



Non-market-based Approaches to Reducing Deforestation and Forest Degradation

March 2013



Peasant-farmers managers at the 'Camino de la Tagua' Community Reserve in Lebrija, Colombia.

Global Forest Coalition, ICCA Consortium and Econexus*

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Summary

Market mechanisms have proven to be a highly problematic source of funding for climate change mitigation and adaptation in terms of equity, efficiency and environmental and social effectiveness whilst also resulting in unintended negative consequences. Happily there are many non-market based approaches to addressing deforestation and forest degradation that have been shown to work, not only from an environmental perspective, but from a social, cultural and economic viewpoint as well.

Addressing the drivers of forest loss by eliminating perverse incentives, as recommended by the Conference of the Parties to the Biodiversity Convention (CBD), is a pre-condition for any policies and mechanisms that aim to reduce deforestation and forest degradation. As the 193 Parties to the CBD have recognized “eliminating, phasing out or reforming incentives, including subsidies, harmful for biodiversity will make positive incentive measures for the conservation and sustainable use of biodiversity more effective and/or less costly.”¹ This recommendation is particularly relevant for climate policies that include perverse incentives leading to forest loss, like bioenergy policies. In this respect, the CBD COP specifically recognizes “that some incentive measures can be significant drivers of biofuels expansion, in certain circumstances, [and] *invites* Parties and other Governments to evaluate these measures using the Aichi Biodiversity Targets, in the context of the Convention’s cross-cutting issue on incentive measures, taking into account national socio-economic conditions.”²

Another non-market based approach to reducing forest loss that has proven to be highly effective is the recognition of Indigenous territories and community conserved areas (ICCAs). As the Coordination of Indigenous Peoples from the Amazon Basin (COICA) has pointed out, Indigenous territories are “full life territories to cool the planet”.³ ICCAs were recognized or otherwise supported in at least eight decisions of the 11th Conference of the Parties to the CBD. Not only do they form an approach to forest conservation that is at least as effective as the formal establishment of protected areas, but they are far more sustainable from the social, cultural, economic, and financial points of view, protecting ancient cultures and sustainable livelihoods while not requiring a permanent external flow of funding in terms of compensation payments. Rather, they require formal legal recognition of the rights of Indigenous Peoples and local communities to their territories, land tenure systems, autonomous governance systems and biocultural conservation approaches. In the words of Marcial Arias, Indigenous focal point to the Global Forest Coalition: “Instead of wasting money on doubtful and unstable carbon markets, with modest financial support one could

¹ <http://www.cbd.int/doc/decisions/COP-11/cop-11-dec-30-en.doc>

² UNEP/CBD/COP/DEC/XI/27, see <http://www.cbd.int/doc/decisions/COP-11/cop-11-dec-27-en.pdf>

³ <http://www.coica.org.ec/index.php/es/noticias/107-la-ruta-hacia-territorios-de-vida-plena-coica-en-la-cumbre-de-cambio-climatico-2>

secure the rights of Indigenous Peoples to their lands and territories and support sustainable community management of forests.”⁴

1. Introduction

The mechanism that was established by Decision FCCC/CP/2010/Add.1 on *Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries*” (normally abbreviated as the REDD+ mechanism, even though this abbreviation does not have a legal foundation) is based on the misguided assumption that the lack of financial revenue from standing forests is the main driver of forest loss. As the original submission by Papua New Guinea and Costa Rica states: “*Nevertheless, in the absence of revenues streams from standing forests, communities and governments in many developing nations have little incentive to prevent deforestation.*”⁵ Eric Solheim, former Minister of Environment of Norway, put it even more bluntly: “*Tropical deforestation happens because it is more profitable to cut down forests than to look after them.*”⁶

If this assumption were true, it would be highly doubtful that the world’s forests could be saved. It implies that forests can only be conserved if a market is established that makes it more profitable to protect forests than it is to cut them down is established; that is, a market in the so-called ‘environmental services’ of forests that can outcompete markets in profitable commodities like palm oil, sugar, soy and beef. This is highly doubtful. Theoretically, the economic values of forests are significant, but existing markets for so-called ‘environmental services’ are still a marginal phenomenon in practice, despite the fact that they have benefited from large amounts of public support over the past decade. As Milder *et al.* (2010) conclude, 98% of all existing ‘payments for environmental services’ is in the form of agro-ecological or other subsidies and incentive schemes that are financed by governments. The forest carbon offset market itself has mobilized less than 1% of the funding that researchers who originally promoted the idea of the REDD+ scheme expected.⁷ And this situation is not expected to alter until at least 2020: the only major Party that accepted a second round of binding emission reduction commitments under the Kyoto Protocol, the EU, will not accept forest carbon offset credits until 2020, due to legitimate concerns about as yet unresolved questions concerning permanence, leakage, and other technical issues that would undermine the environmental integrity of the UN’s climate regime.⁸ Moreover, current emission reduction commitments are astonishingly unambitious, and as a result demand for carbon offsets has collapsed. Therefore, market-based finance for forest conservation is likely to decline even further between now and 2020, and any new market mechanism is unlikely to be operational for at least ten years. It is clear, however, that the world cannot wait another seven to ten years for forest loss to be halted, if only because the Aichi Target of the Convention on Biological Diversity that “the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero” should have been *reached* by 2020. This implies there is a clear lack of coherence between existing legally binding commitments under the Biodiversity Convention and negotiations under the UNFCCC about a potential market-based funding mechanism to finance forest conservation that might only be established in or after 2020. This inconsistency demonstrates an

⁴ Marcial Arias, Latin American focal point of the Global Forest Coalition. Personal communication, March 2013

⁵ FCCC/CP/2005/MISC.1, see <http://unfccc.int/resource/docs/2005/cop11/eng/misc01.pdf>

⁶ Bond *et al.*, 2009

⁷ e.g. Santilli, 2005, Chomitz *et al.*, 2007, Dutschke *et al.*, 2008, Peskett and Harkin, 2007. Richards and Jenkins, 2007

⁸ EC, 2008, Lovera, 2008(b), Lohmann, 2006

increasing trend by UNFCCC negotiators to ignore the decisions of the Conference of the Parties to the Convention on Biodiversity, and vice versa.

2. Are Market-based Mechanisms Necessary to Conserve Forests?

Market-based mechanisms bring numerous risks for and negative impacts on the effectiveness, efficiency and equity of the climate change regime (see our joint submission on new market mechanisms). More importantly, whether or not they are even needed is highly questionable. Whether they are defined as a broad, generic approach or as specific direct negotiated payments for environmental services delivery⁹, Payments for Environmental Services (PES) are based on a rather contested, neo-liberal conservation philosophy. *“The AD proposal is an approach to forest and carbon sink conservation that fits comfortably into the logic of environmental economics and neoliberalism.”*¹⁰

The rather simplistic assumption that forests can only be conserved if the environmental services that forest provide are paid for has little basis in research into either the drivers of forest loss, or the success factors of forest conservation. In fact, analysis of the effectiveness of existing Payments for Environmental Services’ (PES) schemes in Costa Rica and Mexico has demonstrated that their PES schemes have added relatively limited value to existing community conservation practices and/or command and control measures like deforestation bans.

Indeed, it is often unclear whether the PES mechanism has been the main factor in the success of the overall scheme, or whether other factors like existing community forest management traditions, accompanying deforestation and/or logging bans or reduced demand for commodities like beef or timber, were the main contributors to forest conservation.¹¹ In an analysis of PES schemes in Mexico, Alix-Garcia *et al.* found that the payments had had only very modest impacts on existing conservation practices (including because few of the participating communities actually understood that the payments were made for forest conservation activities).¹² In many cases, the payments ended up replacing existing (and cheaper) command and control measures.¹³ Similarly, Pfaff *et al.* concluded that the PES scheme in Costa Rica had not been particularly successful as far as reducing deforestation was concerned, because most of the payments went to landholders that would not have destroyed their forests anyhow.¹⁴

In general, it seems that most schemes are only effective when combined with regulations banning or at least strictly regulating forest conversion and/or when they are accompanied with policies that recognize community rights over their forests. Arguably, these far less costly policy measures might have been a success without any additional compensatory payments. So one might wonder whether PES schemes are an effective use of the very limited resources that are available for environmental policy implementation today. Most countries that have embraced large-scale PES-schemes have been faced with significant challenges with respect to obtaining long-term financing, which has added to existing

⁹ Pirard *et al.*, 2012

¹⁰ Humphrey 2008

¹¹ Pfaff *et al.*, 2008

¹² Alix-Garcia, 2005

¹³ Alix-Garcia, 2005

¹⁴ Pfaff *et al.*, 2008

budgetary challenges in the US and EU, as well as being responsible for disproportionately high loans to small countries like Costa Rica.¹⁵

The concept of compensation also makes the false assumption that conserving their own forests does not benefit countries or communities at all, and that they should therefore be fully compensated for any efforts made. This assumption overlooks ample evidence for the local and national carbon and non-carbon economic and social benefits of forest conservation.¹⁶ Moreover, there is no historical evidence that such payments are needed or even helpful when it comes to convincing countries to conserve their forests. None of the 63 countries that had halted forest loss by 2010¹⁷ had received full compensation for doing so, and there is remarkably little evidence of a statistical relationship between financial support for a country's forest sector and success in forest conservation. For example, none of the five countries that received an award for having the world's best forest policies in 2011¹⁸ – Rwanda, Gambia, Bhutan, Switzerland and the US – had received any REDD+ funding at the time, and the support these countries received for their forest policies, if any, was very modest compared to that received by countries such as Indonesia and Brazil, two countries which still have astonishingly high deforestation rates.¹⁹ What the forest policies of the five winning countries did have in common was significant public awareness of the economic, social, and intrinsic value of forests, which in four cases²⁰ formed the basis for a well-functioning system of community forest governance, and in four cases for broadly supported, strict regulations banning forest conversion and/or the import of illegal timber.²¹

3. Addressing the Drivers of Forest Loss by Redirecting Perverse Incentives



Logs and trees in industrial monoculture tree plantation, US. Photo courtesy: Anne Petermann/GJEP.

On the basis of the findings of national multi-stakeholder workshops on the underlying causes of forest loss (organized by the Global Forest Coalition in 22 different countries between 2006 and 2009) it is clear that global and national demand for wood and land play a far more important role in driving deforestation than lack of finance. As the summary report on these national analytical processes states: “Measures to address deforestation and forest degradation are most unlikely to succeed if they do not address the real underlying causes of forest loss. These include an excessive

¹⁵ Vatn, 2011

¹⁶ ten Brink *et.al.*, 2009


¹⁷ FAO, 2010

¹⁸ <http://www.worldfuturecouncil.org/4322.html>

¹⁹ Advisory Group on Finance of the Collaborative Partnership on Forests, 2012

²⁰ Rwanda, Gambia, Bhutan and Switzerland

²¹ Rwanda, Bhutan, Switzerland and the US. The latter was specifically nominated for its Lacey Act regulating the import of illegal timber from other countries.



demand for wood, which was identified as a key underlying cause in many countries. Current policies to promote wood-based bio-energy are likely to increase this demand even further.

“Spiraling demand for land for plantations and other forms of agriculture, and tense disputes and uncertainty over who owns various areas of land and forest are another important root cause. Here again, current climate mitigation policies add to the problem rather than addressing it, by promoting the expansion of agrofuels, bio-energy and monoculture tree plantations, which increases demand for land. Similarly governments are failing to address the rapidly increasing global demand for meat and dairy products, which is triggering expansion of the agricultural frontier for the production of animal feedstocks.

Forest loss is often brought about by the development of infrastructure and mining, and urbanization and industrialization projects supported by bilateral and multilateral donors. Redirecting these financial flows would benefit forests and forest peoples much more than pumping millions of dollars, euros and krone into protected areas that people are frequently excluded from. In general, it was found that a great deal of forest loss was down to deliberate government policies and/or governments’ failure to develop, implement and enforce proper forest policies. Entrenched corruption is still a major driver of forest loss in many countries... An inspiring conclusion in this respect is that addressing the underlying causes of forest loss does not require a huge financial investment, but rather a redirection of the financial flows that currently support bio-energy, large-scale tree plantations, mining and other destructive projects. The workshops concluded that forests can be saved and restored by providing lower levels of stable but well-targeted support for integrated programs that respect Indigenous territories and community conserved areas, foster and promote cultural values and knowledge systems, raise awareness where necessary of the importance of forests for water and livelihoods, and offer alternative livelihood opportunities where needed.²²

These conclusions are very much in line with the recommendations of the most recent Conference of the Parties to the Convention on Biological Diversity. In its decision UNEP/CBD/COP/DEC/XI/30, it “*Invites* Parties and other Governments to take into consideration, in their policy planning, the linkages between the elimination, phase out or reform of harmful incentives, including subsidies, and the promotion of positive incentive measures for the conservation and sustainable use of biodiversity, consistent and in harmony with the Convention and other relevant international obligations, including in revised national biodiversity strategies and action plans, taking into account national socio-economic conditions”. More specifically, the Conference of the Parties:

“*Invites* Parties and other Governments to develop and apply tools to identify incentives that are harmful for biodiversity, as well as methods to monitor progress towards Aichi Biodiversity Target 3, using the relevant indicator of the strategy for resource mobilization (decision X/3, paragraph 7, indicator 13);

(b) *Emphasizes* that conducting studies for the identification of incentives, including subsidies, harmful for biodiversity need not delay immediate policy action in cases where candidates for elimination, phase out or reform are already known, taking into account national socio-economic conditions;

(c) *Encourages* Parties and *invites* other Governments to take appropriate action in these cases, in the form of elimination or initiation of phase out or reform, taking into account national socio-economic conditions, including by seizing opportunities arising within the review cycles of existing sectoral policies, both at national and regional levels;

²² Hall, 2010

(d) *Invites* Parties, other Governments and relevant international organizations to submit to the Executive Secretary information on obstacles encountered in implementing options identified for eliminating, phasing out or reforming incentives that are harmful for biodiversity;

5. *Recognizes* that eliminating, phasing out or reforming incentives, including subsidies, harmful for biodiversity will make positive incentive measures for the conservation and sustainable use of biodiversity more effective and/or less costly.”²³

These recommendations by UNFCCC’s sister Convention are of the utmost relevance to the discussion on mobilizing resources for reducing forest loss.

3. Alternative Non-market Incentive Mechanisms for Forest Conservation

Considering the significant amount of literature that has been produced on the technical aspects of REDD+, there has been remarkably little research on the factors that have triggered successful forest conservation and restoration until now. Comprehensive research by Kuchli on the historical patterns leading to forest restoration in twelve different countries found that effective community governance over forests played a key role in most of these success stories.

“Local empowerment, rather than central control, is the first step towards long-term preservation of natural resources and the environment.”²⁴

As one of the key motivations for forest conservation for local communities he identifies the fact that “the forest is their home and not merely one of the many places they have chosen to exploit for profit.”²⁵

This conclusion is very much in line with the motivations identified by Indigenous Peoples and local community representatives themselves, for example in a participatory analysis of the drivers of community forest restoration that was undertaken by national Global Forest Coalition members in seven different countries in 2010.²⁶ During the workshops that were organized during this analysis, local people pointed out that forests are not considered in a reductive, mechanical way by indigenous Peoples. Rather, they are an integral part of peoples’ and communities’ existence and identity, intrinsic to life itself, both practically and spiritually: the forests are central to many Indigenous Peoples’ traditions and culture, and are a source of food, medicines and building materials. For some the forest is also home to their gods, and of great spiritual importance.²⁷

Research by enlightened economists like the late Elinor Ostrom²⁸ has demonstrated that social pressures and community values play a significant role in motivating individual economic actions. According to representatives of Indigenous Peoples and local communities engaged in forest conservation and other area-based conservation activities themselves, such pressure and value systems form the cornerstone of their motivation. In their testimonies on why their communities were motivated to conserve their forests rather

²³ UNEP/CBD/COP/DEC/XI/30 see <http://www.cbd.int/doc/decisions/COP-11/cop-11-dec-30-en.doc>

²⁴ Kuchli, 1997

²⁵ Kuchli, 1997

²⁶ Hall, 2010

²⁷ Hall, 2010

²⁸ Ostrom, 2006

than destroy it, Indigenous Peoples seldom mention financial motives. Rather, they highlight traditional value systems:

"Indigenous People have always considered that this land is sacred and that the welfare and health of the planet depend on their health and conservation. This is the vision that has and is still motivating our communities to maintain the conservation and restoration of our territories. We are seeking to recover usurped ancestral lands, and to restore their vitality, to recreate the forests as they once were, before the expansion of Western agriculture and deforestation."²⁹

Representatives of traditional communities in India, Tanzania, Nepal, Colombia and Brazil have given similar clarifications for their conservation efforts.³⁰ Awareness of the many carbon and non-carbon benefits of forests plays an important role in motivating community conservation. In Tanzania, for example, community members from the village of Kongwa explained that they had been encouraged to restore their forests because of the important role these restored forests play in sustaining their livelihoods. Following restoration they noticed a decline in soil erosion, easier availability of medicinal plants and bushmeat, and an increase in the flow of water from springs.³¹

In their submission to the UNFCCC in March 2012, the Least Developed Countries point out rightfully that "the recognition of the LDC communities' high dependency on forests for their daily livelihoods, food, shelter, energy and medicines must be considered fully in the REDD+."³² Likewise, in its submission in 2011, India stresses that "carbon service from forest and plantations is one of the co-benefits and not the main or the sole benefit" and that "in India's context, the forest will not be managed for 'carbon services' alone, but for all the ecosystem services that are flowing to the local community from the forest."³³ As Souparna Lahiri from the All India Forum of Forest Movements points out "Forests is their traditional habitat, identity, intrinsic part of culture, home to their sacred groves and source of life and livelihood. The non-timber forest produce and minor forest produce enhance their livelihood and also helps the wildlife survive. A significant example is that of the state of elephants in India and the increasing elephant-villagers conflict since the elephant herds are raiding the villages for food because the forest around (mostly plantations and secondary forests) can no longer provide them with food."³⁴

4. Assessing and Supporting the Resilience of Territories and Areas conserved by Indigenous Peoples and Local Communities (ICCAs)

There is very broad support for the notion that recognizing and strengthening the rights of Indigenous Peoples and local communities to manage and control their forests is an important strategy to conserve forests.³⁵ Territories and areas conserved by Indigenous

²⁹ Geodisio Castillo, an Indigenous legal expert from Kuna Yala, Panama, during the 2010 national workshop on the underlying causes of forest restoration in Panama, in Hall, 2010

³⁰ Hall, 2010

³¹ Hall, 2010

³² http://unfccc.int/files/methods_science/redd/submissions/application/pdf/20120314_gambia-ldc_submission_redd.pdf

³³ http://unfccc.int/files/documentation/submissions_from_parties/application/pdf/india_submission_reddplus-strategy.pdf

³⁴ Souparna Lahiri, All India Forum of Forest Movements, personal communication, March 2013

³⁵ Agrawal, 2001, Nepstad *et.al.* 2006, Nagendra, 2007, Porter-Bolland, 2010, Pfaff, 2010, World Bank, 2008

Peoples and local communities (ICCAs) cover an estimated 22% of the earth's terrestrial surface.³⁶ The ICCA Consortium defines an ICCA as follows:

- A community or people that is closely connected to a well-defined ecosystem (or to a species and its habitat) culturally and/or because of survival and dependence for livelihood.
- The management decisions and efforts of the Indigenous People/local community lead to the conservation of the ecosystem's habitats, species, ecological services and associated cultural values, even when the conscious objective of such management may not be conservation *per se*. It might, for instance, be related to material livelihood concerns, water security, or the safeguarding of cultural and spiritual places, etc.
- The community or people is the major player in decision-making (governance) and implementation regarding the management of the site, implying that customary and community institutions have the capacity to enforce regulations; in many situations there may be other stakeholders in collaboration or partnership, but primary decision-making rests with the concerned community or people.³⁷

Successful examples of ICCAs and other biocultural approaches can be found in forest and other ecosystems all over the world. It is important to distinguish ICCAs from community-based forest management, which is an often-used term in the forestry sector. Community-based forest management includes initiatives that have been designed by outside actors like State forestry agencies or NGOs and that involve community members in implementation only, without giving them full control over the forests.³⁸ These projects are often marked by significant conflicts between the community and the State forestry agency. It should also be highlighted that ICCAs do not necessarily imply legal ownership over the land. Especially in Africa and Asia, most ICCAs are located on lands that are the legal property of the State, but *de facto* controlled and managed by Indigenous Peoples or local communities.



Photo courtesy: ICCA Consortium, 2012.

There is increasing evidence that ICCAs are not only beneficial from the perspective of human rights, social welfare and the other non-carbon benefits provided by forests, but that they are at least as effective as conventional protected areas in terms of conservation policy.

An elaborate research exercise by Porter-Bolland *et al.* concluded that forest areas managed and governed by local communities showed lower deforestation rates than

³⁶ World Bank 2008 and ICCA Consortium, 2010

³⁷ <http://www.iccaforum.org/>

³⁸ IPCC, 2011

formal protected areas.³⁹ This is even more remarkable if one takes into account that protected areas are often established in areas that are relatively less attractive for agriculture or other forms of land use, like mountains, deserts and large unfragmented forests.⁴⁰ Nepstad *et al.* who studied deforestation in the Brazilian Amazon, reported that even in high-risk areas of frontier expansion many Indigenous lands prevented deforestation completely; Indigenous lands comprise approximately 20% of the region and the authors concluded they were “the most important barriers to Amazonian deforestation.”⁴¹ These findings are supported by recent analysis by Nolte *et al.* They categorized almost 300 Brazilian Amazon protected areas into strict protection, sustainable use, and Indigenous lands, and showed that “indigenous lands were particularly effective at avoiding deforestation in localities with high deforestation pressures.”⁴² Similar results were reported for Latin America and the Caribbean, where investigations utilized forest fire as a proxy for deforestation, and revealed that Indigenous areas were almost twice as effective as strictly protected areas and multiple use areas in reducing tropical fires; and that Indigenous Peoples’ governance regimes not only protect forests but contribute towards biodiversity conservation and climate change mitigation goals.⁴³

ICCAs also play an important role in climate change adaptation, as the traditional knowledge and management practices of Indigenous Peoples and other forest-dependent communities plays a key role in enhancing the resilience of the community. *“It is the Adivasi and indigenous knowledge and wisdom of the ecology, the environment, the forests, land and water that highly contribute also to the communities’ resilience towards impacts of climate change and related disasters. This knowledge and wisdom is passed on through generations and women play an important role in preserving that knowledge and wisdom.”*⁴⁴

5. How should Community Forest Conservation be incentivized?

In-depth research on the most effective ways to support community conservation is remarkably scarce. The ICCA consortium itself performed an analysis of the best ways to support ICCAs in 2010 (see Annex 1).⁴⁵ It concluded that by far the most important forms of support are the legal and political recognition of ICCAs, and the rights and governance systems of the Indigenous Peoples and local communities that conserve them.

A preliminary analysis by the Global Forest Coalition, the ICCA Consortium and the Commission on Environmental, Economic and Social policy of the World Conservation Union on the most effective ways to support forest conservation and restoration by Indigenous Peoples and local communities led to similar conclusions. Some of the key recommendations for policies and incentives to support community conservation were:

- The recognition of Indigenous territorial rights, autonomy, traditional knowledge and governance systems;
- Enabling Indigenous Peoples and local communities to share knowledge, strengthen their institutions and governance systems, and build alliances with like-minded movements;

³⁹ Porter-Bolland, 2011

⁴⁰ Nagendra, 2008

⁴¹ Nepstad *et al.*, 2006

⁴² Nolte *et al.*, 2013

⁴³ Nelson and Chomitz, 2011

⁴⁴ Souparna Lahiri, All India Forum of Forest Movements, personal communication, March 2013

⁴⁵ Borrini-Feyerabend, 2010.

- Governmental policies to support land reform, sustainable agriculture, food sovereignty and sustainable alternative livelihood options, provided these policies respect and build upon the rights, traditional knowledge, governance systems and livelihood strategies of Indigenous Peoples and small farmers; and
- Legal, political and financial support for campaigns against destructive policies and projects, including logging, mining, large tree plantations and land grabbing;

The following kinds of external support were seen as not helpful:

- REDD+ and other projects that convince Indigenous Peoples and local communities to sign false or otherwise unfair PES agreements and that create tensions and even conflicts within and between communities and that undermine their livelihoods;
- REDD+ projects and policies funded through offsets from mining, logging or agro-industrial companies, as it is very unlikely such companies will provide badly needed support for legal and advocacy campaigns against their industries;
- REDD+ and other support for monoculture tree plantations, which cause serious negative impacts on local communities and Indigenous Peoples, and forests;
- Top-down forms of support that do not respect, and undermine the rights, spiritual value systems, and governance systems of Indigenous Peoples and communities. International support often comes with fixed ideas about governance structures that are inappropriate for Indigenous Peoples and local communities;
- Projects and policies that ignore women's rights and needs, and gender initiatives that do not take into account the traditional rights and status of women;
- Projects that impose economically unviable or otherwise senseless alternative livelihoods on Indigenous Peoples and local communities;
- Projects that trigger the privatization of land and the commodification of nature, also because they undermine traditional communal values and governance systems.⁴⁶

A more elaborate legal review of policies and laws to support ICCAs drew up similar conclusions.⁴⁷ Here again, Payments for Environmental Services systems were not amongst the schemes mentioned by the different authors of these legal reviews. Rather, laws and policies that formally recognized ICCAs and the rights of Indigenous Peoples and communities to manage these areas autonomously were seen as the most effective ways to promote them.

Most importantly, what is needed is to enhance the capacity of Indigenous Peoples and local communities themselves to assess the resilience of their own biocultural conservation approaches, and the kinds of support they feel would contribute to enhancing this resilience. Such community conservation resilience assessments should include a thorough assessment of the role, rights, and needs of women in conservation initiatives.

Too many support schemes for community-based conservation continue to be top-down, and disconnected from endogenous, biocultural conservation approaches and the development aspirations of communities themselves. Genuine Free, Prior and Informed Consent processes also require that communities are able to present their own aspirations and requests for support as a possible alternative to REDD or other top-down designed support schemes. Biocultural protocols can be one of the tools used to describe the rights, biocultural conservation approaches and development aspirations of communities in this respect.

⁴⁶ Global Forest Coalition *et.al.*, 2012

⁴⁷ Jonas et al., 2012

“For us in AIFFM, our demand similarly is full implementation of the FRA [Forests Rights Act, 2006], and establishment of community forest governance giving primacy to the Gram Sabha (village council) in decision making and planning. Gram Sabhas will also reflect and moderate the aspirations of the community in such governance framework. We also believe that certain current practices can fit in to the community governance framework and others need to be revived and remodeled keeping in mind the current nature and stock of forests and the aspirations of the communities.”⁴⁸

6. The Equity and Effectiveness of REDD vis-à-vis Alternative Incentive Schemes

The fact that PES schemes were not highlighted amongst the policies and mechanisms that could promote community conservation in the above-mentioned studies does not imply that they do not play a role in stimulating community action at all. However, it is important to realize that PES schemes do not necessarily target communities, many schemes target individuals as well as communities, or even only individuals. This implies that they do not contribute to strengthening the communal traditional and/or cultural value systems that were identified by scholars like Agrawal,⁴⁹ coalitions like the ICCA Consortium,⁵⁰ and individual Indigenous representatives⁵¹ as the cornerstone of community conservation. As has been observed in India, “PES is a mechanism that is not understood by the forest communities. Nor do they have any stake in it. Rather, the beneficiaries will be new private agencies that will come in between to trade in environmental services. The best mechanism to us is the mechanism of community forest governance and strict implementation of the Forest Conservation Act, 1980 and the Forest Rights Act 2006.”⁵²

Overall, these ‘classic’ PES schemes are based on the assumption of a ‘homo economicus’, that is, the assumption that financial gains are by far the main motivation for human action. REDD+ is based on a similar assumption: that financial contributions are the only incentive that will trigger action to conserve forests. However, several researchers⁵³ have identified the risk that PES payments to individuals might actually lead to an erosion of community values. Kuchli highlights the conflict between what he calls “the short-sightedness of individuals versus the long-term needs of the community,”⁵⁴ embracing the latter as the cornerstone for successful forest restoration.

Karsenty and others also highlight the risk that PES or REDD+ payments might lead to so-called “opportunistic behaviours” by countries: “Using incentives to prevent highly lucrative activities could not only prove to be ineffective: it could also generate opportunistic behaviours and raises issues of equity.... As pointed out by Gregersen *et al.* (2010), using incentives systematically within such a REDD+ framework would encourage potential oil palm developers to ask for plantation permits in the primary forests (turning the baseline scenario into a self-fulfilling prophecy), with the expectation of receiving financial compensation to develop lands elsewhere. A regulation prohibiting the development of large-scale agricultural plantations on densely forested land would be much less costly than using incentives, and would prevent “rent-seeking behaviours” of powerful players..... Effective

⁴⁸ Souparna Lahiri, All India Forum of Forest Movements, personal communication, March 2013

⁴⁹ Agrawal, 2001

⁵⁰ Borrini-Feyerabend *et al.*, 2010

⁵¹ Global Forest Coalition *et al.*, 2012

⁵² Souparna Lahiri, All India Forum of Forest Movements, personal communication, March 2013

⁵³ Alix-Garcia, 2005

⁵⁴ Kuchli, 1997

combinations between regulation and incentives will need to be designed in order to avoid important drifting of the costs and capture of the bulk of the funds by opportunistic and powerful players.....”⁵⁵

By establishing an entitlement to financial compensation for an ‘environmental service’ like reducing deforestation, the proponents of REDD+ create the assumption that deforestation by itself is a right of the forest owner — or a country in the case of REDD+ — and that reducing it is a ‘service’ to outsiders.⁵⁶ Such a vision seems at odds with legislation in most countries, which requires specific permission from the government in the form of a license or logging concession whenever a significant area of forest is converted. In fact, an estimated 86% of the world’s forests is state property. In continents like Africa and Asia almost all forests belong to the state.⁵⁷ So national governments in these continents have the right to prohibit or permit deforestation, without any legal need for compensatory payments.

A related, significant risk of PES programs is that conservation activities will be undone once contracts run out and payments stop. While most PES schemes foresee the possibility of renewal of contracts, landowners might not be interested to do so if commodity prices have improved in the meantime and the payments are no longer sufficient to compensate for the resulting higher opportunity costs. The largest and oldest PES schemes in the world, the US Conservation Reserve Program and the EU Eco-agricultural subsidy scheme provide quite dramatic examples in this respect.⁵⁸ In the US, for example, when wheat prices rose dramatically in the 1970’s, some 26% of the lands that had been set aside as part of the Great Plains Conservation Program were put back into production again.⁵⁹ Considering the current uncertainty about reliable and stable financial flows for forest conservation, governments should thus be urged to be extremely cautious about establishing new or additional PES schemes. The most recent developments in countries that have received generous REDD+ support like Indonesia — which is considering dropping previously agreed deforestation moratoria and converting massive amounts of land to oil palm plantations, including areas that are highly sensitive to flooding and other climate change impacts⁶⁰ — are very worrying in this respect as well.

7. Conclusion: Learning from Successes in Forest Conservation

There is clearly a need for more scientific research on the success factors that prompt countries to halt or even reverse their forest loss, and the success factors that support Indigenous Peoples and local communities conserving forests in their territories and areas. Initial analysis indicates that financial compensation and even financial support play only a modest role at best. Indeed, there are indications that financial support schemes might actually aggravate conflict at the community level, as well as triggering elite resources capture and providing an incentive for illegal land grabbing.⁶¹

⁵⁵ Karsenty, 2012

⁵⁶ Wunder, 2007. Karsenty, 2008

⁵⁷ Please note this state ownership is often challenged by forest-dependent Indigenous Peoples and local communities, who tend to foster long-standing land claims over these forest areas.

⁵⁸ Latacz-Lohmann

⁵⁹ Cain and Lovejoy, 2004.

⁶⁰ See <http://www.redd-monitor.org/2013/01/29/indonesian-ngos-demand-action-saving-indonesias-remaining-forests-can-no-longer-be-delayed/> and <http://www.redd-monitor.org/2013/02/13/indonesia-governor-of-aceh-puts-forests-under-threat/>

⁶¹ Alix-Garcia, 2005, Peskett, 2008, Lovera, 2008, Lovera, 2008 (b), Global Forest Coalition (2008), Global Forest Coalition *et al.*, 2012

It is broadly acknowledged that PES and REDD+ schemes can have serious equity implications. These mechanisms also create a need for permanent funding flows in a time when there is significant uncertainty about future forest funding. From a global financial and macro-economic point of view, they can be considered highly inefficient as forest conservation policies. It is clear these policy mechanisms need serious reconsideration, especially in light of the emerging evidence that alternative policies, like recognizing community and Indigenous Peoples' governance over forests, have proven to be far more effective, equitable and economically efficient. "It is not the lack of financial incentives or the absence of revenue from forests that has triggered most deforestation until now. Rather, it is the denial of Indigenous Peoples' rights and community governance by forest communities, combined with the appropriation of forests by state forestry departments, who promote plantations in place of old growth forests, which are unproductive both for communities and wildlife. At the same time they turn a blind eye to forest conversion for development projects, which causes the alienation of forest communities from their forests."⁶²

"...non-market compensatory mechanisms.... should attach value to the sustainable and integral management of forest resources as a basis for the provision of support to local and indigenous people to manage their forests, and forest landscapes, in sustainable ways. These mechanisms should thereby enhance local and national forest governance as a way of improving people's livelihoods, based on climate friendly and resilient economies, while simultaneously ensuring sustained reduction of the GHG emissions without affecting the legitimate goals of socio-economic development. This implies that supporting joint mitigation and adaptation measures can contribute to foster the transition of developing countries towards pathways based on socially and environmentally sound rural development by strengthening local resource use and management practices of forests and other land use systems located within forest landscapes — in community forest management, agroforestry, forest gardens, and smallholder tree planting — without compromising the forests' multiple environmental functions while simultaneously enhancing the livelihoods of forest dependent communities."⁶³



*Forest landscape at the Amador Hernandez community in Chiapas, Mexico.
Photo courtesy: Orin Langelle/GJEP.*

⁶² Souparna Lahiri, All India Forum of Forest Movements, personal communication, March 2013

⁶³ Submission by the Plurinational State of Bolivia on the Development of the joint Mitigation and Adaption Mechanism for the Integral and Sustainable Management of Forests. In FCCC/AWGLCA/2012/MISC.3

Annex 1: The Do's and Don'ts of Supporting Territories and Areas conserved by Indigenous Peoples and local communities (ICCAs)⁶⁴

Do's	Don'ts
Help the concerned communities to document their ICCAs and make them known and appreciated, if this is requested and/or agreed upon by them.	Do not research or disseminate ICCA information without the free, prior and informed consent of the relevant communities, as defined by them.
Assist communities managing ICCAs to gain recognition of their land, water, and bio-cultural resource rights (property, custodianship, use), including by supporting their claims to such rights through maps, demarcation, historical records, etc.	Do not impose top-down governance regimes upon ICCAs, including co-management/shared governance regimes; do not acquiesce when rights have been taken by force or ignored.
Recognize the local institutions governing the ICCAs, while helping them to self-evaluate and strengthen the quality of their governance (indicated by, for example, gender and class equity, transparency, accountability, and effectiveness).	Do not undermine or displace functioning ICCA governance institutions or impose new institutions upon endogenous bodies and rules.
Strengthen national laws and policies that recognize Indigenous Peoples and local communities as legal actors possessing common rights.	Do not neglect communities in state legal systems (e.g. by recognising as legal subjects only state bodies, individuals, and corporate actors).
Emphasize that ICCAs are living links between biological and cultural diversity, stressing history, ancestral territories, and cultural identity, as well as their continuing evolution and adaptation.	Do not overtly or implicitly promote cultural uniformity, narrow-mindedness, intolerance, ethnic disrespect, or any type of discrimination and prejudice against 'the others'.
Provide coherent support and backing to communities enforcing ICCA regulations, in particular to apprehend violators and have them judged and sanctioned in fair and consistent ways.	Do not leave communities alone to carry the burden of surveillance and repressing violations, in particular when the ICCA rules match and enforce state rules.
Provide means for joint, constructive evaluation of ICCAs by concerned communities, civil society, and government administrations, focusing on outputs and impacts for conservation, livelihoods, governance, and cultural and spiritual values.	Do not evaluate ICCAs in isolation from their concerned communities or solely or mostly in terms of compliance with external expectations (e.g. types of committee, rules, and plans).
Provide assistance in technical aspects of management, if required and sought by the community, through respectful, cross-cultural dialogue between different knowledge systems,	Do not impose management objectives, legal categories, or technical expertise that undermine ICCAs' local meaning and value; do not validate traditional


⁶⁴ ICCA, 2010

including mutual validation where necessary.	knowledge by 'scientific' knowledge as a one-way process.
Help prevent and mitigate threats to ICCAs from outside and within the community, including by seeking special status for ICCAs (e.g. as off-limits to destructive activities, 'ecologically important', or as part of the national protected area system).	Do not impose protected area status or any other special status on an ICCA without the free, prior and informed consent of the relevant Indigenous Peoples or local communities as decided and controlled by them.
Support local sustainable livelihoods activities, whether or not they are linked to the ICCAs, ensuring that distribution of benefits is equitable and that any integration with the market economy is culturally appropriate and desired by the community.	Do not formally recognize ICCAs in ways that diminish local livelihoods or support development that undermines ICCAs (e.g. inappropriate tourism and other initiatives that see nature and culture as commodities).
Provide or strengthen socio-cultural, political, and economic incentives for conserving ICCAs, while seeking to maintain their independence and autonomy.	Do not displace or undermine existing motivations for supporting ICCAs or make ICCAs entirely or primarily dependent on outside economic incentives.
Provide special support to young people contributing to ICCAs and facilitate locally relevant, culturally-sensitive health and education services that incorporate local languages and knowledge.	Do not support health and education services that are culturally insensitive, irresponsive to local contexts and livelihoods, and/or disruptive of local identities.
Respect and strengthen local, traditional knowledge, protect it against piracy and misuse, and facilitate its evolution in complementary partnership with other forms of knowledge, in particular to fill gaps or deal with local power inequities.	Do not impose external or 'scientific' ways of understanding and solving problems; do not undermine customary approaches and values that provide effective contributions to the ICCA.
Support networking among ICCAs for mutually beneficial learning and empowerment.	Do not flood attention on individual ICCAs as if they were unique phenomena.
Support respectful alliances among Indigenous Peoples, local communities, human right advocates, and development and conservation practitioners.	Do not pit local, culture-based rights and values against human rights, human development, or conservation aspirations with general appeal.
Promote values of community integrity and solidarity and environmental awareness and care.	Do not incite private interests, power, and violence as values or conform to them as dominant discourse.
Support conflict management and peace and reconciliation efforts that respect local communities and their ties to nature.	Do not exacerbate conflicts or put communities in the frontline of conflicts.

References:

Advisory Group on Finance of the Collaborative Partnership on Forests, 2012. 2012 Study on Forest Financing. CPF, 2012.

Agrawal, A. 2001. Common property institutions and sustainable governance of resources. World Development 29(10): 1649-1672.



Alix-Garcia, J., de Janvry, A., Sadoulet, E. and Torres, J., 2005. An Assessment of Mexico's Payment for Environmental Services Program. University of California at Berkeley and CIDE for the FAO Comparative Studies Service Agricultural and Development Economics Division.

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.

Borrini-Feyerabend, G, 2008. Recognising and supporting indigenous & community conservation – ideas & experiences from the grassroots. CEESP briefing note 9, September 2008. IUCN, Gland, Switzerland.

Cain and Lovejoy, S., 2004. History and Outlook for Farm Bill Conservation Programs. Choices, 4th Quarter 2004, American Agricultural Economics Association.

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.

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.

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.

FAO. 2010. State of the World's Forests 2009. Food and Agriculture Organisation of the United Nations, Rome, Italy.

Global Forest Coalition, 2008. Life as Commerce, the impact of market-based conservation on Indigenous Peoples, local communities and women. Global Forest Coalition, Amsterdam.

Global Forest Coalition, ICCA Consortium and IUCN Commission on Environmental, Economic and Social Policy, 2012. The Do's and Don'ts of supporting forest conservation and restoration initiatives by local communities and Indigenous Peoples. <http://globalforestcoalition.org/wp-content/uploads/2012/05/final-report-dos-and-donts.pdf>

Hall, R. (ed.) 2010. Getting to the Roots, Underlying Causes of Deforestation and forest Degradation and Drivers of Forest Restoration, Global Forest Coalition, Amsterdam, 2010
<http://www.globalforestcoalition.org/wp-content/uploads/2010/11/Report-Getting-to-the-roots1.pdf>

Humphrey, D. 2008. The politics of 'avoided deforestation': historical context and contemporary issues, *International Forestry Review* 10, 433-442

ICCA Consortium, 2010. Bio-cultural diversity conserved by Indigenous peoples and local communities – examples and analysis, companion document to IUCN/CEESP Briefing Note No. 10. CENESTA, Tehran, 2010.

Jonas, H., Kothari, A. and Schrumm, H., 2012. Legal and Institutional Aspects of Recognizing and Supporting Conservation by Indigenous peoples and Local Communities. An analysis of international law, national legislation, judgements, and institutions as they interrelate with territories and areas conserved by Indigenous peoples and local communities. Natural Justice, Bangalore and Kalpavriksh, Pune/Delhi.


Karsenty, A. 2008. The architecture of proposed REDD schemes after Bali: facing critical choices. In *International Forestry Review* Vol. 10(3), 2008 (pp. 443 – 457).

Karsenty, A. 2012. Financing Options to Support REDD+ Activities. CIRAD, France. April 2012.

Kuchli, C., 1997. Forests of Hope, Stories of Regeneration. Earthscan Publications Ltd., London, UK.

Latacz-Lohmann, U. and Hodge, I., 2003. European agri-environmental policy for the 21st century. The Australian Journal of Agricultural and Resource Economics, 47:1 pp. 123 – 139.

- Lohmann, L., 2006. Carbon Trading, a critical conversation on climate change, privatization and power. What Next Development Dialogue September 2006, Dag Hammarskjöld Centre, Uppsala, Sweden.
- Lovera, S., 2008. Life as Commerce: The Risks of Market-based Conservation Mechanisms on Women. Global Forest Coalition, Amsterdam, 2008, <http://www.globalforestcoalition.org/wp-content/uploads/2010/12/Impacts-marketbasedconservationmechanisms-on-woman4.pdf>
- Lovera, S. 2008 (b). 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.
- 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.
- 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* Volume 20, No.1, 65 – 73. Society for Conservation Biology, 2006 <http://www.funai.gov.br/procuradoria/docs/Artigo%20Terras%20Ind%EDgenas.pdf>
- Nelson, A. & Chomitz, KM. 2011. Effectiveness of Strict vs. Multiple Use Protected Areas in Reducing Tropical Forest Fires: A Global Analysis Using Matching Methods. *PLoS ONE* 6(8): e22722. doi:10.1371/journal.pone.0022722.
- Nolte, C., Agrawal, A., Silvius, KM. & Soares-Filho, BS. 2013. Governance Regime and Location Influence Avoided Deforestation Success of Protected Areas in the Brazilian Amazon. *Proceedings of the National Academy of Sciences*, www.pnas.org/cgi/doi/10.1073/pnas.1214786110
- Ostrom, E., and Nagendra, H., 2006. Insights on Linking Forests, Trees, and People from the Air, on the Ground, and in the Laboratory. *Papers of the National Academy of Sciences*, vol. 103, no. 51, pp. 19224 – 19231, <http://www.pnas.org/content/103/51/19224.abstract>
- Peskett *et al.* 2008 "Making REDD work for the Poor", A Poverty Environment Partnership (PEP) Report <http://www.povertyenvironment.net/pep>
- Peskett, L. And Harkin, Z., 2007. Risk and responsibility in Reduced Emissions from Deforestation and Degradation. Overseas Development Institute, London, UK
- Pfaff, A., Robalino, J. And Sanchez-Azofeifa, A., 2008. Payments for Environmental Services: Empirical analysis for Costa Rica. Working Papers Series, Terry Sanford Institute of Public Policy, Duke University.
- Pfaff, A., Sills, E., Amacher, G., Coren, M., Lawlor, K. And Streck, C., 2010. Policy Impacts on Deforestation. Lessons Learned from Past Experiences to Inform New Initiatives. Nicholas Institute Report, Duke University.
- Pirard, R., Dooley, K. and Pistorius, T., 2012. Defining market-based approaches for REDD+. IDDRI, Paris, France.
- Porter-Bolland, L., *et al.* Community managed forests and forest protected areas: An assessment of their conservation effectiveness across the tropics. *Forest Ecol. Manage.* (2011), doi:10.1016/j.foreco.2011.05.034.
- Richards, M. And Jenkins, M., 2007. Potential and Challenges of Payments for Ecosystem Services from Tropical Forests. Overseas Development Institute, London, UK.
- 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.
- Ten Brink, P. (ed.), 2009. TEEB – The Economics of Ecosystems and Biodiversity for National and International Policy Makers – Summary: Responding to the Value of Nature, 2009.
- Vatn, A., Barton, D., Lindhjem, H., Movik, S., Ring, I and Santos, R., 2011. Can Markets Protect Biodiversity? An Evaluation of Different Financial Mechanisms. Noragric Report no 60. University of Life Sciences, Norway.
- World Bank, 2008. The Role of Indigenous Peoples in Biodiversity Conservation, The Natural but Often Forgotten Partners. World Bank, Washington D.C.



Wunder, S. 2007. The Efficiency of Payments for Environmental Services in Tropical Conservation. In Conservation Biology Volume 21, No. 1. 48 – 58, Society for Conservation Biology.