive corruption and fragmented governments in Kalimantan, Indonesia. *International Forestry Review* 5(3): 293-302.
- Smith, R. J., Muir, R. D. J., Walpole, M. J., Balmford, A. and Leader-Williams, N. 2003b Governance and the loss of biodiversity. *Nature* 426(6962): 67-70.
- Somanathan, E., Prabhakar, R. and Mehta, B. S. 2009 Decentralization for cost-effective conservation. *Proceedings of the National Academy of Sciences* 106(11): 4143-4147.
- Southgate, D. and Runge, C. F. 1990 The institutional origins of deforestation in Latin America. University of Minnesota, Department of Agriculture and Applied Economics, Staff Paper No. P90-5. University of Minnesota, St Paul, MN, USA.
- Southgate, D., Salazar-Canelos, P., Camacho-Saa, C. and Stewart, R. 2000 Markets, institutions, and forestry: the consequences of timber trade liberalization in Ecuador. *World Development* 28(11): 2005-2012.
- Souza, C., Firestone, L., Silva, L. M. and Roberts, D. 2003 Mapping forest degradation in the eastern Amazon from SPOT 4 through spectral mixture models. *Remote Sensing of Environment* 87: 494-506.
- Spergel, B. and Taieb, P. 2008 Rapid review of conservation trust funds. Conservation Finance Alliance, Washington, DC.
- Stern, N. 2006 *The Stern review: the economics of climate change*. Cambridge University Press, Cambridge, UK.
- Sunderlin, W., Hatcher, J. and Liddle, M. 2008a From exclusion to ownership? Challenges and opportunities in advancing forest tenure reform. Rights and Resources Initiative, Washington, DC.

- Sunderlin, W. D., Dewi, S., Puntodewo, A., Müller, D., Angelsen, A. and Epprecht, M. 2008b Why forests are important for global poverty alleviation: a spatial explanation. *Ecology and Society* 13(2): 24. <http://www.ecologyandsociety.org/vol13/iss2/art24/> (18 Nov. 2009).
- Sutter, C. 2003 Sustainability check-up for CDM projects. Wissenschaftlicher Verlag, Berlin.
- Tacconi, L. 2007a Decentralization, forests and livelihoods: theory and narrative. *Global Environmental Change* 17(3-4): 338-348.
- Tacconi, L. 2007b Verification and certification of forest products and illegal logging in Indonesia. *In: Tacconi, L. (ed.) Illegal logging: law enforcement, livelihoods and the timber trade.* Earthscan, London.
- Tacconi, L. (ed.) 2007c *Illegal logging: law enforcement, livelihoods and the timber trade.* Earthscan, London
- Tacconi, L., Boscolo, M. and Brack, D. 2003 National and international policies to control illegal forest activities. Report for the Ministry of Foreign Affairs, Government of Japan. CIFOR, Bogor, Indonesia.
- Tahmina, Q. A. and Gain, P. 2002 A guide to NGO–business partnerships. Society for Environment and Human Development, Dhaka, Bangladesh.
- Taylor, P. L. 2005 A fair trade approach to community forest certification? A framework for discussion. *Journal of Rural Studies* 21(4): 433-447.
- Tewari, A. and Phartiyal, P. 2006 The carbon market as an emerging livelihood opportunity for communities of the Himalayas. ICIMOD Mountain Development No. 49. Central Himalayan Environmental Association, Nainital, India. p. 26-27.
- TFF 2008 Tropical Forest Foundation News (spring 2008). http://www.tropicalforestfoundation.org/newsletters/newsletter2008_spring.pdf (16 Aug. 2008).
- The Nature Conservancy 2009 Submission to the United Nations Framework Convention on Climate Change regarding Views on issues relating to indigenous peoples and local communities for the development and application of methodologies for reducing emissions from deforestation and forest degradation in developing countries. <http://unfccc.int/resource/docs/2009/smsn/ngo/099.pdf>.
- Tieguhong, J. C. and Betti, J. L. 2008 Forest and protected area management in Cameroon. Tropical Forest Update 18/1. The International Tropical Timber Organization.
- Tole, L. 2001 Jamaica's disappearing forests: physical and human aspects. *Environmental Management* 28(4): 455-467.
- Tomaselli, I. and Hirakuri S. R. 2008 Converting mahogany. ITTO Tropical Forest Update 18/4

- Tomlinson, F. 2009. Do harvesting impacts determine patterns of non-forest vegetation in dipterocarp forest in Sabah 15 years post-logging? MSc Thesis, University of Aberdeen, Aberdeen, UK.
- Toni, F. 2006a *Gestão florestal na Amazônia brasileira: avanços e obstáculos em um sistema federalista*. CIFOR, Bogor, Indonesia and International Development Research Centre, Ottawa, Canada.
- Toni, F. 2006b Institutional choice on the Brazilian agricultural frontier: strengthening civil society or outsourcing centralized natural resource management? Paper to 11th Biennial Conference of the International Association for the Study of Common Property. Bali, Indonesia, 19-23 June 2006.
- Topp-Jørgensen, E., Poulsen, M. K., Lund, J. F. and Massao, J. F. 2005 Community-based monitoring of natural resource use and forest quality in montane forests and miombo woodlands of Tanzania. *Biodiversity and Conservation* 14(11): 2653-2677.
- Torres-Duque, C., Maldonado, D., Perez-Padilla, R., Ezzati, M., Viegi, G. and on behalf of the Forum of International Respiratory Societies Task Force on Health Effects of Biomass Exposure 2008 Biomass fuels and respiratory diseases: a review of the evidence. *Proceedings of the American Thoracic Society* 5(5): 577-590.
- Transparency International 2002 *Corruption in South Asia: insights and benchmarks from citizen feedback surveys in five countries*. Transparency International, Berlin.
- Treisman, D. 2007 What have we learned about the causes of corruption from ten years of cross-national empirical research? *Annual Review of Political Science* 10: 211-244.
- Tucker, C. 1999 Private versus common property forests: forest conditions and tenure in a Honduran community. *Human Ecology* 27(2): 201-230.
- Twidell, J. and Weir, T. 2006 *Renewable energy resources*. 2nd ed. Taylor and Francis, Oxford, UK. 601p.
- UNDP, UNEP, WB and WRI 2003 *World resources 2002-2004: decisions for the Earth: balance, voice and power*. United Nations Development Programme, United Nations Environment Programme, World Bank, World Resources Institute, Washington, DC.
- UNFCCC 2007 *Reducing emissions from deforestation in developing countries: approaches to stimulate action*. 2/cp.13. United Nations Framework Convention on Climate Change, Bonn, Germany.
- UNFCCC 2009a Article for the REDD+ mechanism. United Nations Framework Convention on Climate Change, Bonn, Germany. http://unfccc.int/files/kyoto_protocol/application/pdf/papuanewguinea070509.pdf (12 Nov. 2009).

- UNFCCC 2009b Cost of implementing methodologies and monitoring systems relating to estimates of emissions from deforestation and forest degradation, the assessment of carbon stocks and greenhouse gas emissions from changes in forest cover, and the enhancement of forest carbon stocks. Technical Paper FCCC/TP/2009/1. United Nations Framework Convention on Climate Change, Bonn, Germany. <http://unfccc.int/resource/docs/2009/tp/01.pdf>.
- UNFCCC 2009c Reordering and consolidation of text in the revised negotiating text. Advance version. 1F5C CSeCp/tAemWbGerL 2C0A0/92 009/INF.2. United Nations Framework Convention on Climate Change, Bonn, Germany.
- UN-REDD Programme 2009 Background analysis of REDD regulatory frameworks. The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, Geneva.
- van Noordwijk, M., Tomich, T. P., Winahyu, R., Murdiyarso, D., Suyanto, Partoharjono, S. and Fagi, A. M. 1995 Alternatives to slash-and-burn in Indonesia. Summary report of phase 1. ASB Indonesia Report 4. World Agroforestry Centre, Bogor, Indonesia.
- van Rouveroy van Nieuwaal, E. A. B. 1987 Chiefs and African states: some introductory notes and an extensive bibliography on African chieftaincy. *Journal of Legal Pluralism* (25 & 26): 1-46.
- Vatn, A. 2005 Institutions and the environment. Edward Elgar, Cheltenham, UK. 481p.
- Vatn, A., Vedeld, P., Petursson, J. G. and Stenslie, E. 2009 The REDD direction. The potential for reduced carbon emissions, biodiversity protection and enhanced development. A desk study with focus on Tanzania and Uganda. Noragric Report. Norwegian University of Life Sciences, Ås, Norway. 140p.
- Venkataraman, C., Habib, G., Eiguren-Fernandez, A., Miguel, A. H. and Friedlander, S. K. 2005 Residential biofuels in South Asia: carbonaceous aerosol emissions and climate impacts. *Science* 307(5714): 1454-1456.
- Verchot, L. and Petkova, E. 2009 The state of REDD negotiations: consensus points, options for moving forward and research needs to support the process. Unpublished manuscript. CIFOR, Bogor, Indonesia.
- Veríssimo, A., Cochrane, M. A. and Souza Jr, C. 2002 National forests in the Amazon. *Science* 297(5586): 1478.
- Villegas, Z., Peña-Claros, M., Mostacedo, B., Alarcón, A., Licona, J.C., Leño, C., Pariona, W. and Choque, U. 2009 Silvicultural treatments enhance growth rates of future crop trees in a tropical dry forest. *Forest Ecology and Management* 258(6): 971-977.

- von der Goltz, J. 2009 High stakes in a complex game: a snapshot of the climate change negotiating positions of major developing country emitters. Working Paper 177. Center for Global Development, Washington, DC.
- von Thünen, J. H. 1966 The isolated state. Wartenberg, C. M. trans. Translation of: *Der isolierte Staat* (1826). Pergamon Press, Oxford and New York. 304p.
- Vosti, S. A., Carpentier, C. L., Witcover, J. and Valentim, J. 2001 Intensified small-scale livestock systems in the western Brazilian Amazon. *In*: Angelsen, A. and Kaimowitz, D. (eds) *Agricultural technologies and tropical deforestation*. CAB International, Wallingford, UK.
- Wadsworth, F. H., Zweede, J. C. 2006 Liberation: acceptable production of tropical forest timber. *Forest Ecology and Management* 233(1): 45-51.
- Walker, P. and Peters, P. 2001 Maps, metaphors, and meanings: boundary struggles and village forest use on private and state land in Malawi. *Society and Natural Resources* 14: 411-424.
- Weber, E. 1998 *Pluralism by the rules: conflict and co-operation in environmental regulation*. Georgetown University Press, Washington, DC.
- Weinhold, D. and Reis, E. 2008 Transportation costs and the spatial distribution of land use in the Brazilian Amazon. *Global Environmental Change* 18(1): 54-68.
- Wells, M. 1991 Trust funds and endowments as a biodiversity conservation tool. Policy Research Working Paper No. 1991-26. Environment Department, The World Bank, Washington, DC.
- Wells, M. and Brandon, K. 1992 *People and parks: linking protected area management with local communities*. The World Bank, Washington, DC. 116p.
- Wells, M., Guggenheim, S., Khan, A., Wardojo, W. and Jepson, P. 1999 Investing in biodiversity. A review of Indonesia's integrated conservation and development projects. *Directions in Development*. The World Bank, Washington, DC.
- Wells, M. P., McShane, T. O., Dublin, H. T., O'Connor, S. and Redford, K. H. 2004 Do integrated conservation and development projects have a future? *In*: McShane, T. and Wells, M. (eds) *Making biodiversity projects work: towards more effective conservation*. Columbia University Press, New York.
- Wemaere, M., Streck, C. and Chagas, T. 2009 Legal ownership and nature of Kyoto units and EU allowances. *In*: Freestone, D. and Streck, C. (eds) *Legal aspects of carbon trading: Kyoto, Copenhagen and beyond*. Oxford University Press, Oxford, UK.

- Wertz-Kanounnikoff, S. and Kongphan-apisak, M. 2009 Reducing emissions from deforestation and forest degradation: a preliminary survey of emerging REDD demonstration and readiness activities. Working Paper. CIFOR, Bogor, Indonesia.
- White, A. and Martin, A. 2002 Who owns the worlds forests? Forest tenure and public forests in transition. Forest Trends and Center for International Environmental Law, Washington, DC.
- Wilson, E. 2009 Company-led approaches to conflict resolution in the forest sector. The Forest Dialogue, London.
- Wily, L. A. no date [c. 2000] Making woodland management more democratic: cases from eastern and southern Africa. Drylands Programme, International Institute for Environment and Development, London. Mimeo.
- Winders, W. 2009 The politics of food supply: U.S. agricultural policy in the world economy. Yale University Press, New Haven, CT, USA.
- Wittayapak, C. and Vandergeest, P. (eds) 2009 The politics of decentralization: natural resource management in Asia. Mekong Press, Chiangmai, Thailand.
- Wittman, H. and Caron, C. 2009 Carbon offsets and inequality: social costs and co-benefits in Guatemala and Sri Lanka. *Society and Natural Resources* 22(8): 710-726.
- Wollenberg, E., Anderson, J. and Edmunds, D. 2001 Pluralism and the less powerful: accommodating multiple interests in local forest management. *International Journal of Agricultural Resources, Governance and Ecology* 1(3/4): 199-222.
- Wollenberg, E., Moeliono, M., Limberg, G., Iwan, R., Rhee, S. and Sudana, M. 2006 Between state and society: local governance of forests in Malinau, Indonesia. *Forest Policy and Economics* 8(4): 421-433.
- World Bank 1997 World development report. Oxford University Press, New York.
- World Bank 2004 Sustaining forests: a development strategy. The World Bank, Washington, DC.
- World Bank 2006 Strengthening forest law enforcement and governance. Addressing a systemic constraint to sustainable development. Report No. 36638-GLB. The World Bank, Washington, DC. http://www.illegal-logging.info/uploads/Forest_Law_FINAL_HI_RES_9_27_06_FINAL_web.pdf.
- World Bank 2008a Capacity building. The World Bank Carbon Finance Unit, Washington, DC. <http://wbcarbonfinance.org/Router.cfm?Page=CapBuilding&ItemID=7> (12 Nov. 2009).

- World Bank 2008b The World development report 2007: agriculture for development. The World Bank, Washington, DC.
- World Bank 2009a Ease of doing business index. The World Bank, Washington, DC. <http://www.doingbusiness.org/EconomyRankings/> (12 Nov. 2009).
- World Bank 2009b Projects and operations: project portfolio advanced search. <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,menuPK:51563~pagePK:95873~piPK:95910~theSitePK:40941,00.html> (22 Sep. 2009).
- World Bank 2009c World Bank poverty impact evaluations database. <http://go.worldbank.org/DOKOVUWXR0> (12 Nov. 2009).
- World Bank 2009d World development report 2009: reshaping economic geography. The World Bank, Washington, DC.
- World Bank 2009e Making smart policy: using impact evaluation for policy making, case studies on evaluations that influenced policy. Doing Impact Evaluation No. 14. The World Bank, Washington, DC.
- WRI 2000 A first look at logging in Gabon. A Global Forest Watch – Gabon Report. World Resources Institute, Washington, DC.
- WRI 2009 The duality of emerging tenure systems. World Resources Institute, Washington, DC. <http://www.wri.org/publication/content/8069> (1 Nov. 2009).
- Wunder, S. 2003 Oil wealth and the fate of the forest: a comparative study of eight tropical countries. Routledge, London.
- Wunder, S. 2005 Payments for environmental services: some nuts and bolts. CIFOR Occasional Paper No. 42. CIFOR, Bogor, Indonesia. 24p.
- Wunder, S. 2008 How do we deal with leakage? *In*: Angelsen, A. (ed.) Moving ahead with REDD: issues, options and implications, 65-75. CIFOR, Bogor, Indonesia.
- Wunder, S. and Albán, M. 2008 Decentralized payments for environmental services: the cases of Pimampiro and PROFAFOR in Ecuador. *Ecological Economics* 65(4): 685-698.
- Wunder, S., Campbell, B., Frost, P. G. H., Sayer, J. A., Iwan, R. and Wollenberg, L. 2008a When donors get cold feet: the community conservation concession in Setulang (Kalimantan, Indonesia) that never happened. *Ecology and Society* 13(1): 12.
- Wunder, S., Engel, S. and Pagiola, S. 2008b Taking stock: a comparative analysis of payments for environmental services programs in developed and developing countries. *Ecological Economics* 65(4): 834-852.
- Wünscher, T., Engel, S. and Wunder, S. 2008 Spatial targeting of payments for environmental services: a tool for boosting conservation benefits. *Ecological Economics* 65(4): 822-833.

- Xu, Z., Xu, J., Deng, X., Huang, J., Uchida, E. and Rozelle, S. 2006 Grain for green versus grain: conflict between food security and conservation set aside in China. *World Development* 34(1): 130-148.
- Yao, C. E. and Bae, K. 2008 Firewood plantation as an alternative source of energy in the Philippines. *Journal of Forest Science* 24(3): 171-174.
- Young, K. R. 1994 Roads and the environmental degradation of tropical montane forests. *Conservation Biology* 8(4): 972-976.
- Zahabu, E. 2008 Sinks and sources. PhD thesis, University of Twente, Enschede, The Netherlands.
- Zahabu, E., Malimbwi, R. and Ngaga, Y. 2005 Payments for environmental services as incentive opportunities for catchment forest reserves management in Tanzania. Paper to the Tanzania Association of Foresters Meeting. Dar es Salaam, Tanzania, 6–9 November 2005.
- Zarin, D. J., Schulze, M. D, Vidal, E. A., Lentini, M. 2007. Beyond reaping the first harvest: What are the objectives of managing Amazonian forests for timber production? *Conservation Biology* 21(4):916-925