



Forest Peoples Programme

***Submission to the Convention
on Biological Diversity
relating to innovative
financial mechanisms and the
rights of indigenous peoples
and local communities***

31st July 2011

Key recommendations:

- ***The CBD should adopt a precautionary approach to its work on innovative finance mechanisms, based on detailed evidence of their potential to contribute to the effective implementation of the Convention***
- ***Existing and innovative finance mechanisms for conservation must adhere to stringent safeguards consistent with CBD standards and the international obligations of countries to uphold the rights of indigenous peoples and local communities***
- ***Proposed GEF safeguard principles on indigenous peoples must ensure close alignment with relevant CBD norms as well as minimum standards enshrined in the United Nations Declaration on the Rights of Indigenous Peoples***
- ***International processes to design a system of information on REDD+ safeguards under the UNFCCC should include, inter alia, information on compliance with CBD standards and work programmes, including elements relating to indigenous peoples and local communities***

This submission to the CBD Secretariat is presented by the Forest Peoples Programme (FPP) in response to the Secretariat's call for information on the potential role of innovative financial mechanisms in the achievement of the Convention's three objectives linked to biodiversity conservation, sustainable use and equitable benefit sharing (pursuant to decision X/3, A, paragraph 8c).¹

The information provided includes brief assessments of three different finance mechanisms: Payment for Ecosystem Services; Biodiversity Offsets and REDD+. Each mechanism is assessed in relation to its:

- (i) possible impacts on the rights and livelihoods of indigenous peoples and local communities
- (ii) potential consistency with associated CBD objectives, standards and work programmes.

The final part of the submission presents some general conclusions and recommendations for consideration by the CBD Secretariat and Parties to the CBD. FPP welcomes this opportunity to comment on innovative finance mechanisms and their relation to the effective implementation of the Convention.

1. Payments for Ecosystem Services (PES)

Payments for Environmental or Ecosystems Service (PES) normally involve payments to land owners and managers conditional upon their provision or restoration of one or more ecosystem services (water, watershed protection, soil conservation, carbon storage, biodiversity etc). Parties to PES agreements may make exchanges at the local, national or international levels. Payments may be made through a range of finance mechanisms including user finance (payments by beneficiaries), public finance (government-run schemes and environmental subsidies), market finance (mostly confined to carbon offset trading) and payments of ecological debt between Northern cities and industries to traditional landowners and managers in developing countries.²

Most existing PES schemes in Latin America, Asia and Africa are publicly funded through State funds and through international agency grants and loans from multilateral development Banks.³ Other than carbon trading projects for afforestation, no globally agreed market-mechanisms exist for payments for biological, watershed and climate services, though some NGOs and groups advocate this approach through the establishment of new markets for "eco-utilities".⁴ As with carbon trading (see below), such market-based PES proposals are very controversial and face numerous technical, economic, ethical and methodological problems (e.g. objective and verifiable quantification of services).

Several large PES schemes affecting forests and other ecosystems within the territories of indigenous peoples remain at the research and preparation stage i.e. with no defined finance mechanisms yet in place.⁵

Risks and challenges:

Although detailed studies of PES impacts remain limited, emerging lessons show that the sustainability of such schemes can be undermined due to a lack of meaningful consultation with affected and participating indigenous peoples and local communities, a failure to respect the right to free, prior and informed consent (FPIC) and lack of recognition of customary land and resource rights.⁶

Other risks and potential impacts associated with PES finance and projects include local inflation in land prices in areas covered by the scheme that may lead to land grabbing and a reluctance by governments to resolve indigenous land claims (rent seeking behaviour by government and the private sector).⁷

A further possible problem with PES schemes is that the transacting parties might not necessarily be the legitimate owners of the land or may exclude those people and communities whose historical and present behaviour maintains or affects an ecosystem. Thus, there is a significant risk that PES could engender top-down actions by the parties contracting the PES to oblige local people and others to change their behaviour, while reaping most or all the benefits.

PES schemes often seek to change local livelihood practices and so ill-conceived initiatives risk imposing unjust and unscientific restrictions on the livelihoods and customary resource use of indigenous peoples and local communities.

PES finance for national or local conservation schemes may thus have direct implications for fulfilment of country commitments under CBD Articles 10c and 8j through which Parties have duties to respect and protect the customary use and traditional practices of indigenous peoples and local communities.

Like most environmental payment schemes, PES risks generating perverse incentives for unscrupulous land managers who may threaten to damage resources and destroy services if payments are not forthcoming or if payments do not meet a certain level.

Emerging lessons from PES initiatives indicate, *inter alia*, that:

- good legal and governance frameworks and systems for local benefit sharing in order for PES schemes to be sustainable and equitable⁸
- secure land and resource property rights are an essential precondition for generation of local benefits⁹
- where transaction costs for participation in PES programmes are high, indigenous peoples, local communities and small holders may be excluded or receive only modest benefits¹⁰
- the costs of PES engagement must be looked at to assess potential net benefits for communities/households
- land owned communally can be more effective for enforcement of PES rules and sanctions and may help reduce transaction costs¹¹
- Without robust procedures for targeting PES schemes, monitoring and oversight, payments may not help protect biodiversity and local livelihoods
- There is a need for more detailed empirical studies of PES schemes to assess their impacts on local livelihoods and the environment
- making PES schemes financially self-sustaining over the long term remains a major challenge.

Potential opportunities:

There is some evidence that well-designed PES policies and projects formulated with the full participation of customary landowners and communities can deliver biodiversity and local livelihood co-benefits.¹²

Some indigenous communities have reportedly benefitted from forest protection payments under public-funded PES schemes in Mexico, where different communities have chosen to use funds in different ways in support of conservation and community development.¹³ In other cases, the livelihood and rights impacts of PES schemes appear to be mixed with some communities enjoying worthwhile benefits and others receiving only modest rewards. Positive outcomes are linked to strong land and resource rights and PES recognition and support for traditional land management practices and customary law.¹⁴

Well-designed PES programmes affecting the lands and territories of indigenous peoples that are built on early prior actions and measures to respect customary rights and uphold free, prior and informed consent thus have potential to help meet the objectives of the Convention. Such schemes could assist Parties to further the implementation of specific CBD standards such as Article 10c through support for customary systems of ecosystem management and community conserved territories.

2. Biodiversity offsets

Proposals for finance for conservation through biodiversity offsets is gaining momentum among governments, large corporations and conservation NGOs. This type of finance mechanism is based on the provision of funds to protect a specific site or habitat in one place as compensation for the destruction or damage to biological diversity caused by a development or commercial activity at another site.

Risks and challenges:

Like carbon offsets (see below), this finance tool is controversial and plagued by complex scientific, legal, ethical and economic problems. Demonstrating that two biological sites are ‘equivalent’, for example, is fraught with difficulties and vulnerable to abuse and ‘green washing’. Clearly, biological diversity in two locations is different in some way and each biological site is to a certain degree unique (i.e. how can one forest be identical to another?). It may be argued therefore that offsets can never truly compensate for the destruction of nature and the end result may well be a net loss of biological diversity.

Studies of existing schemes reveal that the risk of net losses of biodiversity can be exacerbated where the biological “quality” of the offsets is very low (e.g. wetlands exchanged for dead pools of water).¹⁵ Offsetting also risks distracting project developers away from measures to avoid or minimise environmental and social damage at the resource extraction/development site.

Although most initiatives promoting biodiversity offsets suggest that a “mitigation hierarchy” needs to take place (requiring that avoidance and minimisation of environmental destruction is ensured before offsetting is considered),¹⁶ evidence shows that this mitigation hierarchy is not always respected in practice. Studies in Canada and the USA, for example, indicate that rather than avoiding or reducing damage, projects typically skip straight to offsetting.¹⁷

A further potential problem with offsets is that they could be used to strengthen existing or create new protected areas at other sites that may apply exclusionary conservation approaches at the expense of local people (in disregard for CBD and other standards requiring inclusive and rights-based approaches to protected area establishment and management).

FPP is thus especially concerned that biodiversity offsets may pose serious risks of social harm and rights violations unless rigorous safeguards and due diligence are guaranteed. Such risks are effectively doubled when compared to non-offset initiatives. This is because tenure and livelihood rights must be fully recognised and respected at *both* the site of potential habitat loss or damage and at the proposed offset site. This necessarily requires that extra resources are required for effective due diligence at two sites, which in turn has implications for transaction costs.

The wealth of evidence from resettlement and relocation schemes confirms that seeking to ‘compensate’ and replace livelihoods lost to development actions is complicated in practice. Effective compensation and mitigation requires long lead times for very detailed baseline studies, meaningful participatory planning and robust mechanisms to respect the right to free, prior and informed consent.¹⁸

While emerging voluntary standards for biodiversity offsets mention social and rights issues like FPIC,¹⁹ there are genuine risks that policy implementation may be superficial or rushed unless adequate time and resources are dedicated to ensuring compliance (see literature on problems with implementation of voluntary standards in the logging and palm oil sectors).²⁰

Given the high risks, potential high transaction costs and the multiple methodological problems associated with biodiversity offsets, this finance mechanism does not appear to be well aligned with the objectives of the Convention.

3. REDD+ and avoided deforestation finance

A global framework for financing REDD+ actions remains under negotiation within the UN climate convention. Meanwhile, existing government and NGO proposals for REDD+ finance mechanisms include international and national forest funds supported through public monies. Other proposals for REDD+ finance mechanisms include payment for environmental service schemes and various market-based mechanisms (including carbon offset markets, rainforest bonds, etc), or some combination of public and market-based funding sources.²¹

Pilot REDD+ funds under the World Bank and UN provide grants for national readiness planning and actions to facilitate possible future market-based finance for national and sub-national REDD+ programmes. At the same time, local voluntary REDD+ projects based on carbon offset trading are proliferating on the ground, often with little or no regulation (see below).

Risks and challenges:

Without rigorous adherence to agreed social and environmental standards both public and private funding for REDD+ pose multiple risks for forest peoples and forest biological diversity.²² Key risks associated with flawed REDD policies and finance include land grabbing, corruption, elite capture, violation of indigenous peoples’ rights, including rights to their customary lands and traditional livelihoods; and destruction of natural forests by afforestation and tree plantation schemes.²³

Inappropriate use of REDD+ finance in support of flawed legal frameworks in the forest and conservation sectors risks reinforcing unjust colonial forest, land and conservation laws and a return to ‘guns and guards’ conservation to protect ‘forest carbon stocks’. REDD+ funding for defective national REDD policies and strategies could likewise lead to renewed and strengthened central government control over forests.

Such outcomes would potentially violate CBD standards and undermine advances made on rights-based conservation, participation and local governance made under the Convention's Programmes of work on Protected Areas (Element 2.0) and Forest Biological Diversity.

There is a significant risk that indigenous peoples and local communities may be pressured by governments, NGOs and the private sector to 'opt in' in to inequitable carbon contracts that threaten to lock them in to unjust financial and land use arrangements for many years. Without proper screening and independent verification, there is a danger that such arrangements could violate CBD standards (such as articles 10c and 8j) as well as the human rights obligations of REDD countries.

Evidence from the ground from voluntary REDD carbon trading projects shows that these potential adverse impacts of sub-national REDD+ policies and investments are already taking place in some tropical countries (e.g. Colombia, Peru, PNG).²⁴ FPP field studies indicate that carbon standards and auditing are failing to screen projects against international obligations of REDD countries, and are instead basing sustainability and compliance assessments on outdated national legal frameworks. At the same time, there is much evidence to show that consultation with forest communities by NGOs and government agencies promoting REDD has so far been superficial and that robust procedures for upholding the right to free, prior and informed consent have not been followed (e.g. in Cameroon, Guyana and Indonesia).²⁵

As well as the general risks noted above, there are major challenges linked to market finance mechanisms as well as the basic economic assumptions underlying REDD+ policies. Recent studies indicate that use of an opportunity cost model for REDD+ finance, for example, is inappropriate for addressing governance, equity and tenure issues. Other studies show that the use of 'least cost abatement curves' in the design of national REDD finance and actions may impose unfair costs on indigenous and local communities that could threaten their food and livelihood security.²⁶

Serious problems also exist with plans to finance REDD through carbon offset markets. Climate justice critics maintain that carbon offsets are a false solution to climate change,²⁷ while economic studies demonstrate that carbon trading transaction costs are likely to be high and the potential to deliver significant local benefits is limited, with most potential benefits accruing to traders and commercial interests.²⁸ The vulnerability of carbon trading to large-scale fraud and corruption as well as price instability in international markets is also seen as a major weakness of carbon market finance mechanisms.²⁹ Given all these difficulties, some REDD policy-makers are starting to recognise that a global forest carbon market is unlikely to develop in the near future and that alternative funding approaches need to be examined.

Alternatives to carbon finance, include proposals to issue 'rainforest' or 'green' bonds on international markets to provide up-front capital for forest businesses involved in forest conservation and development.³⁰ Proponents of this mechanism maintain that these bonds would minimise risk and potentially attract large investors like pension funds as well as foster public-private partnerships for forest development.³¹

One risk with this approach is that such bonds could be used to provide credit to large-scale industrial logging and plantation companies whose operations are a proven threat to forest biological diversity and local livelihoods. In many countries, logging and timber concessions remain contested and are often superimposed on the customary lands of indigenous peoples and forest dependent communities.

Without proper regulation and control and full respect for land and territorial rights, forest bonds finance mechanisms skewed towards large investors and private sector interests might create land and resource conflicts and land grabbing in developing countries. As currently conceived, it is not apparent how forest bonds (or even ‘community forest bonds’ as proposed in developed countries) might be used to provide benefits and support for conservation and sustainable use activities of indigenous peoples and local communities with limited capital and income. Indeed, such approaches might risk indebtedness of communities and generate economic pressure on them to enter into inequitable partnerships with large companies to repay bond debts.

Opportunities:

Scientific evidence shows that effective conservation and sustainable use of forest ecosystems is more likely achieved by indigenous peoples and forest-dependent communities than through governmental and commercial interests.³² CBD objectives could be advanced through effective targeting of innovative and existing REDD finance towards tenure and governance reforms in support of community conservation and forest management. This approach has the potential to yield multiple biodiversity, benefit-sharing, climate and other co-benefits.

Financial support for legal and policy change can be cost effective and would help tackle some of the direct and indirect drivers (such as unjust tenure regimes and perverse incentives) that are causing forest loss in tropical countries.³³ Such targeted finance may also help achieve synergies with other international agreements, including those relating to climate change, human rights and sustainable development.³⁴

The adoption of REDD+ safeguards under the UNFCCC likewise offers opportunities to formulate operational standards that aim to uphold obligations and commitments of Parties under the CBD. In this context, ongoing CBD regional consultations on “REDD-plus Biodiversity Safeguards” in 2011-12 could develop proposals for effective adherence to CBD standards, including articles 8j, 10c and 10d and relevant elements of CBD work programmes.

The same CBD work on safeguards should discuss application of important CBD principles and tools to innovative finance, including the CBD’s ecosystem approach and the *Akwé: Kon voluntary guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities*.³⁵

Conclusions

1. There is little or no solid evidence to show that innovative finance mechanisms such as biodiversity offsets and forest bonds would contribute to achievement one or more of the three objectives of the convention. Available evidence on biodiversity offsets suggests that they might run *against* the objectives of the CBD.
2. Some innovative finance mechanisms remain at the theoretical or conceptual stage or are in their infancy in testing in the field: it is thus difficult to fully assess their potential impacts and effectiveness in supporting CBD objectives. It is therefore of vital importance to gather further details and compile independent case studies on these finance initiatives (if and when they are developed).

3. Targeted finance for participatory and rights-based PES schemes that uphold FPIC and recognise, secure and reward indigenous customary sustainable use systems have potential to advance progress towards the 2020 Aichi Biodiversity Targets, such as Target 18 on traditional knowledge.³⁶
4. Robust safeguards, fulfilment of international obligations, effective monitoring and public accountability arrangements are needed at the national and international levels to reduce risks associated with REDD+ finance.
5. Targeted REDD+ readiness finance in support of governance, legal and tenure reforms, including measures to recognise and respect the rights and governance systems of indigenous peoples in line with Article 10c, would help ensure that REDD+ actions and investments meet the objectives of the convention and enable countries to meet their international obligations under the CBD and other environmental and human rights treaties.
6. Existing international support for safeguards and accountability measures in REDD+ finance offer an unprecedented opportunity for the Parties of the CBD to consolidate international norms and principles in support the objectives of the convention.
7. Innovative finance mechanisms including carbon trading and proposals for new markets in environmental services or ‘utilities’ are highly controversial and need to be subjected to thorough public scrutiny to examine the pros and cons, advantages and disadvantages of these finance tools.
8. The nomenclature and definition of “innovative financial mechanisms” remains unclear within the CBD process. Both need to be refined to assist Parties in further work on this issue at both the international and national levels.

Recommendations

- Given the unproven sustainability of different innovative finance mechanisms, Parties should apply a precautionary approach and avoid decisions and commitments on this topic until reliable evidence is available to demonstrate the usefulness of different funding mechanisms in helping to achieve the objectives of the Convention.
- To assist further work of the Convention on this important topic, COP11 should consider inviting submission of up-to-date and detailed case studies of the impact and effectiveness of innovative finance initiatives
- Measures need to be put in place by Parties and by finance agencies to ensure that all “innovative financial mechanisms” for conservation and sustainable use fully uphold CBD standards and other relevant international norms, including human rights standards
- Ongoing CBD consultations on REDD+ biodiversity safeguards in 2011-12 should enumerate relevant CBD and other applicable international standards to be adhered to by

global, regional, national and other finance mechanisms in order to further the objectives of the Convention and enable countries to fulfil their commitments under the CBD

- At a minimum, standards relating to indigenous peoples should be consistent with the UN Declaration on the Rights of Indigenous Peoples, including requirements for free, prior and informed consent for all finance decisions and investments that may affect indigenous peoples' lands, territories and natural resources
- CBD development of biodiversity safeguards for REDD+ finance should make direct reference to agreed CBD principles and approaches such as the Ecosystem Approach as well as existing innovative CBD tools such as the *Akwe:kon* guidelines on environmental, social and cultural impact assessment
- Work by governments and major groups within the UNFCCC to establish a system of information for REDD+ safeguards should include information on compliance with CBD standards relating to indigenous peoples and local communities
- GEF safeguard principles on indigenous peoples under development in 2011 must ensure close alignment with CBD objectives, norms, principles and work programmes (including Articles 8 j and 10c as well as relevant elements of the work programmes).
- CBD working and expert groups should be tasked with assessing how strategic *targeting* and *sequencing* of existing and innovative international financial flows for environmental conservation and sustainable use can help promote effective implementation CBD objectives and work programmes (including targeted support for indigenous peoples and local communities)
- Upcoming public participatory consultations on the revision and updating of NBSAPs should include open public debate on different finance options for implementation of the CBD at the local and national levels. Such debates should cover a range of innovative options and measures as well as existing tools, including reform of existing tax and subsidies that may be harmful to biodiversity (such as subsidies to fossil fuels) and the creation of tax and subsidies that promote the conservation and sustainable use of biological resources.

¹ CBD Notification Ref: SCBD/ITS/YX/75558, 1 April 2011

² *Climate Alliance Manifesto* <http://www.klimabuendnis.org/english/association/511a.htm> See also, the *Climate Alliance Declaration* <http://www.klimabuendnis.org/buendnis/5120222.htm>

³ Wunder, S, Engel, S and Pagiola, S (2008) "Taking Stock: a comparative analysis of payments for environmental service programs in developed and developing countries" *Ecological Economics* 65(4)(2008:834-852

⁴ E.g. University of Edinburgh (2009) *Valuing rainforests as global eco-utilities: a novel mechanism to pay communities for ecosystem services provided by the Amazon* Project Proposal Ref: NE/G008531/1

⁵ e.g. UNDP (2008) *Project name: Ecological and financial Sustainable Management of the Guiana Shield Eco-region - GSI Phase II Project* <http://www.undp.org.gy/project00052491.html>

⁶ See, for example, Griffiths, T and Anselmo, L (2010) *Indigenous Peoples and Sustainable Livelihoods in Guyana: an overview of experiences and potential opportunities* FPP, APA, NSI

⁷ 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* (2002): 111–152. See also Global Forest Coalition (2008) *Climate Change, Forest Conservation and Indigenous Peoples'*

Rights Briefing paper prepared by Estebancio Castro Diaz; and WRI (2005) *The Challenges of Pro-Poor PES* WRI briefing at <http://www.wri.org/publication/content/7619>

⁸ Greiber, T (Ed)(2009) *Payments for Ecosystems Services: legal and insitutional aspects* IUCN Environmental Policy and Law Paper No. 78, Gland, Switzerland

⁹ Born R H, Talocchi S *et al* (2002) *Payment for Environmental Services: Brazil* Fundación Prisma, January 2002 at page 67-68

¹⁰ Luca Tacconi, Sango Mahanty, and Helen Suich, *Payments for Environmental Services, Forest Conservation and Climate Change: Livelihoods in the REDD?* (Edward Elgar Pub, 2011).

¹¹ Porras, I, Grieg-Gran, M and Neves, N (2008) *All that glitters: a review of payments for watershed services in developing countries* IIED London. at pages 67-68; See also Richards, M and Jenkins, M (2007) *Potential and Challenges for PES from Tropical Forests* ODI Forest Policy and Environment Programme, London

¹² See, for example, ICRAF (2006) 'Clean Rivers, Lighted Lights: monetary rewards for reducing sediment', *RUPES Sumberjaya* Brief No. 2, World Agroforestry Centre, Bogor; ICRAF (2007) 'In Bakun, indigenous peoples use modern mechanisms for selling environmental services to preserve a traditional way of life without its poverty traps', *Site Profile: RUPES Bakun* ICRAF, Bagoio City

¹³ Ibid. at pages 75 and 78.

¹⁴ Rainforest Foundation Norway REDD Network Seminar, Oslo, May 2010

¹⁵ e.g. Chad I. Kettlewell *et al.*, "An assessment of wetland impacts and compensatory mitigation in the Cuyahoga River Watershed, Ohio, USA," *Wetlands* 28, no. 1 (March 2008): 57-67.

¹⁶ See, for example, <http://bbop.forest-trends.org/guidelines/principles.pdf> . See also **GCP**

¹⁷ Shari Clare *et al.*, "Where is the avoidance in the implementation of wetland law and policy?," *Wetlands Ecology and Management* 19, no. 2 (January 2011): 165-182; Palmer Hough and Morgan Robertson, "Mitigation under Section 404 of the Clean Water Act: where it comes from, what it means," *Wetlands Ecology and Management* 17, no. 1 (May 2008): 15-33.

¹⁸ See, for example, World Bank (2004) *Resettlement Sourcebook* World bank, Washington DC

¹⁹ See <http://bbop.forest-trends.org/guidelines/participation.pdf>

²⁰ Colchester, M, Sariat, M and Wijardjo, B (2003) *FSC in Indonesia – obstacles and possibilities: an examination of the obstacles and challenges of implementing Principles 2 and 3 of the FSC Criteria in Indonesia* Walji and AMAN

²¹ See, for example, GCP (2009) *Little Climate Finance Book* http://www.theredddesk.org/sites/default/files/resources/pdf/2009/lcfb_en.pdf

²² Griffiths T and Martone F (2009) *Seeing REDD? Forests, climate change mitigation and the rights of indigenous peoples and local communities* May 2009, FPP, Moreton in Marsh

²³ CBD (2008) *Findings of the First Meeting of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change*, London 17-21 November, 2008 at paragraph C

²⁴ "Carbon Cowboys" Sydney Morning Herald, 23 July 2011 <http://www.smh.com.au/environment/conservation/carbon-cowboys-20110722-1hssc.html>

²⁵ Freudenthal, E Nnah, S and Kenrick, J (2011) *REDD and Rights in Cameroon: A review of the treatment of Indigenous Peoples and local communities in policies and projects* FPP and CED, Moreton in Marsh and Yaounde; See also Dooley, K, Griffiths, T, Ozinga, S and Martone F (2011) *Smoke and Mirrors: a critical assessment of the Forest Carbon Partnership Facility FERN and FPP, Moreton-in-Marsh*; and Griffiths, T (2009) *Guyana: indigenous peoples, forests and climate initiatives* FPP Moreton-in-Marsh

²⁶ Gregersen, H, Lakany H, Karsenty, A and White, A (2010) *Does the Opportunity Cost Approach Indicate the Real Cost of REDD+ ?* RRI, Washington, DC; Dyer, N and Counsell, S (2010) *McREDD: How McKinsey 'cost-curves' are distorting REDD* Rainforest Foundation UK, London; See also Fisher, B, Lewis, SL, Burgess, N D, Malimbwi, R E, Munishi, P K, Swetnam, R D, Turner, R K, Willcock, S and Balmford, A (2011) "Implementation and opportunity costs of reducing deforestation and forest degradation in Tanzania" *Nature Climate Change* 1, 161–164 (2011)

²⁷ FERN (2010) *Designed to fail: The concepts, practices and controversies behind carbon trading* FERN, Moreton in Marsh http://www.fern.org/sites/fern.org/files/FERN_designedtofail_internet_0.pdf

²⁸ See, for example, Munden, L (2011) *REDD and forest carbon: Market-Based Critique and Recommendations* The Munden Project <http://www.mundenproject.com/forestcarbonreport2.pdf>

²⁹ Leach, P (2008) *Carbon Sunk: The potential impacts of avoided deforestation credits on emissions trading mechanisms* Rainforest Foundation, UK; and Munden, L (2011)

³⁰ <http://www.forestbonds.com/reports/ifc-proof-of-concept-study>

³¹ Cranford, M, Henderson, I R, Mitchell, A W, Kidney S and Kanak, D (2011) *Unlocking Forest Bonds: workshop report* WWF Forest and Climate Initiative, Global Canopy Programme and Climate Bonds Initiative

³² Agrawal, A and (2011) "Social and ecological synergy: local rulemaking, forest livelihoods, and biodiversity conservation" *Science* 331(6024):1606-08; Agrawal, A (2008) 'Livelihoods, carbon and diversity of community

forests: trade offs and win wins? Presentation to Rights, Forests and Climate Change - A joint conference convened by Rights and Resources Initiative and Rainforest Foundation Norway Oslo, Norway, 15-17 October 2008; Sobrevilla, C (2008) *The Role of Indigenous Peoples in Biodiversity Conservation. The Natural but often Forgotten Partners* World Bank, Washington D.C., 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;

³³ "Could land reform succeed where conservation has failed?" FPP E-Newsletter, July 2011

<http://www.forestpeoples.org/sites/fpp/files/publication/2011/07/fpp-july-2011-e-newsletter-english-colour.pdf>

See also White, A (2011) Cash Alone Will Not Slow Forest Carbon Emissions

<http://www.rightsandresources.org/blog.php?id=666>

³⁴ Tauli-Corpuz, V (2011) *Learning from different levels: lessons on how to make progress and what needs to be done to advance tenure reform* Statement to International Conference on Forest Tenure, Governance and Enterprise 11-15 July 2011, Lombok

³⁵ <http://www.cbd.int/doc/publications/akwe-brochure-en.pdf>

³⁶ <http://www.cbd.int/sp/targets/>