Making REDD work for the poor: The socio-economic implications of mechanisms for reducing emissions from deforestation and degradation

IUCN on behalf of the Poverty and Environment Partnership

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Executive Summary

Reducing Emissions from Deforestation and Degradation (REDD) is a crucial building block for a post-2012 climate regime. Furthermore, REDD presents a tremendous opportunity to jointly address climate change and rural poverty, while sustaining ecosystem services and conserving biodiversity. However, in order to maximize the contribution of REDD to sustainable development, more attention must be paid to the interests of all stakeholders, especially rural people who live in and depend upon forest ecosystems. Forests support the livelihoods of several hundred million of the poorest people around the world. New initiatives to address climate change by conserving forests and other ecosystems must be based on a solid understanding of their social impacts, as well as the potential environmental benefits.

Protecting ecosystems for local livelihoods and global benefits

Over the past century, humankind has altered and degraded its natural environment more than at any other time in history. This ecological crisis is a direct threat to the survival of the world's biological diversity and is undermining the ecosystem services upon which all societies ultimately depend. Human economic activity has reached such a scale that it is disturbing the global climate system, leaving us all increasingly vulnerable to extreme weather events, desertification, sea-level rise and other adverse effects. Meanwhile poverty and insecurity continue to afflict billions of people around the world, despite concerted and sustained efforts to foster economic and social development.

for effective participation of local communities in land use decisions, could seriously compromise the delivery of both local and global benefits and the long-term sustainability of REDD investments.

A pro-poor approach to REDD

The success of REDD will ultimately depend on how well it contributes to the development needs of forest-dependent communities. Hard-won lessons from years of experience in the agriculture and forest sectors, in nature conservation and the global carbon market, can all help guide the design of more equitable and effective REDD mechanisms. The biggest challenges may be governance issues, such as weak rural land tenure regimes, limited access by vulnerable groups to investment finance, markets and information, and capture of benefits by local or national 'elites'.

Community-based and participatory approaches can help overcome such hurdles, although their high initial costs can make them difficult in practice. In the long-run, however, efforts to enlist community support for REDD should reduce costs and risks and increase total benefits. Such an approach can also enhance coherence between

Introduction

1.1. Climate and other values of tropical forests

Forests provide many important economic benefits, beyond their traditional role in supplying timber and non-timber products and as land reserves for agricultural expansion. Evidence is growing that forests are an essential component of the global climate system. Their role in maintaining both carbon and water cycles make them critical components of human well-being at all geographic scales. A wide variety of indigenous and forest-dwelling communities call tropical forests their home, as do a significant share of our planet's terrestrial species of plants and animals. Yet, these havens of diversity are also among the most threatened ecosystems in the world. Tropical forests in particular are expected to be lost at a rate of 5% per decade over the next 30 to 50 years (Chomitz et al., 2006).

Forest ecosystems contain twice as much carbon as the total amount contained in the atmosphere. Tropical forests, in particular, hold a significant share of the world's terrestrial carbon, with a range of 120 to 400 tons per hectare (Lawrence, 2007), or up to 3000-6000 tons per hectare for certain carbon-rich peat forests (Hooijer et al., 2006).

When forests are cleared, a significant portion of the carbon that they have accumulated both in their above-ground (branches and leaves) and below-ground (soils) biomass is released back into the atmosphere. Similar net carbon emissions result from soil disturbance due to agriculture. Humandriven deforestation and land degradation has thus contributed significantly to the recent rise in greenhouse gas emissions (GHGs) that is driving global climate change. It is estimated that deforestation and other forms of land degradation - mainly in the tropics - may account for up to one quarter of all anthropogenic greenhouse gas emissions (Santilli et al., 2005; Stern, 2006; UNFCCC, 2006; IPCC, 2007).

Despite the importance of forests for climate mitigation, biodiversity conservation and human development, recent efforts to reduce the loss and degradation of tropical forests have had limited success. However, with climate change rising steadily to the forefront of the global consciousness, many people are hoping for renewed support for the conservation of tropical forests.

1.2. Addressing deforestation in climate policy

Economic incentives for reforestation and afforestation have been established as part of the existing international climate change regime (i.e. Clean Development Mechanism of the Kyoto Protocol). However, no such incentives currently exist for avoiding deforestation in developing countries. The fact that deforestation is driven by diverse, layered and linked factors – such as timber extraction, agricultural expansion, urban sprawl and the opening of new roads - makes it a particularly difficult issue to address (Geist and Lambin, 2001). The overall complexity of including 'avoided deforestation' as a climate mitigation option continues to fuel a lively debate among forest and climate stakeholders.

As the two countries with the highest amounts of forest loss (FAO, 2005), Indonesia and Brazil hold particular importance in the REDD debate. The potential contribution to emissions mitigation that could be achieved by avoiding deforestation and land degradation in these two countries alone is estimated to be roughly equal to the total amount of GHGs emissions anticipated

¹ Reforestation is defined under the Clean Development Mechanism of the Kyoto Protocol, for the purpose of determining which activities are eligible for carbon credits, as the direct human-induced conversion of non-forested land to forest land in areas deforested prior to 31 December 1989, while afforestation refers to creation of forest in areas not forested over the previous 50 years (FCCC/KP/CMP/2005/8/Add.3).

1.3. REDD and sustainable development

Recent debates about REDD have largely focused on technical issues, such as leakage, additionality and permanence, noted above. There has been much less attention to the potential impact of REDD investments on the development prospects of people living

2. Reducing Emissions from Deforestation and Degradation (REDD)

2.1. A 'REDD' hot topic

Climate change has reached unprecedented prominence in international affairs. The recently convened Heads of State meeting, hosted by the Secretary General of the United Nations, is one recent example among many⁴. The impacts of deforestation on climate change and likewise the potential contribution of forest conservation to climate mitigation have been high on the international agenda, alongside efforts to promote energy efficiency, low-carbon technology and other solutions.

In simple terms, REDD refers to any conservation or sustainable land-use initiative that effectively mitigates a real deforestation/degradation threat in a given area. Attention has focused on REDD opportunities in the Amazon Basin, the Congo Basin, mainland and archipelagic Southeast Asia, although REDD is potentially relevant in every region where deforestation and forest degradation occur. This highlights an important characteristic of REDD, namely its potential to secure wider participation of developing countries in climate mitigation efforts (Skutsch *et al.*, 2006).

With negotiations set to begin on the architecture of an international climate change regime beyond 2012, REDD has become a key focus of discussion. Several institutions are actively seeking to develop workable approaches to increase finance for tropical forest conservation. For example, the World Bank is proposing a Forest Carbon Partnership Facility (FCPF) and Global Forest Partnership (GFP), which will be launched during the 13th Conference of the Parties to United Nations Framework Convention on Climate Change (UNFCCC). The Australian government is financing similar activities in the Asia-Pacific region, through its Global Initiative on Forest and Climate, with some of this finance channeled through the FCPF.

In advance of COP13, the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA) has prepared a draft decision on REDD⁵. At the same time, numerous official submissions by governments, position statements from NGOs and reports from the scientific community have been but forward with respect to REDD. Most of these documents focus on methodological challenges, including the precise definition and scope of REDD and what it might achieve as a mitigation mechanism. Large differences remain to be resolved. Funding is a key focus of debate, in particular the role of carbon trading and other market-based mechanisms as sources of finance for REDD. Consensus is emerging around certain key features of REDD, as listed in Box 1.

Box 1: Converging views on REDD

Support from developed countries is needed to help developing countries prepare for REDD, including technology transfer and capacity building.

A combination of national and sub-national (project-based) action will be required to implement REDD successfully.

Proven approaches to sustainable forest management may be used to implement REDD in productive landscapes.

Methodological issues are surmountable, notwithstanding continuing disagreement about baseline deforestation rates and other issues.

2.2. What can be expected from REDD?

2.2.1. Key features of REDD

At present, REDD is more of a theoretical concept than established practice. A range of political and technical issues continue to impede the development 0.1746 T9ff@08ant 0.18@08ant sBT0j8 miT0 333n

Box 2 : Key political and technical hurdles to REDD:

(Mitchell et al., 2007)

Political:

- o Moral hazard concern that REDD will allow developed countries to 'buy their way out' of emission reductions
- o Differing national contexts and priorities
- o Uncertain integration of REDD in carbon markets

Technical:

- o Leakage the displacement of deforestation pressures
- Lack of permanence of conservation measures (due to risks of fires, pest outbreaks, etc.)
- Additionality the difficulty in proving that a measure has effectively mitigated the deforestation threat or that conservation would not have occurred anyway
- o How to establish meaningful baseline scenarios, given uncertain deforestation trajectories in different countries

Another outstanding question is

mechanisms, but favours a market-based approach based on deeper cuts for Annex B countries. Brazil calls for the creation of an international trust fund that would be supported by public contributions from developed countries. Others favor an approach that would tap into existing carbon markets.

The issue of high transaction and administrative costs highlights an important underlying challenge for REDD policies, which is their capacity to effectively address the trade-off between equity and efficiency. While the economies of scale that could result from the use of larger and more centralized REDD mechanisms present the considerable advantage of limiting high transaction and administrative costs, they could face greater difficulty in taking local-level realities into consideration. This, in turn, could potentially compromise the successful delivery of benefits to the local level.

An additional cause for concern is the issue of governance. Indeed, it is feared that many of the countries that would be the main focus of REDD suffer from weak legal and institutional structures that limit their capacity to successfully govern REDD (Rubio Alvarado and Wertz-Kanounnikoff, 2007). This would be particularly problematic if a mandatory market mechanism was implemented as a means of funding REDD, as many governments might not have the capacity to ensure compliance with the market requirements.

However, it has been argued that a reliance on voluntary funding (e.g. Official Development Assistance (ODA)) to address deforestation will not deliver sufficient resources (Stern, 2006). In the case of ODA, it has actually been found that funding for forestry-related activities has been steadily decreasing (PROFOR, 2007). It has thus been argued that a combination of both voluntary and mandatory sources could be a solution, with a possible model being the the creation of an international fund that would act as an intermediary between buyers and sellers (i.e. the FCPF idea described earlier) (Rubio Alvarado and Wertz-Kanounnikoff, 2007).

2.2.3. Social concerns

As REDD is currently more of a prospect than a reality, it is difficult to accurately assess the potential livelihoods impacts that it might have. Lessons learned from the Noel Kempff project, mentioned earlier, provide an initial indication of what can be expected. In their analysis of the social impacts of the project, Asquith *et al.* (2002) find that many villagers in the regions feel both resentment towards the project (project carried out without their prior consent) as well as disappointment (inequitable distribution of benefits). Perceived losses in livelihoods and in areas under traditional tenure, as well as slow administrative procedures were also evoked as negative

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concern (Griffiths, 2007). The urgent need to include social aspects into the REDD debate has been recently reinforced by observers who are keen to make sure that 'top-down' global and national policies are tailored to the rights and interests of local communities (WRM, 2007).

The need to ensure community benefits in the design of REDD schemes has been acknowledged for quite some time. Already, standards have been developed in order to provide guidance on ensuring that local communities are adequately integrated into forest management efforts. The CDM Gold Standard, for instance, ensures that forest-based projects carried out through the Kyoto Protocol's Clean Development Mechanism (CDM)

After examining and synthesizing 152 sub-national case studies, the researchers conclude that "no universal policy for controlling tropical deforestation can be conceived".

A more simplified categorization of the drivers of deforestation is offered by Moutinho and Santilli (2005), who distinguish between the main direct and indirect causes of deforestation:

Direct: agricultural expansion, mining, and logging

Indirect: agricultural subsidies, investment in infrastructure, unclear land tenure, weak government surveillance, demand for timber and non-timber forest products (NTFPs), and market pressure on land conversion.

It has been noted that higher rates of deforestation are associated with higher profits (Chomitz *et al.*, 2006). These trends have notably been confirmed in the Brazilian Amazon, where a positive correlation between the rate of deforestation and GDP growth has been observed (Alencar *et al.*, 2004; Fearnside and Laurance, 2003). Driven

of human development (McQueen, 2006). In an effort to bring some clarity to the complex issue of poverty, McQueen et al (2001) offer the following four defining characteristics of the poverty concept:

lack of representation inappropriate laws and policies weak institutional relationships isolation

An important insight from this multi-faceted description of poverty is the importance of

dependence on forest resources varies on many other factors beyond poverty (PROFOR, 2007). Nevertheless, it can be expected that the dependence of local communities on their natural resources will be more pronounced in cases where poverty is more widespread. However, a recent study of the dependence of local communities on forest resources found that while most people in the six sites studied are at least 'partially dependent' on forest resources, dependence was often decreased when agriculture was a significant source of income (PROFOR, 2007). In can thus be expected that vulnerability to forest loss will be particularly pronounced in areas where agricultural systems are either inexistent or poorly developed.

Health and safety are paramount issues when considering the vulnerabilities and dependencies of the rural poor. It is estimated that 97% of the world's death resulting from natural disasters is suffered in low income countries (Abramovitz, 2001). Furthermore, it has been found that deforestation can lead to 300 fold increase in the risk of malaria infection (Yasuoka and Levins, 2007). Considering that many local populations depend on their natural environments as a source of medicine; deforestation and land degradation can seriously compromising the availability to these critical resources.

3.5. Can REDD be made pro-poor?

It has been argued that poverty alleviation activities can and shoul

Development Mechanism (CDM) (approximately 92% of 2006 market volume) (Capoor and Ambrosi, 2007). Projects carried out through the voluntary market are difficult to track, but they are believed to represent about 2% of the CDM-dominated projected-based carbon market (Capoor and

estimated that up to \$43 billion could be available to developing countries if a REDD framework is formalized, and that forested areas could be worth \$200-\$10,000 per hectare (Peskett *et al.*, 2007). Thus, a major shortcoming of the CDM is its poor presence in other areas of the developing world that might be in greater need of incentives for clean development.

In Africa, for example, clean energy CDM projects are often not feasible, as only a small percentage of the population is connected to the energy grid (Jindal, 2004), and much of the economic potential lies within the natural capital. However, it has been argued that while Africa faces serious infrastructure challenges in the energy and industry sectors, it has a strong potential for the implementation of land use, land-use change, and forestry (LULUCF) projects (Capoor and Ambrosi, 2007). Unfortunately, LULUCF projects to date have had a very limited reach in the CDM, accounting for less than 4% of the market share in 2005 (World Bank, 2006). The fact the CDM projects are excluded from the world's largest carbon market, the EU ETS, has seriously limited their reach, notably by lowering the overall demand (World Bank, 2006).

Overall, the CDM has yet to make an impact in areas where it would be most needed, notably in Africa. A recent case study in Cameroon comes to the fairly straightforward conclusion that the institutional support necessary to make the CDM work there is simply inexistent (Minang, 2007). It is important to bear in mind that transaction costs still represent a significant barrier to the development of LULUCF projects within the CDM (Smith and Sherr, 2003). Enforcement costs stand out as being particularly burdensome, especially if an effort is made to reach out to small landowners (Milne, 1999; Jindal, 2006).

The CDM is often evoked for its failure to meet its objective of sustainable development, notably in the interest of cost effectiveness (Sim *et al.*, 2004; Wara, 2006). The sustainable development clause of the CDM reaffirmed the sovereignty of the host-nation in terms of ensuring that social concerns were adequately integrated (UNFCCC, 2001), but this has apparently not always led to on-the-ground results.

4.2.2. The Voluntary Carbon Market

While the bulk of carbon credits currently flowing across borders are set within the regulatory framework of the Kyoto Protocol, the voluntary market is growing rapidly (Capoor and Ambrosi, 2007). This growth is expected to continue over the coming years, and by 2010 should match the amount currently being traded through the Kyoto Protocol's Clean Development Mechanisms (CDM) (IFC, 2006).

Recent trends in the voluntary markets tend to show a greater diversification of offers in forest-based offsets, which indicates that the market is no longer limited to large-scale efforts, such as those implemented by large international environmental organizations (e.g. the Noel Kempff project operated by The Nature Conservancy). In 2006, the major sellers that previously dominated the voluntary market saw their share of offset sales shrink to 60% of the overall volume of transactions. The diversity and competitiveness of the market is thus increasing as smaller retailers, brokers and project developers become involved (Hamilton *et al.*, 2007).

An interesting example of how the international market for carbon offsets can reach local communities in the African continent is offered by the International Small Group and Tree Planting Program (TIST). This small-scale reforestation program is currently auctioning carbon offsets on eBay for a starting price of \$8.50 per metric ton (http://www.tist.org/). The projects are located in Uganda, Kenya, Tanzania, and India. Nevertheless, preliminary assessments of the projects implemented by the initiative have led to mixed results (Peskett, personal communication, October 30th, 2007).

As with the CDM, Africa has remained on the margins of the development of voluntary carbon markets, and has benefited from less than 10% of the overall activity in the voluntary carbon

market (Jindal, 2006). Moreover, although the continent is home to the second largest tropical forest ecosystem in the world – the Congo Basin – many of the existing carbon projects are found outside of this region in Eastern Africa (Jindal, 2006). Lack of technical expertise, difficulties in securing legal land ownership, temporary credits and high transaction costs are some of the main constraints

4.4. Large-scale land use policies

As previously stated, a project-based approach to REDD

4.4.2. Conservation

Perhaps the most REDD-relevant type of land use policy is the management and enforcement of protected areas. In cases where forest conservation is considered as an effective means of mitigating threats to tropical deforestation and degradation, then protected areas could provide a significant contribution to GHG mitigation.

Overall, the social implications associated with the creation of protected areas are mixed:

It is equally important to recognize the cultural values that local communities associate with their forests. Long standing traditions risk being undermined by thoughtless 'carving-up' of forest

areas in

vulnerable populations. Consequently,

REDD

ion of Protected Areas often accrue either at national or global levels, with local commu

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4.4.4. Key findings

economically viable, large-scale projects (both conservation and plantati

Based on experience with large scale land use policies, a major anticipated social risk of REDD is the difficulty in reaching marginalized populations. In many cases, influential stakeholders who might have formalized legal rights, such as large timber or crop industries, risk receiving a greater share of the economic incentives used for sustainable land use (Sherr and Smith, 2003). A major threat to a socially sustainable implementation of REDD is when powerful landowners grab forested land that has been made increasingly valuable through REDD and drive local communities away (Kerr *et al.*, 2006). This in turn, will lead to the highly inequitable situation whereby local communities that are *de facto* stewards of a given forest area will fail to receive REDD compensation, while large companies, who might be *de jure* landowners, will collect the payments.

Overall, a key element of the pro-poor implementation of REDD is to give rural communities

5. Achieving pro-poor REDD

5.1. An integrated approach

5.1.1. De-centralized ecosystem management

As we have seen, the carbon market is likely to grow significantly in the coming years. Although it is unsure whether or not a future inter-governmental REDD scheme taps into these markets as a source of funding, the current scope of the carbon market is currently insufficient. High transaction costs, unclear land tenure systems, and elite capture are all important barriers impeding

Box 7: Some advantages of community-based ecosystem management: (CIEL, 2002)

High level of knowledge on local resources and on the consequences of human action
Social networks that facilitate the achievement of common goals (i.e. through social suasion)
Stronger legitimacy of local norms and rules
Lower implementation costs
Promoting democracy, social justice, and humanitarianism

While it holds promise for a pro-poor implementation of REDD, the ecosystem approach is only effective where there is sufficient knowledge and management capacity. It has been argued that the diffuse nature of external costs and benefits of land uses, the complexity of ecosystems, the need to coordinate land management at the landscape level, and the multiplicity of stakeholders involved often leads to sub-optimal decision-making in ecosystem management. Some suggest to co-ordinate efforts through local-level 'adaptive co-management' processes that integrate a range of stakeholders (Hodge, 2007). The defining features of such a management scheme have been offered by Folke *et al.* (2005):

small scale enterprises, and removing subsidies that favor unsustainable land uses (e.g. grazing, palm oil plantation, etc.).

It has been argued that results established from local action are, more often than not, better than the alternative. (Fischer *et al.*, 2005). Community-based projects, such as agroforestry, SMFEs, multiple-use forest management, ecoagriculture, all

By limiting the overall risk of environmental degradation, greater ecosystem resilience could thus positively influence both mitigation and adaptation. These considerations are especially relevant in a livelihoods perspective, as poor communities are likely to be the hardest hit by the erosion of forest resilience (McQueen and Vermeulen, 2006). A sound implementation of REDD should thus strive for more than mitigation benefits, as it also has the capacity to support forest resilience, thereby helping local communities adapt to the threats of climate change (unpredictable weather patterns possibly resulting in more frequent fires, floods, landslides, etc.) (McQueen and Vermeulen, 2006).

It has been found that agroforestry systems have a greater resilience than many competing land-uses, making it a good strategy for jointly addressing climate change adaptation and mitigation. Furthermore, its income generation potential for local populations makes agroforestry a particularly interesting option from a poverty reduction perspective (Kandji *et al.*, 2006).

Oxfam (2007) find that REDD could be a good opportunity for combining adaptation and mitigation efforts, but argue that there is a lack of support for adaptation. They argue that funding for adaptation should be considered as additional to overseas development aid (ODA), and that countries that are both responsible for high GHG emissions and capable of providing aid should bear the costs. The UNFCCC is in the process of developing an international Adaptation Fund. This is a subject likely to attract significant attention, along with REDD, during the upcoming UNFCCC meetings¹⁴.

Adaptation concerns could thus provide an appropriate entry point for delivering pro-poor REDD. By highlighting vulnerabilities to environmental degradation, there is a case to be made for a REDD approach that focuses on building up ecological resilience. This would apply both the establishment of a well-connected network of forest protected areas as well as to the restoration of degraded landscapes.

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¹⁴ For more information, see: http://unfccc.int/cooperation_and_support/financial_mechanism/items/3659.php

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8. ANNEX I:

Mentions of poverty reduction and rural development in selected submissions to the UNFCCC SBSTA on REDD:

Selected government submissions –

- Brazil:

- The position does not make any explicit mention of poverty or rural livelihoods as they relate to REDD.
- O A noteworthy element of Brazil's position is their reluctance to "envisage the creation of a new bureaucratic structure", and their preference for having a UNFCCC focal area manage the information relevant to REDD. In terms of financing, the Brazilians are not in favor of integrating the carbon market as a potential funding mechanism for REDD, and state the emissions reductions through REDD should be considered to be additional to the reductions by Annex I countries.

- 24 tropical countries (Coalition of Rainforest Nations):

- O Related to social concerns, this positions states thatat "a system of policy approaches and positive incentives to reduce emissions from deforestation should concurrently raise living standards within rural populations and be designed to support significant social, environmental and economic objectives associated with development". They make an explicit reference to Sustainable Forestry Management (SFM), which they consider to be "an effective approach to reducing emissions from deforestation in developing countries".
- O This position expresses concern with the draft Decision resulting from SBSTA-26 for consideration at COP-13, and state that "Voluntary initiatives to support such [funding] efforts, like the World Bank's Forest Carbon Partnership Facility, should be commended and supported". They are in favor of using the carbon market as a means of incentivizing REDD.

- DRC, on behalf of Cameroon, CAF, Congo, DRC, Equatorial Guinea, and Gabon (COMIFAC):

- Related to poverty concerns, this position states that "In the context of the countries of Central Africa, the reduction/disappearance of forest cover resulting in land-use change is due to extreme poverty and the development needs of the populations." They list 7 key principles for implementation, with a mention for equity, but nothing for 'pro-poor'.
- This position argues in favor of a broad understanding of deforestation that also allows for the consideration of degradation.

- Indonesia:

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- rehabilitation of degraded lands, as part of the whole efforts that contribute to reducing emissions from LULUCF sector".
- o The position sees a REDD mechanism as a complement to the CDM. The Indonesia position mentions the relevance of peatlands in their intro (10% of country area). The highlight the need to distinguish between undisturbed and disturbed forests in establishing baselines, and stress the need to understand the drivers of deforestation.

- Japan:

O The Japanese does not make explicit mention of poverty or livelihood concerns, but does favor "sustainable forest management" as "the basis for sustainable reduction of emissions from deforestation and forest degradation". They state further that "it is also necessary to consider if multiple functions of the forest other than carbon fixing are properly maintained and demonstrated as well".

- European Commission:

O Related to poverty concerns, the EC position makes an indirect link by stating that: "[REDD] has the potential to provide multiple benefits towards sustainable development".

- USA:

O As with the European and Japanese postions, the United States make a scant reference to livelihoods by stating that "efforts to mitigate deforestation should occur in the broader context of sustainable forest management and sustainable development."

- Chile:

- o The Chilean position makes no explicit mention of poverty concerns.
- O The position is favorable to the use of market mechanisms and favors the "Nested Approach" (Lucio Pedroni CATIE, and Charlotte Streck, Climate Focus). Related to this, they state that "market mechanisms that allow full private sector participation are the most promising tools to create sufficient financial transfers to reduce emissions from deforestation in developing countries". They also express doubt that "private investors would be willing to share the risk of potential policy failure by directly supporting government programs."

- Tuvalu:

o The Tuvalu position clearly mentions the issue of indigenous rights and traditions which need to be protected through REDD.

- Colombia:

- o In this position, it is specified that international payments could be made towards local communities in addition to public or private entities.
- The position reiterates the Chile views on getting the private sector on board.

Selected submissions from inter-governmental organizations (IGOs) –

Convention on Biological Diversity (CBD): has a large section on incentive measures. They then mention their 2010 goals and targets, including goal 9: "maintain socio-cultural diversity of indigenous and local communities". The relevance of this goal to REDD is cited as being "socially sustainable protection of forests"; and for goal 8: "maintain capacity of

- ecosystems to deliver goods and services and support livelihoods", the relevance to REDD is: "enhanced capacity of forest ecosystems to sequester carbon".
- United Nations Food and Agriculture Organization (FAO): This submission clearly devotes substantial amount of text to poverty concerns: "Although it is widely accepted that sustainable forest management can contribute to sustainable development, the links between deforestation and poverty reduction are not clearcut. In some cases, poverty motivates people to clear forests, in other cases poverty constrains people from clearing them. Incentives provided to reduce emissions from deforestation, therefore, may help alleviate poverty (e.g. provide additional income to people either directly or indirectly) or may exacerbate it (e.g., by reducing their access to forest lands or forest products). It is essential

- deforestation deprives the poor of their 'natural capital'. It degrades not only forest ecosystems but also the services they provide to people."
- **Vitae Civilis (Brazil)**: State that "the needs and concerns of traditional populations of forest areas must be taken into account."

Other:

The World Conservation Union (IUCN): offer an ecosystem approach to REDD and state at the opening of their position that "scientific evidence clearly highlights the current and potential impacts of climate change on the environment and, consequently, on human well-being, especially poor and vulnerable communities." The highlight the need to "include all stakeholders, in particular forest-dependent communities". They also mention the need to "mainstream gender in the work of the UNFCCC and in all mitigation and adaptation activities".

9. ANNEX II:

Actions recommended during the 5th IUCN World Parks Congress to enable protected areas to play a greater role in sustainable development:

(Scherl et al., 2004)

At the site level:

Undertake social impact assessments Support integrated conservation and development programmes Increase investment in capacity building Encourage active participation

At the national level:

Put legal frameworks in place to recognize traditional land tenure regimes

Develop mechanisms to evaluate ecosystem services leading to incentives and rewards for stewardship of national public goods

Encourage inclusive PA governance systems

Strengthen and expand co-managed PAs

Support community conservation areas

Encourage the establishment of PAs that allow for sustainable resources use (Cat. IV, V, and VI)

Compensate for reduced investment in public infrastructure and services

Integrate PAs into larger scale land-use planning

Give greater recognition to the role of PAs in Poverty Reduction Strategies and the Millennium Development Goals

At the international level:

Better define the linkages between PAs and poverty

Develop new financial mechanisms to support stewardship of international public goods