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SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE
Twenty-sixth session
Bonn, 7–18 May 2007

Item 5 of the provisional agenda
Reducing emissions from deforestation in developing countries

Views on the range of topics and other relevant information relating to reducing emissions from deforestation in developing countries

Submissions from Parties

1. The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its twenty-fifth session, invited Parties to submit to the secretariat, by 23 February 2007, their views on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing emissions from deforestation in developing countries, in order to facilitate discussions at the second workshop,[*] to be held in Cairns, Australia, from 7 to 9 March, 2007. The SBSTA requested the secretariat to make available this information for discussion at the second workshop and to compile this information for consideration by the SBSTA at its twenty-sixth session (FCCC/SBSTA/2006/11, paras. 88–89).

2. The SBSTA also invited Parties, in their submissions referred to in paragraph 1 above, to consider, as appropriate, relevant provisions of other conventions and also the work of multilateral organizations (FCCC/SBSTA/2006/11, para. 90).

3. The secretariat has received 19 submissions from Parties. In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced[**] in the language in which they were received and without formal editing.

[*] The first workshop on this matter was held in Rome, Italy, from 30 August to 1 September 2006.

[**] These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

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* This submission is supported by Ecuador.

** This submission is supported by Bosnia and Herzegovina, Croatia, Serbia, The former Yugoslav Republic of Macedonia and Turkey.

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PAPER NO. 1: ARGENTINA

ARGENTINA

Reducing emissions from deforestation in developing countries

Mandate

The 11° Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC - November/December 2005) decided to consider "issues relating to reducing emissions from deforestation in developing countries, focusing on relevant scientific, technical and methodological issues and the exchange of relevant information and experiences, including policy approaches and positive incentives", beginning at the twenty-fourth session of the Subsidiary Body on Scientific and Technical Assessment (SBSTA)[1]. The 24° session of the SBSTA (May 2006) agreed to continue the consideration of the issue at SBSTA 25 (November 2006). A workshop regarding this issue was held in Rome, from 30 August to 1 September 2006.

The SBSTA, at its twenty-fifth session, requested the secretariat to organize a second workshop before its twenty-sixth session (May 2007). To facilitate discussions at the workshop, the SBSTA invited Parties to submit their views on the range of topics discussed at the first workshop; the discussions of ongoing and potential policy approaches and positive incentives; and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing emissions from deforestation in developing countries, taking into account, as appropriate, relevant provisions of other conventions, including the Convention on Biological Diversity, and also the work of multilateral organizations, including the UNFF and the WTO. The SBSTA, at its twenty-sixth session, will consider these information and views. The Government of Argentina welcomes the opportunity to submit views on the matter.

Improving the understanding of reducing emissions from deforestation in developing countries

Argentina supports that, being this exercise oriented to consider issues relating to reducing emissions from deforestation in developing countries, the discussion should focus on the particular needs, means and ways of developing countries to do it. Discussing experiences coming from developed regions can have a philosophical value, but if the sustainability and effectiveness of those measures depends on the availability of sufficient funding and the wealth of the States, we can presume that this sort of schemes will not be particularly useful for developing countries.

Provisions of other conventions and work of multilateral organizations

We consider that any mechanism developed to incentivise action to reduce emissions from deforestation in developing countries should be consistent with the applicable international obligations of the UNFCCC members. Also, without importing terminology of other processes, it could be useful to bear in mind some provisions from and the work done in other Conventions and Multilateral Organizations, as the following.

Convention on Biological Diversity: The concept of "positive incentives" is far to be self-explanatory, and not all incentives are positive. Being among the objectives of the Convention on Biological Diversity (CBD), as stated in its Article 1, '(…) the conservation of biological diversity (…)' and '(…) the sustainable use of its components (…)', it could be particularly relevant to take into consideration the

[1] FCCC/CP/2005/5, para. 81.

experience of the discussion process of "incentive measures" in that context. Article 11 of the CBD refers to incentive measures like "measures that act as incentives for the conservation and sustainable use of components of biological diversity".

In addition, work has been done on "perverse incentives", defined by the CBD process as, "incentives that accelerate the loss of biodiversity. Examples include those public subsidies that support unsustainable farming, forestry or fishery activities. Work is now under way to develop proposals for the application of ways and means to remove or mitigate such perverse incentives.".[2] Especially relevant is the fact that, after many years of consideration of matters related with incentive measures, differences of interpretation have arised among the Parties and the COP8 of the CBD (Curitiba, 2006) has agreed, by its Decision VIII/26, to initiate a structured, transparent and inclusive preparatory process for the in-depth review of work done on incentives measures since COP5 (Nairobi, 2000).[3]

World Trade Organisation: In the first workshop, experiences of some Parties were considered with regard to "payments for environmental services". We believe that our process should use conceptually precise definitions. Specifically, it is relevant to take into account that there is a conceptual difference between "payments for ecosystem services" and "payments for environmental services". The first is based on the presumption that it is possible and desirable to both quantify and commodify the values and assets of ecosystems. However, being some of the most important values of forests non-monetary, they cannot be easily integrated into the economic valuation process. The question should be raised about if all ecosystem benefits can or should be valued in monetary terms, taking into consideration the serious ethical questions involved, such as poverty reduction.

On the other hand, with regard to the the second category, "payments for environmental services", it has to be taken into account that environmental services are subject to the GATS provisions, save for the case of services supplied in the exercise of governmental authority as it is stated in Article 1.3 (b) of the agreement, and therefore part of the Services negotiations under WTO. We consider that the relation between WTO agreements and MEAs is working well, and that confusion with regard to those issues should not be introduced in our process, in order to ensure harmony and mutual supportiveness between trade rules and international environmental law, in line with the mandate of the Doha Ministerial Declaration, reaffirmed in the Hong Kong ministerial Declaration. We do not support the development of terminology that could collide with established multilateral commercial disciplines, and/or the elaboration of a positive ponderation of measures whose impact on international trade can be negative, such as some kinds of subsidies. Subsidies have been clearly defined in article 1 of the WTO Agreement on Subsidies[4], obligatory to their 149 members, which indicates that the concept includes, among others,

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[2] CBD website, Programmes & Issues, Economics, Trade and Incentive Measures, Introduction & Perverse Incentives and their Removal or Mitigation (http://www.biodiv.org/programmes/socio-eco/incentives/default.asp).

[3] Decision VIII/26 also recognizes that "policy guidance on incentive mechanims developed under the Convention is voluntary and should be applied in accordance with national law, taking into account other international instruments", and encourages international institutions and organisations as well as stakeholders to strengthen research on "comparative analyses of the effectiveness and cost-efficiency of individual positive incentive measures, including their impact on the livelihood and biodiversity of third parties."

[4] World Trade Organisation (WTO) Agreement on Subsidies, Article 1: "1.1 (…) a subsidy shall be deemed to exist if: (a) (1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as "government"), i.e. where:
(i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);
(ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits) [4];
(iii) a government provides goods or services other than general infrastructure, or purchases goods;
(iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments;
or

payments, financial transfers and tax exemptions. The consideration that all subsidies are positive incentive measures is wrong, especially from the perspective of their possible impact on developing countries and the poor.

United Nations Forum of Forests: Within discussions in the United Nations Forum of Forests (UNFF) many Parties have expressed the view that innovative and new sources of funding are needed, including the possibility of establishing a "Global Forest Fund" to support developing countries in implementing Sustainable Forest Management. This is an issue that is still being discussed within a broader process to develop a multi-year programme of work (MYPOW) of the UNFF and a non-legally binding instrument (NLBI) on all types of forests.

Ongoing and potential policy approaches

We should take into account in our discussions the results of the negotiations on the MYPOW and the adoption of the NLBI at the upcoming seventh session of the UNFF (April 2007) and their impact on the protection and sustainable management of forests. The MYPOW and NLBI should be useful mechanisms to incentivise positive action to reduce emissions from deforestation in developing countries, provided they have adequate means of implementation. However, specific approaches to reduce emissions from deforestation need to be developed under the UNFCCC.

Also, it could be useful to have a better understanding of the impact of the removal of perverse incentives by developed countries on developing countries forests. We consider that incentives have different motivations, many of them neither exclusively nor principally directed to protect the environment. In fact, a fundamental cause of the loss of biodiversity in developing countries is the persistence of the use of perverse incentives in developed countries.

We are open to discuss the benefits of publicly-governed mechanisms, such a as a fund, and of well designed, targeted and flexible market-based approaches to promote the reduction of emission from deforestation and forest degradation in developing countries. Both approaches should continue to be compared, not only on the basis of cost-effectiveness and the technical and methodological requirements related to their implementation, but also in terms of equity. To this end, different categories of developing countries could be set, taking into account their geographic situation (high, mid or tropical latitudes) and the associated types of forests (boreal, tropical, etc.).

The Government of Argentina coincides with a number of our developing country peers in the belief that this discussion should aim at establishing a new arrangement within the Convention to enable developing country Parties to take action to reduce emissions from deforestation. Any such mechanism should include provision of new and additional financial resources, transfer of technology, capacity building and enhancement of national capacities, strengthening of national compliance and enforcement mechanisms, as well as support for monitoring and evaluation. Such assistance would be channeled through government programs based on measures that reduce emissions from deforestation in developing countries.

(a) (2) there is any form of income or price support in the sense of Article XVI of GATT 1994;
and
(b) a benefit is thereby conferred.
1.2 A subsidy as defined in paragraph 1 shall be subject to the provisions of Part II or shall be subject to the provisions of Part III or V only if such a subsidy is specific in accordance with the provisions of Article 2."

The Government of Argentina is looking forward to cooperate with other Parties to the Convention in finding ways and means to curb and ultimately stop not only deforestation but also forest degradation in developing countries.

PAPER NO. 2: AUSTRALIA

Submission by Australia to the UNFCCC

23 February 2007

Reducing emissions from deforestation in developing countries

At its twelfth session, the Conference of the Parties invited Parties to submit their views on issues relating to reducing emissions from deforestation in developing countries, focusing on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; on assessment of results and their reliability; and on improving the understanding of reducing emissions from deforestation in developing countries taking into consideration, as appropriate, relevant provisions of other conventions and also the work of multilateral organizations (FCCC/SBSTA/2006/L.25, paragraphs 5 and 6). Australia is pleased to provide its views on this matter.

Australia regards the United Nations Framework Convention on Climate Change (UNFCCC) process to consider approaches to reducing greenhouse gas emissions from deforestation in developing countries as a critical component of the global effort to reduce emissions. Australia believes that through the reduction of emissions from deforestation, the global community has the capacity to significantly moderate global emissions in the near term. As increasingly evident (highlighted by the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report and the Stern Review on the economics of climate change), reducing emissions from deforestation can result in substantial abatement that is both environmentally and cost effective, leading to clear and immediate atmospheric benefits. And given recent UNFCCC discussions on this matter, it is clear that we have a shared willingness to make progress on this issue.

Discussions so far have been useful but have not progressed beyond consideration of the workshop agendas. In Australia's view, we need to engage in more substantial negotiation as the hard work of designing, agreeing and implementing an effective solution remains in front of us.

Australia's previous submission in March 2006, emphasized that an optimal outcome can only be achieved if we respect the complexity of this issue and the sensitivities related to it. We must recognise that national circumstances vary significantly between countries, and may have a profound effect on national practices and outcomes in relation to forests. Any narrowly focused approach to tackling deforestation is unlikely to be applicable, nor acceptable, to all countries.

Australia maintains that the international community can reach a workable framework to support reductions in emissions from deforestation in developing countries. To do so, SBSTA should continue to build a technical understanding of both forest cover and land use change and their effect on greenhouse gas emissions. In effect, agreement on the technical and methodological issues underpinning this issue will bring us significantly closer to agreement on the policy approaches that will be necessary to reduce emissions from deforestation in developing countries.

Australia recognises that it is very important to progress discussions on potential policy approaches to reduce emissions from deforestation in developing countries. In this regard, SBSTA should also continue to discuss a wide range of policy options to enable Parties to better understand the choices they may have, and the implications of those choices, when assessing various approaches.

Australia accepts that, to be successful, policy approaches must provide an incentive to reduce emissions from deforestation. We also acknowledge that developed countries have a responsibility to support developing countries to take action. However, it is also true that developing countries (particularly those that are more advanced economically) also have a role to play in managing their emissions, including from deforestation. At this time, Australia is unable to identify a preferred policy approach as the discussion to date has not allowed detailed consideration of proposals. We encourage Parties at the

Cairns workshop, at SBSTA 26 and at COP 13 to come prepared to fully explain their thinking behind various policy approaches and how they would work in practice. This will be critical to further developing our mutual understanding of the implications of various approaches, and will be a necessary step towards developing a workable, practical and environmentally effective framework to reduce emissions from this sector.

General principles

To date, discussions on the methodological issues associated with reducing emissions from deforestation have not addressed deforestation in an integrated manner. In order to move this issue forward, Australia thinks it is important that we agree on a set of overarching principles to guide our future discussions on the treatment of emissions from deforestation.

Fundamentally, it is the overarching methodological framework which will determine the outcomes, rather than the individual mechanisms used. It is also important to emphasize that any process to preserve forest carbon stocks must be simple, comprehensive and consistent, as an overly complicated system is likely to fail. Furthermore, we need to ensure that flexible approaches (to accommodate national circumstances) do not equate to 'fuzziness' in methods. With this in mind, Australia proposes the following five key principles in the design of a workable, and effective international framework on deforestation:

*1) **Robust** framework*

- The system needs to be clear and we should start by defining what it is that we are trying to achieve. For example, we need to:
  - identify the types of processes we are attempting to capture (e.g., the loss of forest carbon stocks from anthropogenic sources);
  - be clear about the definition of which processes we want to include (e.g.. temporary forest cover change (degradation) and/or permanent land use change (deforestation));
  - identify the specific regions of interest we are targeting for inclusion in the process; and
  - consider the importance of national circumstances in any system, recognising potentially divergent socio-economic processes and/or impacts (including understanding the scale, drivers and patterns of forest cover change).
- The system needs to be robust.
  - It needs to include accurate monitoring and reporting to underpin all facets of accounting; and
  - There needs to be national level, spatially explicit mapping, with no gaps or overlaps.

*2) **Completeness** over space, time and forest type*

- To enable robust reporting of changes in forest cover, the baseline and coverage should be at a national and sectoral level
  - This will reduce likelihood of leakage within countries, as leakage will be

contained within the national inventory (we note that international displacement is still an issue);

- We should clarify the geographical scope of intended process, particularly types of forests we are trying to capture (e.g. tropical, temperate, boreal);
- Definitions of a "forest" can be country specific, however, should be bound by common definitions, such as those in the Marrakesh accords, which were agreed as sufficient to deal with what is included as a forest; and
- We should be clear in the treatment and definition of key activities including temporary and permanent forest cover change or land use change; managed and unmanaged lands; harvest activities; legal and illegal activities.

*3) **Comprehensive**, **transparent** and **verifiable** reporting and monitoring*

- To ensure transparency and verification, methods should be spatially explicit.
- To avoid leakage, methods should be wall to wall;
- To enable robust emissions estimates, methods should be Tier 3;
- Standardised monitoring, verification and compliance procedures will guarantee certainty, transparency, consistency and continuity of data acquisition as well as processing, emissions estimation and accounting; and
- The system should be outcomes driven, rather than rules bound (which are often created in an attempt to deal with exceptions).

*4) **Simple** and **consistent** treatment of deforestation with the rest of the AFOLU sector*

- To reduce the likelihood of leakage within and between countries, emissions should be reported, and accounted, when and where they occur;
- To ensure the consistent treatment emissions across the AFOLU sector, we should avoid stand alone or parallel schemes;
- Ensure consistency with 2006 IPCC guidelines.

*5) **Effective**, **efficient** and **appropriate***

- Methodologies should be cost effective and we should both learn from, and build on, existing efforts to monitor and manage forest resources;
- The system should facilitate technology transfer and sharing, as well as enhance capacity building;
- The process should recognise the integrity of existing mechanisms and international collaboration;
- The approach should allow for the possible involvement of the private sector; and
- The process should ensure that we allow for consistency and/or integration with any future agreement/s.

PAPER NO. 3: BOLIVIA, JOINTLY SUBMITTED BY BOLIVIA, CENTRAL AFRICAN REPUBLIC, COSTA RICA, DEMOCRATIC REPUBLIC OF THE CONGO, DOMINICAN REPUBLIC, FIJI, GHANA, GUATEMALA, HONDURAS, KENYA, MADAGASCAR, NICARAGUA, PANAMA, PAPUA NEW GUINEA, SAMOA, SOLOMON ISLANDS, VANUATU

United Nations Framework Convention on Climate Change

Submission of Views

Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action

11th Conference of the Parties, Agenda Item #6

Submitted Jointly by:

Bolivia
Central African Republic
Costa Rica
Democratic Republic of the Congo
Dominican Republic
Fiji
Ghana
Guatemala
Honduras
Kenya
Madagascar
Nicaragua
Panama
Papua New Guinea
Samoa
Solomon Islands
Vanuatu

Mandate

The Twelfth Session of the Conference of Parties to the UN Framework Convention on Climate Change invited Parties and accredited observers to submit to the secretariat, by 23 February 2007, their views on issues relating to reducing emissions from deforestation in developing countries, focusing on the discussion of ongoing and potential policy approaches and positive incentives, the technical and methodological requirements related to their implementation, the assessment of results and their reliability, and improving the understanding of reducing emissions from deforestation in developing countries. The COP invited Parties to also consider, as appropriate, relevant provisions in other conventions and the work of multilateral organizations.

The COP requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to consider the information in the submissions, beginning at its twenty-sixth session (May 2007).

Key Messages

Reducing Rates of Deforestation is Possible and Urgently Needed: Emissions reductions from deforestation and forest degradation can significantly contribute to the ultimate objectives and goals of the UN Framework Convention on Climate Change ('the Convention') and the Kyoto Protocol (the Protocol). Accordingly, Parties should act with a sense of urgency to assist developing countries reduce emissions from deforestation and forest degradation – hereinafter referred to simply as 'deforestation' or 'REDD'. Experience demonstrates that many activities that cause and drive deforestation can be addressed through a system of policy approaches and positive incentives.

Sustainable Development at Scale: To reduce global deforestation rates by 50% over the next decade, the recently issued 'Stern Review of the Economics of Climate Change' estimates that approximately US$5 – US$10 billion per year will be required to be applied through a system of policy approaches and positive incentives. Revenues to developing countries at this scale could catalyze monumental gains toward achieving climate stability, poverty reduction, biodiversity conservation and sustainable economic development.

Sources of Funding are Available: As global deforestation accounts for approximately 20% of global carbon emissions, under the principle of proportionality, it is equitable that international mitigation policies dedicate 20% of available revenues to address this emissions source. For example, a policy that dedicated 20% of the trading volume from existing emissions trading markets to address deforestation would likely generate revenues that are sufficient to reduce global emissions from deforestation by 50% over the coming decades.

Technology and Methods are Available to All: It is currently possible to measure reductions in GHG emissions from deforestation in developing countries to a sufficient level of accuracy. The Intergovernmental Panel on Climate Change has developed Guidance and Good Practice Guidelines ('IPCC Guidance & GPG') relevant to forests that provide a basis for methodological consistency and verification. Estimation of uncertainty around measures of GHG emissions would allow conservative factors to be applied. Most importantly, the existing methods provide a pathway for immediate participation by developing countries while accommodating respective national circumstances.

Major Reduction in Long-Term Mitigation Costs: Reducing emissions from deforestation could significantly increase the amount of reductions that can be achieved while greatly lowering the mitigation costs of meeting the objectives of the Convention. The costs of reducing deforestation and associated emissions will change over time and vary within and among countries. However, acting now to prevent emissions will be easier, more cost-effective and yield more co-benefits than allowing emissions to continue unabated and attempting to reduce emission rates later.

Scope
This 'Submission of Views' has been developed in consultation with several regionally-oriented Submissions on the matter of 'reducing emissions from deforestation in developing countries.' The objective is to facilitate consensus within the respective geographic regions while advancing this important dialogue through a unified interregional and intergovernmental Submission.

Further, this Submission seeks to demonstrate unity of commitment and solidarity of vision related to reducing emissions from deforestation across continents and island chains – from Africa, Asia, the Caribbean, Central American, Oceania and South America.

Policy Approaches
Specific policy approaches must be considered within the context of each nation's circumstances, taking into account economic, legal, policy and institutional implications and in accordance with the Guiding Principles set out in **Annex 1** below. The many drivers of deforestation often vary by country and region. To be effective, developing countries themselves will determine which policy approaches are relevant and where they are to be applied.

Expand Existing Efforts: For example, many developing countries are already implementing policies to reduce emissions from deforestation that incorporate legal initiatives, tax structures, forest fire management plans, protected areas, agricultural intensification, sustainable forest management, reduced impact logging, payment for environmental services, improvement of land tenure rights, expansion of sustainable livelihood practices to address poverty alleviation, and the like.

Deepen Annex-B Targets: Unequivocally, deeper targets by Annex-B countries are a pre-condition for the introduction of this new source of emissions reductions from deforestation. Developed countries themselves must support policy approaches that ensure this 'new supply' is met by 'new demand.' This 'new demand' must be brought about by greater reductions and deeper targets by Annex-B nations. Reduced emissions from deforestation cannot simply compete with, and thereby lower prices realized by, other existing mechanisms such as the CDM.

Credit for Early Action: Furthermore, developed countries must 'credit early action' by ensuring that emission reductions generated by developing countries engaged in early efforts to reduce their emissions from deforestation should be creditable in future commitment periods post-2012. Such 'credit for early action' will allow emissions reductions markets to more quickly bring revenues to support developing country policies to reduce emissions from deforestation and also provide important learning opportunities.

Sustainable Financial Resources: When considering policy approaches, traditional sources of funding have unfortunately not been available at sufficient scale to meaningfully reduce emissions from deforestation in developing countries. Developing countries need to sustain the implementation of integrated policy approaches to address the associated opportunity costs, institutional overheads, and transitional costs necessary to support sustainable livelihoods and development.

Positive Incentives
To be effective at scale and over the longer term, relevant policy approaches must be underpinned by a basket of complementary instruments that provide simple, transparent and positive incentives to reduce emissions from deforestation in developing countries. When considering possible instruments, the Parties can apply learning from existing mechanisms, bodies and precedents within the Convention, and where appropriate, the Protocol.

When considering the forestry sector in developing countries on an aggregate basis, and within the diversity of national circumstance, the Parties must continue to strengthen existing tools that reward carbon sequestration through afforestation and reforestation but also consider new mechanisms to reduce

emissions from deforestation. Additionally, the Parties must develop a complementary instrument to support those developing countries with historically low rates of deforestation that seek to stabilize existing forest areas and cannot benefit from either of the two aforementioned activities. Finally, an 'enabling fund' is needed to effectively and efficiently implement these instruments.

The CDM only accommodates afforestation and reforestation activities (CDM-AR). Now the Parties must develop a new basket of incentives to address the differing dynamics of the forest sector in developing countries by including instruments that reduce emissions from deforestation along with those that stabilize existing forest areas. Within this context, a new menu of voluntary incentives could include:

A. **REDD Mechanism:** to account for gross carbon emission reductions and non-CO_2 emission reductions only in existing forest areas on a national basis.

B. **REDD Stabilization Fund:** to account for carbon emissions and removals and non-CO_2 emissions in countries participating in the REDD Mechanism that seek to maintain and stabilize existing forest areas on a national basis.

C. **REDD Enabling Fund:** a special purpose group of funds designed to prepare and support developing countries who seek to participate in mechanisms A and B above, including piloting activities.

The nationally-based REDD Mechanism could be implemented synergistically with project-based CDM-AR activities in the same country since each instrument will be applied to different land areas. Clearly, the design of the REDD Mechanism must not conflict with CDM-A/R activities and must effectively offer developing countries a new and additional instrument that can be applied to areas that were forested during an agreed upon reference period. In all cases, each of these instruments may be immediately applied by using technical and methodological principles already in effect, principally the relevant IPCC Guidance & GPG. Further, new and additional funding will be needed to implement B and C above.

A. REDD Mechanism

The REDD mechanism must be designed to provide positive incentives to support voluntary policy approaches that result in gross reductions in GHG emissions from deforestation in developing countries as measured against a Reference Scenario (RS).

A RS will be made by estimating a reference emissions rate (RER) and taking account of a Development Adjustment (DA) factor.

The RER should be determined by assessing the activity data related to rates of deforestation and estimating the carbon stock implications using the relevant IPCC Guidance & GPG over a historical Reference Period (RP). Under the principle of 'conservatism', the RP should be as long as is possible, based upon the availability of country-specific activity data, but not shorter than five years. The RER could be updated periodically.

The DA must take into account the Convention's climate objectives and the atmospheric benefit of aggregately reducing emissions from deforestation in developing countries. However, the DA should seek to accommodate national circumstances and be applied in accordance with the common but differentiated responsibilities, respective capabilities and social and economic conditions within and between Parties.

The REDD Mechanism would provide a system of positive incentives that would be determined by calculating the estimated reduced emissions from deforestation and degradation (REDD), over an agreed upon past time period, evaluated against the Reference Scenario (RS).

REDD could be estimated in accordance with existing IPCC Guidance & GPG. In this respect, no new forest related definitions or rules are necessary because all relevant emissions and removals could be covered by application of the IPCC Guidance & GPG.

Furthermore, the IPCC Guidance & GPG apply a tiered approach. The tier selection for reporting on carbon stocks is based on national circumstances and related to data availability. Properly implemented, all tiers are designed to provide unbiased estimates while accuracy and precision should, in general, improve from Tier 1 to Tier 3. Conservative estimates could be achieved by taking into account uncertainty ranges. Deforestation rates will need to be measured using geographically explicit data. Developing countries may use available archived satellite remote sensing data to assess historical deforestation rates. Thus, Parties would provide estimates of land area representation using Approach 3 of the IPCC Guidance & GPG.

Within the context of national circumstance, the REDD Mechanism should be made available to developing countries to reduce emissions from deforestation via a system of positive incentives that may be either non-market and/or market-based.

Accordingly, non-market instruments would likely carry more conservative carbon accounting systems, lower performance standards, and consequently result in lower economic values per ton of emissions reductions. Conversely, market options could operate with more robust carbon accounting systems, higher performance requirements, and result in higher economic values per ton of emissions reductions.

We envision that under the REDD Mechanism, the UNFCCC Secretariat would organize a periodic review to assess the accuracy of the RS and the REDD for each creditable past time period.

B. REDD Stabilization Fund

A REDD Stabilization Fund could support developing countries that have very low rates of deforestation and seek to maintain their existing forest areas. Atmospherically, this is important to defend against the migration of deforestation from one developing country to another. Such migration would not result in the needed aggregate global reductions in emissions from deforestation in developing countries.

This fund could be supported through contributions generated from a variety of sources, including:

i) a levy on Emissions Reductions Units issued or Assigned Amounts, similar to those imposed on CERs,

ii) a tax on carbon intensive commodities and services, or industries currently excluded from emissions reductions policies,

iii) new and additional Official Development Aid, and/or other voluntary contributions.

The REDD Stabilization Fund will not be sustainable without clearly identifying sufficient, consistent and predictable sources for replenishing the fund.

C. REDD Enabling Fund

In order for some developing countries to participate in a REDD system of positive incentives, specific capacity constraints must be addressed. Early financial resources are necessary to ensure maximum participation at the earliest opportunity. Adoption of policies supporting 'credit for early action' will catalyze financial resources earlier and at greater scale.

Developing countries need to establish and improve national capacities to construct reference scenarios (expanding forest inventories, remote sensing capabilities, etc.), analyze the existing drivers of

deforestation, and carryout policies and measures to implement and estimate reduced emissions from deforestation. Enabling assistance should facilitate cooperation and capacity building among relevant institutions within each country.

Further, the Enabling Fund should develop three voluntary tracks for a system of positive incentives, supported by various pilot activities, which could be formalized by the Parties to operate beyond 2012:

i) REDD non-market (or fund-based) instruments,

ii) REDD market-based instruments, and

iii) REDD stabilization instruments.

Annex 1: Guiding Principles

Real Benefits for the Climate: Any future action to mitigate climate change should pursue the ultimate objective of the UNFCCC as stated in its Article 2. To achieve real and measurable benefits for the climate, policy approaches and positive incentives should be appropriate, sufficient, and credible to address emissions from deforestation at an adequate scale. Further, such policy approaches and positive incentives should be implemented as soon as possible and should not prevent or delay other emissions reduction efforts.

Common but Differentiated Responsibilities: Recalling the principle of "common but differentiated responsibilities", all Parties have the responsibility to collaborate to reduce GHG emissions and combat their adverse effects on climate. There are historical differences in the contribution to the current composition of the atmosphere by industrialized and developing countries, as well as differences in Parties' respective economic and technical capabilities to address the resulting environmental implications. Reducing GHG emissions from deforestation offers a historic opportunity to enhance the effective participation of developing countries in the climate regime on a 'voluntary' basis. It also provides industrialized countries an opportunity to positively fulfill their historical commitments for additional financing to support forest conservation and reduce emissions from deforestation and forest degradation in developing countries.

Polluter Pays: Recalling Principle 16 of the Rio Declaration, we reaffirm the concept that Annex 1 Parties that have proportionally contributed greater amounts of GHG emissions should bear the same proportion of responsibility and mitigation costs.

State Sovereignty, Intergenerational Responsibility & Sustainable Development: Recalling the Preamble of the UNFCCC and the Rio Principles we reaffirm that Parties have the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies in order to fulfill their present needs without limiting the options for future generations. Toward these objectives, forest-based ecosystem services need to be recognized and valued by the international community in order to allow developing countries with forests to capitalize these services on a voluntary basis. Therefore, not only should the Parties' participation in efforts to reduce emissions from deforestation be voluntary, Parties alone shall decide how to implement specific measures.

Equitable and Fair: Any effort to reduce GHG emissions from deforestation should ensure a fair distribution of the responsibilities and benefits both within and among countries. We must ensure that, on the basis of the principle of common but differentiated responsibilities, all countries have equitable and fair access to any incentive instruments developed and are assisted to overcome any comparative capacity and technical disadvantages impeding their access to these instruments. Further, market regulations and methodological issues should not be applied more stringently for developing countries – or for the forestry sector in general, as compared to other countries and sectors.

Cost Effectiveness: Policy approaches and positive incentives should be designed and implemented in ways that improve their cost-effectiveness. Incentives should be sufficient to cover implementation costs of the measures taken to reduce GHG emissions from deforestation, including opportunity costs, and should also assist countries that reduce emissions from deforestation to address poverty alleviation while pursuing the ultimate objective of the UNFCCC.

Supplemental Funding and Capacity Building: Supplementary resources should be made available for developing countries to build the technical, legal and institutional capacity necessary to implement actions aimed at reducing GHG emissions from deforestation. Funding for emission reductions from deforestation should be additional to current and already established ODA programs.

Enhancing Forest Ecosystem Services as a Capital Resource: Many developing countries have difficulty putting into effect policies for maintaining or increasing the area of forest biodiversity habitats due to limited human, institutional, technological and financial capacity. Well-constructed mechanisms to reduce emissions from deforestation can have multiple benefits for sustainable development in developing countries, as forests function as a tangible capital resource that provides a diverse set of ongoing ecosystem services related to air and water quality, improved agricultural production, healthy coral reefs and fisheries, control of infectious diseases, medicinal cures, and social and political stability.

Need to Act Quickly while Protecting the Integrity of Existing Mechanisms: Any delay in addressing emissions from deforestation is counterproductive to the objectives of the Convention and will unnecessarily increase the costs of climate change mitigation. However, new policies and incentives related to reducing emissions from deforestation should be consistent, where possible, with existing mechanisms for reducing GHG emissions, should not undermine emissions reduction efforts by Annex I countries, and should complement existing flexibility mechanisms within the Kyoto Protocol.

Annex 2: Notes on Relevant Multilateral Treaties and Organizations

A. World Trade Organization

Trade-Related Issues Regarding Positive Incentives to Reduce Emissions from Deforestation in Developing Countries:

- The UNFCCC constitutes an independent international legal regime. It is not -- nor should it be -- subordinate to international agreements on trade. Article 3.5 of the UNFCCC makes clear that measures to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or disguised restrictions on international trade.

- The question of how Parties ultimately decide to use any credits, money, or compensation they receive for reducing their national rate of deforestation relevant to a certain reference scenario is wholly separate from the question of whether a framework of "positive incentives" adopted under the UNFCCC or Kyoto has any adverse trade implications. In other words, the possibility that a particular country might decide to use any revenues derived from such "positive incentives" in a manner that violated its obligations under international trade agreements is not a proper basis for arguing that the any framework of "positive incentives" adopted by the UNFCCC and/or Kyoto parties has adverse trade implications.

- Decisions by Annex I countries to allocate emissions allowances for trading purposes to a particular sector or sectors (at no cost) have not raised trade concerns. So too, then, a decision by developing country to allocate credits to particular individuals or companies for efforts to conserve tropical forests should not raise trade concerns.

- Positive incentives for reducing emissions from deforestation that involve direct payments from participants in the carbon markets for credits generated as a result of efforts to reduce emissions from deforestation would not constitute "subsidies" as that term is defined in Article 1.1 of the Agreement on Subsidies and Countervailing Measures because they would not be "financial contributions" from the national government.

- If the revenues derived from positive incentives for reducing emissions from deforestation resulted in transfer payments from national governments to the agents of deforestation in a particular country, such payments would not constitute subsidies as defined under Article 1.1 of the Agreement on Subsidies and Countervailing Measures as long as they do not go beyond correcting for market failure.

- Even if revenues and transfer payments derived from positive incentives for reducing emissions from deforestation could be construed as "subsidies" as defined under Article 1.1, as long as they meet the test for "general availability" (*i.e.* they are not specific to a particular enterprise or group of enterprises/industries), they would not be actionable subsidies.

- Finally, even if a program for channeling any revenues derived from positive incentives for reducing emissions from deforestation were construed as an agricultural subsidy, such payments would be non-actionable subsidies as long as they meet the criteria for "Green Box" subsidies under Annex 2 of the Agreement on Agriculture. Such "green box" subsidies are defined in Annex 2 of the Agriculture Agreement and are allowed without restriction. In order to qualify for "green box" treatment, the incentives must have no or minimal trade-distorting effects or effects on production; the support in question must be provided through a publicly-funded government programs not involving transfers from consumers; and the support in question shall not have the effect of providing price support to producers. In addition, Annex 2 identifies certain policy-specific criteria and

conditions that must be met in order to qualify as a green box subsidy. Among them are payments under environmental programs, provided that eligibility for such payments is determined as part of a clearly-defined government environmental or conservation program and is dependent upon the fulfillment of specific conditions under the government program; and the amount of payment is limited to the extra costs or loss of income (i.e. the opportunity cost) involved in complying with the government program.

B. World Bank

On 14 February 2007, Paul Wolfowitz, the President of the World Bank, announced: 'together with our partners, we are developing a Forest Carbon Facility, that would help countries combat deforestation and be rewarded with carbon finance credits, generating much needed income for poor countries.'

In summary, developing and industrialized countries have requested the World Bank to explore a framework for piloting activities that would reduce emissions from deforestation and degradation using a system of policy approaches and positive incentives. The proposed framework is called the Forest Carbon Partnership Facility. The proposed Facility would set the stage for a future, large-scale market by building countries' capacity to harness the future carbon market and piloting performance-based payments for avoided emissions in a subset of these countries.

For the first lime, win-win solutions to fight two major global problems, deforestation and global warming, would be piloted at a national scale while offering a learning-by-doing opportunity to developing and developed countries. Developing countries would have the opportunity to access sustainable financing flows to reduce deforestation and protect biodiversity. Developed countries would have the opportunity to scale up their contribution to climate change mitigation in cost-effective ways, as well as contribute to other sustainable development goals. Furthermore, major reductions in emissions from developing nations could make a significant contribution to global efforts to address climate change. The Facility would demonstrate that when developed and developing nations work together emission reductions can be scaled up significantly. The Facility can play a key role in fueling this transformation.

The FCPF proposes to create a body of knowledge and experience that would facilitate the development of a global program of incentives for REDD by generating analytical tools and implementation experience to benefit ongoing international negotiations, particularly in design of incentive structures, setting of emissions reference scenarios, monitoring and verification, legal frameworks, program implementation and so on. It would develop a methodological and policy framework and test a supporting program of performance-based incentive payments. Performance-based payments would be disbursed in a transparent and accountable budgetary framework in the context of a national public expenditure program managed by the host country.

PAPER NO. 4: BRAZIL

BRAZILIAN PERSPECTIVE ON REDUCING EMISSIONS FROM DEFORESTATION

INTRODUCTION

Brazil welcomes the opportunity to present views on policy approaches and positive incentives to reduce emissions from deforestation in developing countries, provided in FCCC/SBSTA/2006/L.25, paragraphs 5 and 6. The views presented in this submission are a further elaboration of Dialogue working paper 21 (2006) presented at the COP-12 session of the Dialogue on Long-Term Cooperative Action to Address Climate Change by Enhancing Implementation of the Convention, as well as of the elements presented during the first SBSTA workshop on this topic, held in Rome, Italy, from 30 August to a September 2006.

Brazil is hereby providing elements for a proposal focused on policy approaches and positive incentives to reduce emissions from deforestation in developing countries. The proposal does not attempt to cover all technical and scientific aspects involved.

SCOPE

The analysis of policy approaches and positive incentives for reducing emissions from deforestation in developing countries is based on the understanding that these issues are to be further considered solely under the Framework Convention on Climate Change. Therefore, Brazil does not envisage any mechanism that could be used by Annex I countries to meet their quantified greenhouse gas emission limitation and reduction commitments under the Kyoto Protocol. In this context, emission reductions achieved are to be considered additional to emission reduction by Annex I countries. The proposal is not, therefore, linked to the concept of maintenance of carbon stock on forest land, such as in the concept of "avoided deforestation" or "conservation", but rather is based on effective reduction of emissions from deforestation.

The possible adoption of an arrangement related to providing positive incentives for reducing emissions from deforestation in developing countries, under the auspices of the UNFCCC, aims at contributing to the ultimate objective of the Convention, which is the achievement of the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with climate change.

Brazil acknowledges the importance of considering issues related to stimulating further action that could result in reducing emissions in developing countries, as the UNFCCC, in its article 4.1, establishes that all Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall, among others, implement actions according to paragraphs 1(b) and 1(c).

The UNFCCC recognises clearly that the emissions of non-Annex I Parties are expected to grow so as to accommodate their needs for development. It also states that the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

The proposed arrangement and related efforts undertaken by developing countries to reduce emissions from deforestation in their territories can only be characterized as voluntary and, therefore, cannot generate future obligations, goals, targets or timeframes. Brazil does not intend to suggest or support the implementation of a mandatory regime in this respect.

In accordance with the principle of common but differentiated responsibilities of countries, developing countries do not have quantified commitments to reduce or limit their anthropogenic emissions of greenhouse gases. There are, however, many programs being implemented on a national basis by developing countries that result in a considerable reduction of their greenhouse gas emissions.

The discussions on this issue in the UNFCCC should focus on the establishment of an arrangement, within the Convention, to provide positive incentives to developing country Parties. Such incentives should encompass the provision of new and additional financial resources and transfer of technology, as well as means for capacity-building and enhancement of endogenous capacities. Brazil is proposing an arrangement which is simple and transparent.

OVERVIEW OF THE ARRANGEMENT

The main objective of this proposal is the development of an arrangement under the Framework Convention on Climate Change aimed at providing positive incentives for the net reduction of emissions from deforestation in developing countries that voluntarily reduce their greenhouse gas emissions from deforestation in relation to a rate of emissions from deforestation (RED).

The proposal is based on the distribution of financial incentives to countries that demonstrate, in a transparent and credible manner, a reduction in their emissions from deforestation. These financial incentives should be provided by Annex I countries that voluntarily engage in the arrangement, and shall be new and additional to financial resources provided for other activities (according to Art. 4.3 of the UNFCCC).

The proposal should assist countries interested in obtaining positive incentives to reduce emissions from deforestation through better implementation of new and existing national public policies and measures. Transparency on the use of the positive incentives within the government structure is a key aspect of the proposal.

Participating countries are entitled to financial incentives from the arrangement after they demonstrate, in a transparent and credible manner, that they have reduced their emissions from deforestation. This approach is based on demonstrable reduction of emissions from deforestation, or *ex-post* results.

The positive incentives system should be based on a comparison between the rate of emissions from deforestation (RED) for a certain past time period with the reference emissions rate (RER). This should be achieved through a transparent, consistent and scientifically-based method.

The incentive will be quantified taking into account the reference emissions rate:

- if emissions from deforestation have decreased, the difference is converted into a financial incentive to be received (credit); and

-if emissions from deforestation have increased, the difference is converted into an amount to be subtracted (debit) from future financial incentives to be received.

The amount of the incentive per carbon tonne is to be calculated by a set amount to be agreed and to be reviewed periodically.

All the reduced emissions of a country are to be added together for an agreed period, and the total reduced carbon tonnes is to be converted into a monetary sum, divided among the participating developing countries in the same ratio as the emissions reductions they have achieved.

Financial incentives should be received only when this net accounting results in a number below the RER. In this case, this number should be converted into an monetary sum . The positive incentives will be provided by developed country Parties, taking into account their obligations under the UNFCCC.

The proposal is based on actual demonstration of reduced emissions from deforestation, relative to a reference emission rate, built on the basis of past emissions from deforestation. Hence, it does not recognize "virtual" emission reductions resulting from a projected deforestation rate, such as those from the avoided deforestation concept.

Countries that voluntarily participate in the arrangement should be able to develop public policies and measures to reduce emissions from deforestation. It must be stressed that consistent emission reductions from deforestation requires continuous investments.

At the start of the implementation of the arrangement, two categories of countries are likely to emerge: (1) countries that are ready for a prompt start; and (2) countries that require capacity-building and enhancement of endogenous capacities and technology transfer to adequately implement their policies and measures to reduce emissions from deforestation. Adequate efforts to ensure financing for capacity-building and technology-transfer for category 2 countries should be pursued, including through relevant multilateral financing institutions as well as voluntary contributions from Annex I countries.

The proposal does not envisage the creation of a new bureaucratic structure. It would only entail the identification of a focal area, within the UNFCCC secretariat, to manage the relevant data and information produced by the participating countries (e.g., on reference emission rates, on annual emissions from deforestation, national forest cover).

The monitoring of the reduction in emissions from deforestation shall be based on a transparent and credible system that reliably provides estimates of the annual emissions from deforestation, by biome. All data and information shall be disclosed publicly, and should allow for the analysis of data of the estimated reduction from deforestation by all interested stakeholders.

METHODOLOGY

The steps below summarize the methodological aspects of the proposal, which should be followed by the participating developing countries:

Step (1): identify all the forested land in the country, per biome type. Provide the definition used to define forest, and indicate how this definition relates to that used for reporting to the FAO, and to that used for estimating carbon dioxide emissions and removals from forests in the National Communications to the United Nations Framework Convention on Climate Change (UNFCCC).

Step (2): estimate the mean carbon stock for the forest land identified in Step 1, by type of biome, or forest physiognomy, if applicable. In doing so, reliable published scientific sources shall be used.

Step (3): provide the definition of deforestation, consistent with that used in the National Communications to the United Nations Framework Convention on Climate Change (UNFCCC). Indicate which carbon pools are traditionally assessed.

Step (4): estimate the deforestation reference emission rate (RER) for the different types of biome identified in Step (1), on the basis of the emissions from deforestation in the last 10 years. This estimate

shall be consistent with the definitions provided in Step (3). Differentreference emission rates can be established for different types of biome, if applicable.

The estimate of the RER shall be based on two variables: (1) the mean area deforested; and (2) the mean carbon stock in aboveground biomass in the deforested areas.

The estimate of the mean area deforested in the last 10 years shall be done using objective and transparent sources of data (e.g., remotely sensed data of adequate spatial and spectral resolution, sound sampling design, etc.). The approach used to estimate the mean area deforested shall be documented and made available through the UNFCCC.

The mean carbon stock in aboveground biomass shall be estimated using national data or data from internationally recognized sources (e.g., FAO), and shall represent a value for the entire forest land, or individually for the different types of forest physiognomy or biomes identified by the country, if applicable. The procedures used to define the mean carbon stock in aboveground biomass shall be documented and made available through the UNFCCC.

in order to estimate the RER, a minimum of 4 representative years need to be assessed [e.g., time $t_0 = 0$ (year of the start of the arrangement), $t_0 - 2$, $t_0 - 6$, $t_0 - 10$)], and the corresponding deforestation emission rate estimated. The first assessment $t_0 = 0$ needs to be carried out at the year of implementation of the arrangement within the UNFCCC. The assessments cannot be made in sequential years.
Step (5): find the mean and standard deviation of the four data points above, and provide a confidence interval of 95% for the "true" mean deforestation emission rate, following the guidance in Annex I.

Step (6): assume as the RER the lower limit of the confidence interval defined in Step (5).

Step (7): assess the annual emissions from deforestation, RED. Note that the same methodological approach as that used to define the deforestation reference emission rate (RER). If satellite imagery is used to assess the deforested area, participating countries need to ensure that a reduced area is not the result of areas that could not be assessed due to the presence of cloud cover.

Step (8): If for any given year the annual emissions from deforestation (RED) falls below the deforestation reference emission rate (RER), the participating country is eligible to receive financial positive incentives. In case RED falls above the RER, the participating country is not eligible. In addition, the positive difference, $\Delta D = RED - RER > 0$, shall be discounted from the next RED that falls below the deforestation reference emission rate. A financial incentive is provided only if this difference is negative. Suppose, for instance, that for year *t,* $\Delta D = RED - RER > 0$ and that at time *t+1,* $\Delta D_{t+1} = RED_{t+1} - RER < 0$. At time *t+1*, the net emission reduction is $\Delta D_{N,t+1} = \Delta D_{t+1} - \Delta D_t$. Financial incentives are provided in case $\Delta D_{N,t+1} < 0$, proportional to this net reduction in emissions. In case $\Delta D_{N,t+1} > 0$, the country is not eligible for financial incentives. This quantity shall be deducted from the next assessment of the annual emissions from deforestation, if it falls below the RER.

Step (9): the deforestation reference emission rate (RER) shall be recalculated every three years, as the average of the three last RED values. This re-calculated value for the RER shall only be applied IF it falls below the previous deforestation reference emission rate.

PAPER NO. 5: CHILE

SUBMISSION BY CHILE

Taking into account the views shared with Argentina, Bolivia, Costa Rica, Ecuador, Guatemala, Honduras, México, Panamá, Paraguay, Perú, República Dominicana and Uruguay in the VIII Seminario Latinoamericano sobre Proyectos Forestales y Reducción de Emisiones por Deforestación, held in Costa Rica and organized by the Costa Rican Government and supported by the French and the Swiss Government and the Rain Forest Coalition, Chile is pleased to present the following submission.

Subject: Reducing Emissions from Deforestation in Developing Countries

Preamble

In order to ensure the equitable participation by all interested developing countries, proposed mechanisms to Reduce Emissions from Deforestation (RED) should be able to accommodate different national circumstances so that countries may be able to increase their participation as they enhance their capacities, thus allowing for a wide participation while guaranteeing the environmental integrity of the Climate Change regime.

Deforestation around the world and particularly in Latin America and the Caribbean is linked with important economical activities, the off-set costs of which cannot be ignored. Forest degradation is also acknowledged as a concern that requires further attention.

The Stern report (2006) suggest that the opportunity cost of forest protection in 8 countries responsible for 70 per cent of emissions from land use could be around $5 billion annually, initially, although over time marginal costs would rise. The real cost of avoided deforestation would be even higher as institutional re-organization, monitoring, protection cost, agricultural intensification, etc. need to be taken into consideration. Any RED mechanism to be designed will then require adequate and predictable long-term sources of funding.

A basket of incentives should be designed to be complementary and address the different dynamics of deforestation in developing countries. Within this context, the RED mechanism should include a menu of options, which are outlined below.

RED Mechanism

Within the context of national circumstances, a RED mechanism should be made available to developing countries to reduce emissions from deforestation via both non-market and market instruments.

A. Credit for Early Action

Immediate access to the carbon market and other financial mechanisms for developing countries wishing to reduce emissions from deforestation is critical. If the Parties wait until the end of the first commitment period, based upon current rates of global deforestation, they will have foregone

significant potential emissions reductions. Furthermore, early action will provide important early learning for developing countries wishing to reduce emissions from deforestation at an adequate scale. Immediate decisions by the Parties and the CoP can send a clear signal and promote the creation of further market conditions. Emission reductions generated by Parties engaged in early action should be credited in any future commitment periods post-2012 following transparent monitoring and verification rules.

B. Avoided Deforestation Carbon Fund (ADCF)

A Fund would be created aimed at providing resources for the implementation of specific activities that should directly reduce emissions from deforestation in developing countries, and for activities in developing countries which have very low rates of deforestation and want to maintain their forest cover and avoid carbon stock loses.

To continue, reinforce and expand RED, a possibility is that such activities could generate credits and provide participants with an entry to the carbon market (e.g. CDM) that would in turn entail additional funds and incentives.

Additional to voluntary contributions and in order to increase the level of funding and predictability required to significantly reduce emissions from deforestation in developing countries, we propose that the ADCF shall be fed *inter alia* by:

(i) an X % levy on Emissions Reductions Units issued or Assigned Amounts first traded in the carbon market similar to the one imposed on CERs and/or

(ii) a tax on carbon intensive commodities and services in Annex I countries.

These fund replenishment instruments are based on the polluter pays principle which justifies the issuance of credits from the ADCF.

It is necessary to reaffirm that without clearly identifying a source of sufficient, long-term and predictable replenishment from Annex I countries, the Fund will not work.

C. Enabling Fund

The creation of a Fund to support capacity building and piloting activities related to avoiding emissions from deforestation in developing countries should be considered urgent and independent of the approaches eventually adopted to deal with such emissions. Early financial resources are necessary to ensure maximum participation at the earliest opportunity. Sources for replenishment of the Fund should be identified and additional ODA is urgently required. Negotiations of this Fund and its rules should start immediately.

D. Market –based

According to expected needs of financial resources for reducing emissions from deforestation, the Clean Development Mechanism (CDM) and other market mechanisms should be considered to complement efforts and to maintain the integrity of the regime.

Market mechanisms would only be able to stimulate actions if coupled with an appropriate demand. Such demand could be created by increased commitments of Annex 1 countries in the Kioto Protocol's (KP) second and subsequent commitment periods. This will contribute to the fulfillment of the ultimate objective of the Convention.

The CDM as well as other market options to be explored, could allow a wide scope of activities, from small to programmatic, sectoral and national ones, thus offering options for countries with different circumstances and capacities. RED-CDM activities should be included in LULUCF negotiations for the KP's second commitment period.

PAPER NO. 6: COLOMBIA

SUBMISSION BY COLOMBIA ON REDUCING EMISSIONS FROM DEFORESTATION IN DEVELOPING COUNTRIES

Mandate

Responding to the invitation by the Subsidiary Body for Scientific and Technological Advice (SBSTA), at its twenty-fifth session (Nairobi, 6–14 November 2006) to provide views on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing greenhouse gas (GHG) emissions from deforestation in developing countries, Colombia presents the following ideas and proposals:

Background

Taking into account that developing countries have different drivers of deforestation as well as different needs and capacities, mechanisms to Reduce Emissions from Deforestation (RED) should be designed to be flexible, in order to make these resources available to any Party willing to implement them.

The mechanism developed should also take into account off-set or opportunity costs in land use, implementation costs including new technology and monitoring, it should also try to include degradation issues, since it causes biomass loss, and therefore emissions are due to this phenomenon.

The Stern report (2006) suggests that compensation from the international community should be provided and that it considers the opportunity costs of alternative uses of the land, costs of administering and enforcing protection of forests, and managing of transition. Research carried out for this report indicates that the opportunity cost of forest protection in 8 countries responsible for 70 per cent of emissions from land use could be around US$5 billion annually, initially, although over time marginal costs would rise. Moreover, Stern points out that carbon markets could play an important role in providing such incentives in the longer term, also stressing that there are short-term risks of de-stabilizing the crucial process of building strong carbon markets if deforestation is integrated without agreements that increase demand for emissions reductions, and an understanding of the scale of transfers likely to be involved.

Proposals

Colombia considers the that mechanisms aimed at providing incentives to reduce emissions from deforestation in developing countries should have a wide range of application, as to be able to address this problem as soon as possible and to involve parties under different national circumstances and levels of capacity. Therefore, a mechanism designed to this end should be flexible enough to accommodate different levels of application, or be complemented by one or more other options.

Market instruments must play a key role in reducing emissions from deforestation. In our view, voluntary contributions by Annex I Parties (i.e. official development aid-ODA) will not be able to provide the adequate, constant and predictable flow of resources required to maintain the long-term effort needed to deal with this problem.

With this in mind, we propose that RED be included as an eligible Clean Development Mechanism (CDM) activity and that Annex I commitments in the second and subsequent commitment periods should be strong enough to accommodate the new supply of emissions reductions arising from this and other new options. In such manner, developing countries could be able to increase their contribution to the ultimate objective of the Convention following the principle of common but differentiated responsibilities.

The CDM, with minor modifications, can accommodate national circumstances, capacities and commitment levels by offering the Parties the option of implementing different scales of activities ranging from national to project based.

Therefore, Colombia recommends the implementation of a market mechanism, whether in the framework of the CDM or other innovative instrument designed specifically for RED, being this, the best option for including RED within the activities of the UNFCCC.

PAPER NO. 7: COSTA RICA ON BEHALF OF COSTA RICA, DOMINICAN REPUBLIC, GUATEMALA, HONDURAS, MEXICO, PANAMA, PARAGUAY AND PERU

SUBMISSION BY COSTA RICA ON BEHALF OF DOMINICAN REPUBLIC, GUATEMALA, HONDURAS, MÉXICO, PANAMÁ, PARAGUAY AND PERÚ

San José, Costa Rica 23 February, 2007

Subject: Reducing Emissions from Deforestation in Developing Countries

Preamble

In order to ensure the equitable participation by all interested developing countries, proposed mechanisms to Reduce Emissions from Deforestation (RED) should be able to accommodate different national circumstances so that countries may be able to increase their participation as they enhance their capacities, thus allowing for a wide participation while guaranteeing the environmental integrity of the Climate Change regime.

Deforestation around the world and particularly in Latin America and the Caribbean is linked with important economical activities, the off-set costs of which cannot be ignored. Forest degradation is also acknowledged as a concern that requires further attention.

The Stern report (2006) suggest that the opportunity cost of forest protection in 8 countries responsible for 70 per cent of emissions from land use could be around $5 billion annually, initially, although over time marginal costs would rise. The real cost of avoided deforestation would be even higher as institutional re-organization, monitoring, protection cost, agricultural intensification, etc. need to be taken into consideration. Any RED mechanism to be designed will then require adequate and predictable long-term sources of funding.

A basket of incentives should be designed to be complementary and address the different dynamics of deforestation in developing countries. Within this context, the RED mechanism should include a menu of options, which are outlined below.

RED Mechanism

Within the context of national circumstances, a RED mechanism should be made available to developing countries to reduce emissions from deforestation via both non-market and market instruments.

A. Credit for Early Action

Immediate access to the carbon market and other financial mechanisms for developing countries wishing to reduce emissions from deforestation is critical. If the Parties wait until the end of the first commitment period, based upon current rates of global deforestation, they will have foregone significant potential emissions reductions. Furthermore, early action will provide important early learning for developing countries wishing to reduce emissions from deforestation at an adequate scale. Immediate decisions by the Parties and the CoP can send a clear signal and promote the creation of further market conditions. Emission reductions generated by Parties engaged in early action should be credited in any future commitment periods post-2012 following transparent monitoring and verification rules.

B. Avoided Deforestation Carbon Fund (ADCF)

A Fund would be created aimed at providing resources for the implementation of specific activities that should directly reduce emissions from deforestation in developing countries, and for activities in developing countries which have very low rates of deforestation and want to maintain their forest cover and avoid carbon stock loses.

To continue, reinforce and expand RED, a possibility is that such activities could generate credits and provide participants with an entry to the carbon market (e.g. CDM) that would in turn entail additional funds and incentives.

Additional to voluntary contributions and in order to increase the level of funding and predictability required to significantly reduce emissions from deforestation in developing countries, we propose that the ADCF shall be fed *inter alia* by:

(i) an X % levy on Emissions Reductions Units issued or Assigned Amounts first traded in the carbon market similar to the one imposed on CERs and/or

(ii) a tax on carbon intensive commodities and services in Annex I countries.

This Fund's replenishment instruments are based on the polluter pays principle which justifies the issuance of credits from the ADCF.

It is necessary to reaffirm that without clearly identifying a source of sufficient, long-term and predictable replenishment from Annex I countries, the Fund will not work.

C. Enabling Fund

The creation of a Fund to support capacity building and piloting activities related to avoiding emissions from deforestation in developing countries should be considered urgent and independent of the approaches eventually adopted to deal with such emissions. Early financial resources are necessary to ensure maximum participation at the earliest opportunity. Sources for replenishment of the Fund should be identified and additional ODA is urgently required. Negotiations of this Fund and its rules should start immediately.

D. Market –based

According to expected needs of financial resources for reducing emissions from deforestation, the Clean Development Mechanism (CDM) and other market mechanisms should be considered to complement efforts and to maintain the integrity of the regime.

Market mechanisms would only be able to stimulate actions if coupled with an appropriate demand. Such demand could be created by increased commitments of Annex 1 countries in the Kioto Protocol's (KP)

second and subsequent commitment periods. This will contribute to the fulfillment of the ultimate objective of the Convention.

The CDM as well as other market options to be explored, could allow a wide scope of activities, from small to programmatic, sectoral and national ones, thus offering options for countries with different circumstances and capacities. RED-CDM activities should be included in LULUCF negotiations for the KP's second commitment period.

PAPER NO. 8: DOMINICAN REPUBLIC

DOMINICAN REPUBLIC

SOME SUGGESTIONS OF POLITICS

1) That each country made an inventory of the forest resources that it has, including its categorization according to the **crown** cover as well as the productive capacity of it. Because by this form, a base line could be established (departure point or reference)

2) The governments most establish policies that stimulate and contributed to the reduction of emissions from deforestation (Payment by Environmental Services, Incentives to the Reforestation, etc.).

3) The State System of Protected areas Owen by the State or individuals can be included as avoided deforestation and in consequence their proprietors or the state, according to the case, can accede to the incentives or payments by the maintenance of this resource. Other activities that are relate to the conception or nature of this area, such as: scientific research, ecotourism, landscape, etc, do not have to be considered opposite to have benefits or payments by the services that the country or the particular proprietor could accede.

4) From the point of view of the market, Sustainable Forest Management is considered as a practice of avoided deforestation, every time it generates a change of mentality of the investors who see the forest like an obstacle for cattle and agricultural development.

5) Increase the rate of yield of the investments that traditionally have a low rate of return for the private investor, offers benefits in form of externality for the society as a whole. The State could serve as guarantor so that the investors, who conserve the natural resources, could accede to the benefits from international organization.

6) To maintain permanent capacity building in the marginal zones and the local groups, including the local authorities that are part integrated of the processes of maintenance of the areas of interest for the reduction of emissions from deforestation.

7) The mechanisms that are used within the framework of reduction of emission from deforestation and degradation must be in according with the other existing mechanisms, that is to say, that it created synergies with other conventions and international agreements.

REPUBLICA DOMINICANA

ALGUNAS SUGERENCIAS DE POLITICAS

1) Que cada país lleve cabo un inventario de los recursos forestales que posee, incluyendo su categorización de acuerdo a la cobertura de copas, así como la capacidad productiva de los mismos. De esta forma se podría establecer una línea base (punto de partida o referencia).

2) Que los gobiernos establezcan políticas que incentiven y favorezcan la reducción de las emisiones provenientes de la deforestación (Pago por Servicios Ambientales, Incentivos a la Reforestación, etc.).

3) Que el Sistema de Áreas Protegidas del Estado o de particulares pueda incluirse como deforestación evitada y que, en consecuencia sus propietarios o el estado, según el caso, puedan acceder a los incentivos o pagos por el mantenimiento de este recurso. Otras actividades que se realicen en estas áreas, propias de su concepción o naturaleza, tales como: investigación científica, ecoturismo, paisajismo, etc, no deben ser considerada contrarias a la obtención de los beneficios o pagos por los servicios a que pudiera acceder el país o el propietario particular.

4) Que, desde el punto de vista del mercado, el Manejo Forestal Sostenible, sea considerado como una practica de deforestación evitada, toda vez que genera un cambio de mentalidad de los inversionistas que ven el bosque como un obstáculo para el desarrollo agrícola y ganadero.

5) Aumentar la tasa de rendimiento de las inversiones, que tradicionalmente tienen una tasa de retorno baja para el inversionista privado ofrece beneficios en forma de externalidades para la sociedad en su conjunto. El Estado pudiera servir como garantía para que los inversionistas que conserven los recursos naturales en esta forma puedan acceder a los beneficios de organizaciones internacionales.

6) Mantener actividades permanentes de capacitación en las zonas marginales y que los grupos locales, incluyendo a las autoridades locales sean parte integrada de los procesos de mantenimiento de las áreas de interés para la reducción de las emisiones por deforestación.

7) Los mecanismos que se utilicen en el marco de REDD deben estar en consonancia con los demás mecanismos existentes, es decir, que se creen sinergias con otras convenciones y acuerdos internacionales.

PAPER NO. 9: GABON ON BEHALF OF CENTRAL AFRICAN REPUBLIC, CAMEROON, CONGO, EQUATORIAL GUINEA, DEMOCRATIC REPUBLIC OF THE CONGO AND GABON

United Nations Framework Convention on Climate Change

- SBSTA 25 -

Agenda Item #5 : Reducing Emissions from Deforestation in Developing Countries.

Submission of Views of the Congo Basin Countries

The following views are submitted by the Congo Basin Countries meeting as part of the Commission des Forêts d'Afrique Centrale (COMIFAC), consistent with the 1999 Declaration of the Heads of States, known as the 'Déclaration de Yaoundé' and related to the conservation and sustainable management of forest ecosystems in Central Africa.

The 10 following countries are members of the COMIFAC : Burundi, Cameroon, Congo, Gabon, Equatorial Guinea, Central African Republic , Democratic Republic of the Congo, Rwanda, Sao Tomé and Principe, and Chad.

Angola is currently an observer.

The COMIFAC was created by the Heads of State with the purpose of managing Congo Basin forests in a concerted manner through a common platform, the 'Plan de Convergence', which includes ten strategic components. The first component puts special emphasis on the 1992 Rio Conventions and among them, the United Nations Framework Convention on Climate Change (UNFCCC).

The 'Partenariat pour les Forêts du Bassin du Congo' (PFBC), launched in 2002 during Johannesburg World Summit on Sustainable Development, is composed 30 members: Congo Basin Countries, international NGOs and development partners (bilateral and multilateral).

Assisting the COMIFAC countries, several PFBC members contribute to the implementation of the 'Plan de Convergence'. This assistance focuses inter alia in improving the integration of forests in the post-2012 regime.

The present submission was prepared and elaborated in collaboration with South American, Central American and Asia/Pacific countries, which attended three workshops under the Costa Rican Government auspices:

CfRN (Coalition for Rainforest Nations) Workshop
San José (Costa Rica), January 28 – 30, 2007

Latin American sub-regional workshop
CATIE – Turrialba (Costa Rica), January 31 – February 1, 2007-02-05

Congo Basin sub-regional workshop

It focuses on the specificities of Central African forests, widely engaged in a sustainable management process through management plan, while supporting the general framework of the submission presented by the CfRN (Coalition for Rainforest Nations) countries and developed during the Costa Rica workshop.

The Congo Basin countries wished to develop their own regional submission in order to supplement the one presented by the CfRN countries, which they support besides, to put special emphasis on the ***Avoided Degradation*** concept and the ***distribution key*** to be used to share the proceeds from any ***Stabilization Fund***

Mandate

The Twelfth Session of the Conference of Parties to the UN Framework Convention on Climate Change invited Parties and accredited observers to submit to the secretariat, by 23 February 2007, their views on issues relating to reducing emissions from deforestation in developing countries, focusing on the discussion of ongoing and potential policy approaches and positive incentives, the technical and methodological requirements related to their implementation, the assessment of results and their reliability, and improving the understanding of reducing emissions from deforestation in developing countries. The COP invited Parties to also consider, as appropriate, relevant provisions in other conventions and the work of multilateral organizations.

The COP requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to consider the information in the submissions, beginning at its twenty-sixth session (May 2007).

Guiding Principles

Definition

In the context of this submission, deforestation should be understood as a process leading to emissions of greenhouse gases (GHG) due to human activities. Deforestation includes two distinct situations:

- reduction / destruction of forest cover leading to land use change,
- forest degradation: diminution of carbon stock per hectare which does not result in a reduction / destruction of forest cover.

Reducing emissions from deforestation has to be appreciated under its broad sense, thus in reducing emissions from all the carbon pools within the forest ecosystems, and more particularly from soils, including non-CO2 GHG as well.

Real Benefits for the Climate

Any future action to mitigate climate change should pursue the ultimate objective of the UNFCCC as stated in its Article 2. To achieve real and measurable benefits for the climate, policy approaches and positive incentives should be sufficient and credible to address emissions from deforestation and forest degradation at all adequate scales. Further, such policy approaches and positive incentives should be implemented as soon as possible and should not prevent or delay other emission reduction efforts.

Common but Differentiated Responsibilities

Recalling the principle of ‘common but differentiated responsibilities’, all Parties have the responsibility to collaborate to reduce GHG emissions and combat their adverse effects on

climate. There are historical differences in the contribution to the current composition of the atmosphere by industrialized and developing countries, as well as differences in Parties' respective economic and technical capabilities to address the resulting economical, social and environmental implications. Reducing GHG emissions from deforestation and degradation offers a historic opportunity to enhance the effective participation of developing countries in the climate regime on a 'voluntary' basis. At the same time, industrialized countries have an opportunity:

- to positively fulfill their historical commitments for additional financing to support forest conservation,
- to reduce emissions from deforestation and degradation in developing countries,
- and to help developing countries implement their own sustainable development.

Polluter Pays
Recalling Principle 16 of the Rio Declaration, we reaffirm the concept that Annex 1 Parties that have contributed proportionally with greater amounts of GHG emissions should bear the same proportion of responsibility and mitigation and adaptation costs.

State Sovereignty & Intergenerational Responsibility & Sustainable Development
Recalling the Preamble of the UNFCCC and the Rio Principles which reaffirm that Parties have the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies in order to fulfill their present needs without limiting the options for future generations. Toward these objectives, forest-based ecosystem services need to be recognized and valued by the international community in order to allow developing countries with forests to capitalize these services on a voluntary basis. Therefore, not only should the Parties' participation in efforts to reduce emissions from deforestation be voluntary, Parties alone shall decide how to implement specific measures.

Equitable and Fair
Any effort to reduce GHG emissions from deforestation and degradation should ensure a fair distribution of the responsibilities and benefits both within and among countries. We must ensure that, on the basis of the principle of common but differentiated responsibilities, all countries have equitable and fair access to the incentive instruments and are assisted to overcome any comparative capacity and technical disadvantages. Further, market regulations and methodological issues should not be applied stringently for developing countries – or for the forestry sector as compared to other sectors.

Cost Effectiveness
Policy approaches and positive incentives should be designed and implemented in ways that improve their cost-effectiveness. Incentives should be sufficient to cover implementation costs of the measures taken to reduce GHG emissions from deforestation, including opportunity costs, and should also assist countries that reduce emissions from deforestation and degradation to address poverty alleviation while pursuing the ultimate objective of the UNFCCC.

Supplemental Funding and Capacity Building
Supplementary resources should be made available for developing countries to build the technical, operational, legal and institutional capacity necessary to implement actions aimed at reducing emissions of GHGs from deforestation and degradation. Funding for emission reductions from deforestation and degradation should be additional to current and already established ODA programs.

Enhancing Forest Ecosystem Services as a Capital Resource
Many developing countries have difficulty putting into effect policies for maintaining or increasing the area of forest biodiversity habitats due to limited human, institutional, technological and financial capacity. Well-constructed mechanisms to reduce emissions from deforestation and degradation can have multiple benefits for sustainable development in developing countries and at a global scale, as forests function as a tangible capital resource that provides a diverse set of ongoing ecosystem services related to air and water quality, improved agricultural production, healthy coral reefs and fisheries, control of infectious diseases, medicinal cures, aid to social stability, etc.

Need to Act Quickly while Protecting the Integrity of Existing Mechanisms
Any delay in addressing emissions from deforestation is counterproductive to the ultimate objective of the Climate Change Convention and will increase the costs of climate change mitigation unnecessarily. However, new policies and incentives related to reducing emissions from deforestation should be consistent, where possible, with existing mechanisms for reducing GHG emissions, should not undermine emissions reduction efforts by Annex I countries, and should complement existing flexibility mechanisms within the Kyoto Protocol.

Key Messages

Reducing Rates of Deforestation is Possible and Urgently Needed
Experience has demonstrated that many activities that cause and drive deforestation and the associated 20% of global emissions can be mitigated through a system of policy approaches and positive incentives. According to the recent 'Stern Review of the Economics of Climate Change', reductions in emissions from deforestation and degradation may be possible relatively quickly if carried out with international assistance combined with national actions. These reductions can significantly contribute to meeting the ultimate objectives and goals of the Convention and the Protocol. Annex I coutries should act with a sense of urgency to assist developing countries reduce deforestation and degradation. Acting soon and preventing emissions will be more efficient, more cost-effective and yield more co-benefits than allowing emissions to continue and then attempting to reduce emissions later. In addition, this strategy will decrease significantly the risk of irreversible impacts on earth.

Technology & Methods are Available to All
It is currently possible to measure reductions in GHG emissions from deforestation and forests degradation in developing countries to a sufficient level of confidence. Tools exist to estimate forest area change (remote sensing, forest inventories and GHG emissions inventories in forestry…) and carbon stocks (biome averages, forest stratification and allometry…). Combined, these variables yield calculated emissions from deforestation and carbon stocks. National Communications, IPCC Guidelines and Good Practice Guidance and Guidelines (GPGG) relevant to forests, calculation of emission factors and review procedures already provide an accepted system for ensuring data quality. Most importantly, using a conservative approach, the existing methodologies allow countries to participate immediately according to their national circumstances and capacities.

Major Reduction in Long-Term Mitigation Costs
Curbing deforestation may provide a highly cost-effective way of reducing greenhouse gas emissions. Given the comparatively low costs per unit of GHG reductions, reducing emissions from deforestation could significantly lower the overall costs of meeting the goals of the Convention. While costs of reducing deforestation and associated emissions vary within countries and between countries and will change over time, including all emission reduction opportunities in a global policy will help ensure the maximum amount of emission reductions can be achieved at the lowest costs.

Sustainable Development at Scale
To reduce global deforestation rates by 50% over the next decade, the 'Stern Review of the Economics of Climate Change' estimates that approximately US$5 – US$10 Billion per year will be required through a system of policy approaches and positive incentives. Revenues at this scale could catalyze monumental gains toward the achievement of climate stability, poverty reduction, biodiversity conservation, global environmental security, food security and sustainable development.

Sourcing the Funding and the Principle of Proportionality
Global deforestation accounts for approximately 20% of global carbon emissions. Accordingly, under the principle of proportionality, it is equitable that international mitigation policies dedicate 20% of available revenues to address this emissions source. For example, dedicating 20% of the trading volume of existing emissions trading markets to address deforestation would likely generate revenues that are sufficient to reduce global emissions from deforestation by 50% over coming decades.

Policy Approaches – Implementation scale
Policy approaches must be considered within the context of national circumstance, taking into account legal, policy and institutional implications. Specifically, countries may consider effectiveness of policies incorporating legal initiatives, tax structures, forest fire management, protected areas management, agricultural intensification, sustainable forest management, reduced impact logging, payment for environmental services, poverty alleviation, etc., to reduce emissions from deforestation.

Considering the magnitude and complexity of efforts to be implemented, and the necessary coordination between the different sectoral activities, Central African countries propose to adopt a mixed approach at a national, regional and/or sectoral level, depending on the cost-efficiency in reducing emissions.

So, given the diversity of circumstances within the southern countries, it is essential to keep flexibility for the mechanisms to be adopted. This is why the Congo Basin Countries agree to preserve existing flexibility mechanisms to maximise emmission reduction..

Positive Incentives
To be sustainable, policy approaches must be underpinned by a basket of complementary options that provide sustainable, simple, transparent positive incentives to reduce significantly emissions from deforestation in developing countries. It is possible to thoughtfully learn from existing precedents within the Convention and the Protocol, where appropriate.

When considering the forestry sector in developing countries on an aggregate basis, while considering the diversity of national circumstance, we must augment existing tools that reward carbon sequestration through afforestation and reforestation and consider new mechanisms to reduce emissions from deforestation. In order to effectively and efficiently implement each of these suggested instruments, an enabling fund will be required.

While we acknowledge that the CDM exists and accommodates A/R, a basket of positives incentives should be designed to be complementary and address the differing dynamics of the forest sector within developing countries. Within this context, a menu of voluntary options may include:

A – REDD Mechanism: accounts for carbon emission reductions and non-CO^2 emission reductions only in existing forest areas on a national basis. This option will be explored in more detail within this Submission.

B – Stabilization Fund: accounts for carbon emissions and removals and non-CO2 emissions in developping countries participating in the Mechanism that seek to maintain existing forest areas on a national basis. This option will be outlined within this Submission.

C– Enabling Fund: a special purpose group of funds that are designed to prepare and support developing countries who seek to participate in mechanisms A and B above, including piloting activities.

New and additional funding will be needed to operationalize B and C above.

The CDM-A/R and REDD instruments could be implemented synergistically in the same country since they act on different areas. Clearly, not more than one instrument could be applied on the same area. In all cases, each of these instruments may be immediately applied by utilizing technical and methodological principles already in effect, principally the relevant IPCC GPGG.

REDD Mechanism:
The REDD mechanism must be designed to provide positive incentives to support voluntary policy approaches that result in gross reductions in GHG emissions from deforestation in developing countries measured against a Reference Scenario (RS).

A RS will be made by estimating a reference emissions rate (RER) that will be applied against a Development Adjustment Factor (DAF).

The RER should be determined by assessing the activity data related to rates of deforestation and estimating the carbon stock implications using the relevant IPCC Guidelines and Good Practice Guidance over a Reference Period (RP). Under the principle of 'conservatism', the RP should be as long as is possible, based upon the availability of country-specific activity data, but not shorter than five years.

A DAF must be applied to accommodate the Conventions' acknowledgement in paragraph 3 that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs, including those from land use change and deforestation. Further, the DAF must be applied along with the 'equity principle' outlined in Article 3.1 of the Convention and in Article 4, paragraphs 3 and 5.

GHG emissions from deforestation could be reported in accordance with IPCC GPGG. In this respect, there is no need to develop a new set of forest related definitions or rules (e.g. forest degradation). Further, the IPCC Guidelines and GPG apply a tiered approach. The selection of the tier to use for reporting on carbon stocks is based on national circumstances and related to data availability. Properly implemented, all tiers are designed to conservatively provide unbiased estimates while accuracy and precision should, in general, improve from Tier 1 to Tier 3. So there is an urgent need to build coherent national data basis.

The REDD Mechanism would not require any new review and reporting processes or bodies. Consistent with existing rules under the Convention and the Kyoto Protocol, the Secretariat would arrange Reviewers to assess the conservativeness and accuracy of the data within the relevant National Communications.

Voluntary Non Market and Market-based Instruments
Within the context of national circumstance, the REDD mechanism should be made available to developing countries to reduce emissions from deforestation in developing countries via both market and non-market instruments. Accordingly, non-market instruments would likely carry more conservative carbon accounting systems, lower performance standards and consequently result in a lower carbon price per ton. Conversely, market options operate within more robust carbon accounting systems, higher performance requirements, and resulting in a higher carbon price per ton.

Stabilization Fund
A stabilization fund will support developing countries which have very low rates of deforestation and want to maintain their forest cover. This fund could be supported through contributions by Non Annex I countries through a share of proceeds from REDD credits combined with additional funds provided by Annex I countries through Official Development Aid or similar instruments, such as taxes on products and services with a high carbon footprint.

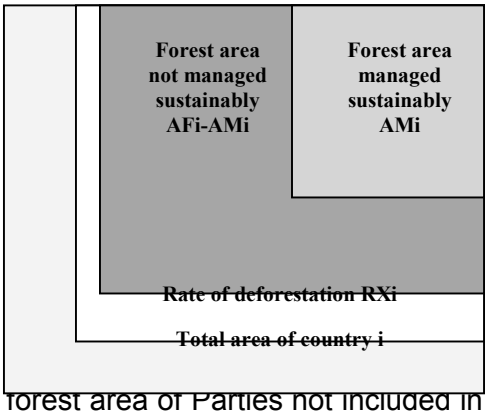
The share of proceeds among the countries could use advantageously a distribution key based on national criteria, such as:

- total forest area,
- deforestation rate,
- forest area managed sustainably, with approved management plan,
- certified forest area (based on sustainable management criteria),
- protected areas,

The selected criteria will especially recognize any effort in natural forest resources sustainable management beyond the forest cover conservation. Weighting systems could be applied in order to put special emphasis on some of the above criteria (grant based on forest area managed sustainably, certified area, etc.).

Example of an overall Grant (GTi) allotted to a county i engaged in reducing emissions from deforestation, based on forest area managed sustainably (Management grant GMi) and liability in climate regulation weighted by the deforestation rate (GRi).

$$GTi = GMi + GRi$$



Total forest area of Parties not included in annex I countries and being likely to benefit from the stabilization fund (Fd): SFT
Management Grant: GMi = [AMi/SFT] x Fd
Climate Regulation Grant weighted by the rate of deforestation:
GRi = [(AFi-AMi)/SFT] x Fd / [λ x RXi],
λ being an adjustment factor allowing to update reward strategies

Overall Grant (GTi) allotted to a county i engaged in reducing emissions from deforestation:

$$GTi = GMi + GRi$$

$$GTi = [AMi/SFT] \times Fd + [(AFi-AMi)/SFT] \times Fd / [\lambda \times RXi]$$

Enabling Fund

In order for many developing countries to participate in a REDD crediting system and in a stabilization fund, substantial capacity constraints must be overcome. There are needs to develop national capacities at developing reference scenarios as well as in carrying out policies and measures to reduce deforestation. Enabling assistance should facilitate cooperation and capacity building among relevant institutions within each country.

Early financial resources are necessary to ensure maximum participation at the earliest opportunity. Additional financing should be used to ensure that information needs (forest inventories, remote sensing, allometry…) are available in country and that countries can compute reference scenarios and develop national policies and measures to reduce emissions from deforestation and degradation in developing countries.

Further, the Enabling Fund should contemplate three voluntary tracks for a system of positive incentives that may operate since the taking into account of this process by the Convention up to the Second Commitment Period: 1) non-market (or fund-based), 2) market-based instruments, and 3) stabilization support. These tracks will be supported by various piloting activities.

New Supply must be met by new Demand

Efforts to reduce emissions from deforestation by developing countries will only deliver global additional climate stabilizing benefits if new demand brought on by deeper Annex 1 reductions exists.. Developing countries' reductions in deforestation can not simply compete with, and lower prices realized by, other mechanisms such as the CDM. Given that meaningful amounts of potential REDD credits can be likely realized in the short to medium term, constant demand is essential to maintain continual progress in stabilizing our climate.

Credit for Early Action

Immediate access for developing countries wishing to reduce emissions from deforestation and degradation to the carbon market is critical. If the Parties wait until the end of the 1st commitment period, based upon current rates of global deforestation, they will have foregone significant potential emissions reductions. Intermediate decisions by the Parties can avoid these outcomes, only by sending a clear signal. Further, early action will provide important early learning for developing countries wishing to reduce emissions from deforestation at scale. Emission reductions generated by Parties engaged in early action to reduce their emissions from deforestation and forest degradation should be able to be credited in any future commitment periods post-2012.

Convention Cadre des Nations Unies sur les Changements Climatiques

- SBSTA 25 –

Point 5 de l'ordre du jour : Réduction des émissions résultant du déboisement dans les pays en développement.

Soumission des vues des Pays du Bassin du Congo

Cette soumission est présentée par les Pays du Bassin du Congo réunis au sein de la Commission des Forêts d'Afrique Centrale (COMIFAC), conformément à la Déclaration des Chefs d'Etat de 1999, dite « Déclaration de Yaoundé », relative à la conservation et à la gestion durable des écosystèmes forestiers d'Afrique Centrale.

La COMIFAC regroupe les 10 pays suivants : Burundi, Cameroun, Congo, Gabon, Guinée Equatoriale, République Centrafricaine, République Démocratique du Congo, Rwanda, Sao Tomé et Principe et Tchad.

L'Angola est actuellement membre observateur.

La COMIFAC est un organe créé par les Chefs d'Etat en vue de gérer de manière concertée les forêts du Bassin du Congo à travers une plate-forme commune dénommée « Plan de Convergence », qui comprend dix axes stratégiques. Le premier de ces axes met un accent tout particulier sur les Conventions de Rio de Janeiro de 1992 dont la Convention-Cadre des Nations Unies sur les Changements Climatiques (CCNUCC).

Le Partenariat pour les Forêts du Bassin du Congo (PFBC), lancé en 2002 lors du Sommet Mondial sur le Développement Durable de Johannesburg, regroupe 30 membres composés des pays du Bassin du Congo, des ONG internationales et des partenaires au développement (bilatéraux et multilatéraux).

Pour appuyer les pays de la COMIFAC, plusieurs membres du PFBC contribuent à la mise en œuvre du Plan de Convergence. Dans ce cadre, un appui est à apporter à cette organisation pour assurer une meilleure prise en compte de la forêt dans le régime post-2012.

La présente soumission a été préparée et élaborée en collaboration avec les pays d'Amérique du Sud, d'Amérique Centrale et d'Asie / Pacifique, présents lors de trois séminaires organisés sous l'égide du Gouvernement du Costa Rica :

Séminaire de la CfRN (Coalition for Rainforest Nations)
San Jose (COSTA RICA) du 28 au 30 janvier 2007

Séminaire régional des pays d'Amérique Latine
CATIE - Turrialba (COSTA RICA) du 31 janvier au 1er février 2007

Séminaire régional des pays du Bassin du Congo
CATIE - Turrialba (COSTA RICA) du 31 janvier au 1er février 2007

Elle intègre les spécificités des forêts d'Afrique Centrale, largement engagées dans un processus de gestion durable à travers l'aménagement forestier, tout en reprenant le cadre général de la soumission présentée par les pays de la ***Coalition for Rainforest Nations*** (CfRN) et développée dans le cadre du séminaire du Costa Rica.

Les Pays du Bassin du Congo ont souhaité développer leur propre soumission régionale, pour compléter celle présentée par les pays de la Coalition for Rainforest Nations (CfRN) qu'ils soutiennent par ailleurs, afin de rappeler l'importance qu'ils apportent au concept de ***Dégradation Evitée*** et de ***clé de répartition*** affectée à un ***Fonds de Stabilisation***.

Mandat

La douzième session de la Conférence des Parties à la Convention Cadre des Nations Unies sur les Changements Climatiques a invité les Parties et les Observateurs accrédités à soumettre au Secrétariat de la Convention, pour le 23 février 2007, leurs vues sur l'examen des méthodes d'action en vigueur et envisageables, ainsi que sur des mesures d'incitations positives et sur les questions techniques et méthodologiques liées a leur mise en œuvre ; l'évaluation des résultats et leur fiabilité ; l'amélioration de la compréhension de la réduction des émissions résultant du déboisement dans les pays en voie de développement. La Conférence des Parties à la Convention Cadre des Nations Unies sur les Changements Climatiques invite aussi les Parties à considérer, si nécessaire, les autres Conventions et le travail des Organisations Multilatérales dans le domaine.

La Conférence des Parties a demandé à l'Organe Subsidiaire de Conseil Scientifique et Technologique (SBSTA) d'analyser le contenu des soumissions, dans le cadre de sa 26ème session (Mai 2007).

Principes directeurs

Définition
Dans le contexte de cette soumission, le terme « déforestation » désigne un processus conduisant à l'émission de gaz à effet de serre (GES) relevant d'activités humaines. La déforestation inclut notamment deux situations distinctes :

- la réduction / disparition du couvert forestier avec changement d'usage des terres ;
- la dégradation des forêts : baisse du stock de carbone à l'hectare ne conduisant pas à la réduction / disparition du couvert forestier.

La notion de réductions d'émissions issues de la déforestation doit s'entendre dans son acceptation la plus large, soit dans la réduction des émissions issues de tous les réservoirs de carbone des écosystèmes forestiers, et notamment du sol, et des autres GES non CO2.

Bénéfices réels pour le climat
Toute action visant à lutter contre les changements climatiques doit poursuivre l'objectif ultime de la Convention Cadre des Nations Unies sur les Changements Climatiques, tel que stipulée dans son article 2. Pour permettre des bénéfices réels et mesurables pour le climat, les approches politiques et les incitations positives sont nécessaires et:

- devront être suffisantes et réalistes pour réduire les émissions issues de la déforestation des forêts à toute échelle adéquate ;
- devront être mises en œuvre aussi vite que possible ;
- devront contribuer au développement durable des pays (lutte contre la pauvreté, augmentation du PIB, ...) ;
- ne devront pas retarder tout effort de réduction possible d'émissions.

Responsabilités communes mais différenciées
En rappelant le principe de responsabilité commune, mais différenciée, les Parties s'engagent à collaborer dans la réduction des GES et à lutter contre leurs effets néfastes. Il existe des différences historiques entre les contributions respectives des pays développés et en développement quant à la composition actuelle de l'atmosphère, de même que des différences existent entre les Parties quant à leurs capacités financières, économiques et techniques à traiter les conséquences économiques, humaines, environnementales, ... en résultant. Réduire les émissions de GES issues de la déforestation et de la dégradation des forêts offre une opportunité historique d'accroître la participation effective des pays en développement dans les mécanismes de lutte contre les changements climatiques globaux sur une base « volontaire ». De même, les pays industrialisés ont l'opportunité :

- de satisfaire à leurs engagements historiques en offrant un soutien financier accru au service de la conservation des forêts ;
- de participer aux efforts de réduction des émissions résultant de la déforestation dans les pays en développement ;
- et d'aider les pays en développement à œuvrer pour un développement durable.

Principe « pollueur - payeur »
Rappelant le principe 16 de la déclaration de Rio, nous réaffirmons que les Parties de l'Annexe 1, qui auraient contribué de façon différenciée à l'émission de grands volumes de GES, doivent en supporter proportionnellement la responsabilité, les coûts d'atténuation et d'adaptation aux changements climatiques.

Souveraineté nationale - Responsabilité intergénérationnelle - Développement Durable
En référence au préambule de la Convention Climat et aux principes de Rio, les Parties ont le droit souverain d'exploiter leurs propres ressources en accord avec leurs politiques environnementales et de développement, afin de satisfaire leurs besoins actuels sans limiter pour autant les options pour les générations futures. Dans ce contexte, les services environnementaux du secteur forestier doivent être reconnus par la communauté internationale afin de permettre aux pays en développement de les valoriser sur une base volontaire. Les Parties décideront seules de la mise en œuvre des mesures spécifiques destinées à lutter contre la déforestation conformément à leurs priorités nationales.

Equité et Justice
Tout effort de réduction des émissions de GES issues de la déforestation et de la dégradation des forêts devra assurer une répartition équitable des responsabilités et des bénéfices, aussi bien au sein des pays qu'entre les pays. Nous nous assurerons que sur la base du principe de responsabilités communes mais différenciées tous les pays auront un accès équitable et juste aux instruments d'incitation. Les pays en développement devront être appuyés pour surmonter les obstacles éventuels (renforcement de capacités). De plus, les mécanismes de marché et les questions d'ordre méthodologique ne devront pas
être plus contraignants pour les pays en développement – ou pour le secteur forestier en comparaison des autres secteurs.

Coût efficacité
Les approches politiques et les incitations positives doivent être conçues et mises en œuvre par des voies visant l'amélioration du rapport coût - efficacité dans la lutte contre les changements climatiques. Les incitations doivent être suffisantes pour couvrir les coûts de mise en œuvre des mesures prises pour réduire les émissions de GES issues de la déforestation, incluant les coûts d'opportunité. Tout en poursuivant l'objectif ultime de la Convention, ces incitations doivent aussi permettre d'aider les pays en développement qui ont des objectifs de réduction d'émissions dans un but de lutte contre la pauvreté.

Ressources additionnelles
Des ressources supplémentaires devront être disponibles pour les pays en développement pour renforcer les capacités techniques, opérationnelles, réglementaires et institutionnelles nécessaires à la mise en œuvre des actions dont le but est la réduction des émissions de gaz à effet de serre issues de la déforestation. Les ressources financières pour les réductions d'émissions issues de la déforestation doivent être additionnelles à l'aide au développement existante ou d'ores et déjà programmée.

Valoriser les services environnementaux rendus par les écosystèmes forestiers
De nombreux pays en développement éprouvent des difficultés pour mettre en œuvre des politiques de maintien ou d'amélioration de la biodiversité forestière en raison de l'insuffisance des ressources humaines et des moyens institutionnels, technologiques et financiers. Des mécanismes bien élaborés pour réduire les émissions issues de la déforestation auront de nombreux effets bénéfiques sur le plan global qu'au service du développement durable dans les pays en développement, au travers des fonctions fournies par les forêts et par une gamme diversifiée de services environnementaux liés à la qualité de l'air et de l'eau, la production agricole, la santé des récifs coralliens et la pêche, le contrôle des maladies infectieuses, les plantes médicinales, l'aide à la stabilité sociale, etc.

Nécessité d'agir rapidement tout en protégeant l'intégrité des mécanismes existants
Tout retard dans la mise en œuvre des réductions d'émissions issues de la déforestation pour atteindre l'objectif ultime de la Convention serait contreproductif et augmenterait sans nécessité les coûts de la lutte contre les changements climatiques. Cependant, de nouvelles politiques et incitations positives liées à la réduction des émissions issues de la déforestation doivent être cohérentes, quand c'est possible, avec les mécanismes existants de réduction des émissions de gaz à effet de serre, sans remettre en cause les efforts de réduction des pays de l'Annexe I, et doit compléter les mécanismes de flexibilité existants dans le cadre du protocole de Kyoto.

Messages clés

Possibilité et urgence de réduire les taux de déforestation

L'expérience a montré que de nombreuses activités à l'origine de la déforestation et des émissions mondiales associées, de l'ordre de 20%, peuvent être réduites à travers un système d'approches politiques et d'incitations positives. Selon le rapport STERN, des réductions rapides d'émissions issues de la déforestation sont possibles si elles sont conduites avec le soutien international et complétées par des actions nationales. Ces réductions peuvent contribuer significativement à l'atteinte de l'objectif ultime de la Convention et du Protocole. Les Parties inclues en Annexe 1 devront agir avec le souci de l'urgence pour aider les pays en développement à réduire la déforestation et leur permettre

de participer pleinement à la lutte contre les changements climatiques. Le fait d'agir précocement dans la réduction des émissions sera plus efficace, d'un coût moindre et générera plus de co-bénéfices que si nous reportons la résolution des problèmes dans le temps, avec le risque d'accroître leurs conséquences et qu'elles deviennent alors irréversibles.

Technologies et méthodes à la disposition de tous

Il est actuellement possible de mesurer les réductions des émissions de GES issues de la dégradation dans les pays en développement, avec une précision suffisante. Des outils existent pour estimer les changements de surface des forêts (télédétection, inventaires forestiers, inventaires de gaz à effet de serre dans le secteur forestier, ...), les stocks de carbone (moyennes par biomes, typologie forestière, équations allométriques, ...). Combinés, ces groupes de variables permettront le calcul des émissions issues de la déforestation et le

carbone séquestré. Les communications nationales, le Guide des bonnes pratiques du GIEC sur les forêts, l'évaluation des facteurs d'émissions et les procédures de révision fournissent déjà un système accepté pour garantir la qualité des données. Plus important encore, les méthodologies existantes permettent à tous les pays de participer dès maintenant en fonction de leurs spécificités et de leurs capacités nationales.

Réduction majeure dans les coûts de réduction à long terme

S'attaquer à la déforestation constitue une solution économe pour réduire les émissions de GES en raison de la faiblesse des coûts de réduction des émissions de GES comparativement à d'autres processus. Réduire les émissions issues de la déforestation peut donc baisser significativement les coûts globaux nécessaires pour atteindre les objectifs de la Convention. Bien que les coûts pour réduire la déforestation et les émissions qui y sont liées varient au sein des pays et entre les pays, et qu'ils puissent changer au cours du temps, inclure l'ensemble des opportunités de réduction d'émissions dans une politique mondiale aidera à assurer qu'un maximum de réduction d'émissions puisse être réalisé à moindres coûts.

Développement durable et échelle

Pour réduire le taux mondial de déforestation de 50% durant les prochaines décennies, le « Rapport Stern sur les économies du changement climatique » estime qu'approximativement 5 à 10 milliards de dollars par an seront nécessaires au travers d'un système d'approches politiques et d'incitations positives. Des revenus de cette importance peuvent catalyser des gains substantiels pour atteindre la stabilité climatique, la réduction de la pauvreté, la conservation de la biodiversité, la sécurité environnementale mondiale, la sécurité alimentaire et le développement durable dans les nations en développement qui cherchent à réduire leurs émissions issues de la déforestation.

Mobilisation des ressources financières et principe de proportionnalité

La déforestation mondiale participe approximativement à 20% des émissions de GES à l'échelle de la planète. Donc, en accord avec le principe de proportionnalité, il sera légitime que les politiques internationales de lutte contre les changements climatiques accordent 20% des ressources disponibles pour lutter contre cette source d'émission. Par exemple, l'allocation de 20% des volumes, en valeur, échangés sur les marchés d'échange existants, à la lutte contre la déforestation pourrait permettre de générer des revenus suffisants pour réduire les émissions mondiales issues de la déforestation de 50% sur les prochaines décennies.

Approches politiques – Echelle d'action

Les approches politiques doivent être considérées dans un contexte national, en prenant en compte les implications législatives, politiques et institutionnelles. Plus particulièrement, les pays s'intéresseront à l'efficacité des politiques sur les plans réglementaire et fiscal, en matière de gestion des feux de forêt, de gestion des aires protégées, d'intensification des pratiques agricoles, de gestion durable des ressources forestières, d'exploitation à faible impact, de paiement pour services environnementaux, etc. afin de réduire les émissions issues de la déforestation.

Compte tenu de l'ampleur et de la complexité des efforts à mettre en œuvre et de la nécessité d'une coordination entre les différents secteurs d'activités, les pays d'Afrique Centrale sont plutôt favorables à une approche mixte allant de l'approche à un niveau national, régional et/ou sectoriel selon qu'elle soit plus adaptée pour apporter des résultats significatives tant dans les réductions des émissions de GES provenant de la déforestation que leurs coût d'opportunité et autres bénéfices.

Pour cela, face à la diversité des situations dans les pays du Sud, il semble important de garder une certaine souplesse et flexibilité dans les mécanismes à adopter. Les pays d'Afrique

Centrale consentent à préserver les autres mécanismes de flexibilité pour une réduction maximale des émissions.

Incitations positives
Afin d'être durables, les approches politiques doivent être soutenues par un ensemble d'options complémentaires à l'origine d'incitations positives simples, transparentes et conservatives afin de réduire considérablement les émissions issues de la déforestation dans les pays en voie de développement. Des leçons pourront être tirées d'expériences existantes développées dans le cadre de la Convention et du protocole de Kyoto, si elles sont appropriées et bénéfiques.

Quand on considère le secteur forestier dans les pays en développement de façon globale, tout en considérant la diversité des situations nationales, nous devons renforcer les outils existants qui rétribuent la séquestration de carbone à travers les projets de boisement et de reboisement et considérer de nouveaux mécanismes qui réduisent les émissions issues de la déforestation.
Aussi, dans le but de mettre en œuvre réellement et efficacement chacun des instruments suggérés pour une meilleure gestion des émissions résultant du déboisement , un fonds d'activation sera nécessaire.

Tout en reconnaissant que le MDP existe pour des activités de boisement / reboisement (B / R), une série d'incitations positives complémentaires devra être conçue pour prendre en compte les différentes dynamiques du secteur forestier dans les pays en développement. De telles options volontaires pourraient inclure les approches suivantes :

A – **Mécanisme REDD[5]:** comptabilise les réductions d'émissions de carbone et les autres émissions de GES autres que le CO2 seulement dans les surfaces forestières existantes sur une base nationale. Cette option sera détaillée ci-après.

B – **Fonds de Stabilisation:** comptabilise les émissions et les absorptions de carbone et les autres émissions de GES autres que le CO2 dans les pays en développement participant au mécanisme qui cherchent à maintenir les surfaces de forêts existantes sur une base nationale. Ils peuvent encore tout en réduisant ou
évitant les émissions, accroître encore cette possibilité. Cette option sera détaillée ci-après.

C – **Fonds d'activation:** ensemble de fonds spécifiques destinés à préparer et à appuyer les pays en développement qui souhaitent participer aux mécanismes A et B présentés ci-dessus, incluant les activités pilotes.

L'opérationnalisation des fonds B et C nécessitera des financements nouveaux et additionnels.

Le MDP – B / R et les instruments REDD peuvent être mis en œuvre en synergie dans le même pays sans porter pour autant sur les mêmes surfaces forestières. Les deux instruments ne seront pas appliqués sur une même surface de forêt. Dans tous les cas, chacun de ces instruments peut être d'ores et déjà appliqué en utilisant des principes techniques et méthodologiques existants, notamment les lignes directrices et le guide des bonnes pratiques pour le secteur forestier du GIEC.

Mécanisme REDD
Le mécanisme REDD doit permettre de fournir des incitations positives pour soutenir des approches politiques volontaires qui permettent des réductions d'émissions de gaz à effet de

[5] REDD: Reduction d'Emissions issues de la Déforestation et de la Dégradation

serre issues de la déforestation dans les pays en développement par rapport à un scénario de référence (SR).

Le SR doit être établi en estimant un taux d'émission de référence (TER) et en tenant compte d'un Facteur d'Ajustement de Développement (FAD).

Le TER sera déterminé par référence à toutes les données / activités ayant un impact sur le couvert forestier (taux de déforestation) et en estimant leurs implications sur les stocks de carbone. Il sera calculé sur une période de référence déterminée (PRD). Selon les principes conservateurs, la PRD pourra être aussi longue que possible, basée sur la disponibilité des données spécifiques par pays, mais ne pourra pas être inferieure à 5 ans. On s'inspirera des lignes directrices et du guide de bonnes pratiques du GIEC.

Un FAD doit être appliqué pour tenir compte du principe de la Convention énoncé dans son paragraphe 3, selon lequel la majeure partie des GES émis dans le monde par le passé et à l'heure actuelle ont leur origine dans les pays développés, que les émissions par habitant dans les pays en développement sont encore relativement bas et que la part des émissions totales imputables aux pays en développement ira en augmentant pour leur permettre de satisfaire leurs besoins sociaux et leurs besoins développement . Aussi, les émissions mondiales en provenance de ces pays ne peut-elles qu'augmenter compte tenu des besoins sociaux et de développement, incluant les émissions liées au changement d'utilisation des terres et à la déforestation. De plus, le FAD devra être appliqué selon le « principe d'équité » stipulé à l'article 3.1 de la Convention et de l'article 4, paragraphes 3 et 5.

Les émissions de GES issues de la déforestation pourraient être évaluées selon les lignes directrices et le guide de bonnes pratiques du GIEC. Sur cette base, il n'est pas nécessaire de développer une nouvelle série de règles ou de définitions liées aux forêts (exemple de la dégradation). De plus, les lignes directrices, les nouvelles lignes directrices pour le secteur de la forêt et le guide de bonnes pratiques du GIEC intègrent une approche par niveau. Le choix du niveau à utiliser pour la comptabilisation des émissions est basé sur les spécificités nationales et la disponibilité des données. Pour mettre en œuvre de façon satisfaisante, les niveaux seront élaborés pour fournir de façon fiable les calculs de
GES en sachant que la précision augmentera du niveau 1 au niveau 3. Ceci nécessite l'urgence de mettre en place des bases de données nationales cohérentes.

Le mécanisme REDD ne nécessitera aucun nouvel organe ou procédure de reporting ni de revue. Cohérent avec les règles existantes sous la Convention et le protocole de Kyoto, le Secrétariat recourra aux vérificateurs pour s'assurer de la précision et du caractère conservatif des données dans le cadre des communications nationales.

Instruments volontaires avec ou sans mécanismes de marché
Dans le cadre des circonstances nationales, le mécanisme REDD doit être accessible aux pays en développement pour réduire leurs émissions résultant de la déforestation au travers d'instruments avec ou sans mécanisme de marché. Les instruments ne faisant pas appel à des mécanismes de marché utiliseront des systèmes de comptabilité carbone moins élaborés, des standards de mesure moins performants et par conséquent se traduiront par un prix de la tonne de carbone plus faible.
Inversement, les mécanismes de marché recourront à des systèmes de comptabilité carbone plus robustes, des standards de performance plus élevés qui entraînera un prix à la tonne de carbone plus important.

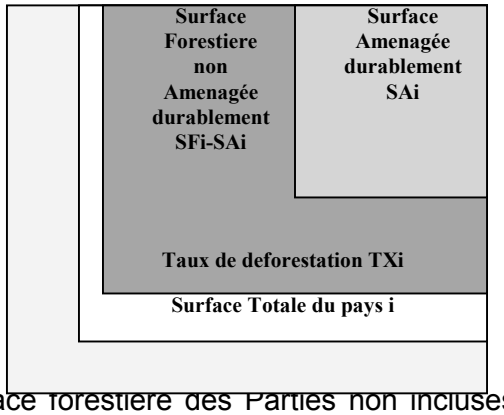
Fonds de stabilisation volontaire
Un fonds appuiera les pays qui ont des taux de déforestation très bas et qui veulent maintenir leur couvert forestier. Ce fonds pourrait être alimenté par des contributions des pays hors

Annexe I au travers d'une taxe sur la vente de crédits REDD (share of proceeds), combinées avec des financements additionnels fournis par les pays de l'Annexe I au travers de l'aide au développement ou d'autres instruments tels que taxes sur les produits et services à fort impact en carbone.
La répartition des fonds entre pays pourrait avantageusement utiliser une clef de répartition bâtie sur des critères nationaux tels que :

- surface forestière totale,
- taux de déforestation,
- surface forestière sous aménagement durable approuvé par les autorités compétentes,
- surface forestière certifiée (critères de gestion durable)
- surface des aires protégées,

Les critères retenus reconnaîtront notamment les efforts notables dans la gestion durable des écosystèmes forestiers, allant bien au delà de la seule conservation du couvert forestier. Il est à noter que des systèmes de pondération sont envisageables pour privilégier certains des critères évoqués ci-dessus (prime à l'aménagement, aux surfaces certifiées, etc.) :

Exemple d'une prime (PTi) attribuée à un pays i engagé dans un processus de réduction des émissions issues de la déforestation, tenant compte des surfaces aménagées (Prime d'aménagement PAi) et de la responsabilité des pays dans la régulation du climat pondérée par le taux de déforestation sur les forêts non aménagées (PRi).
PTi = PAi + PRi



Surface forestière des Parties non incluses dans l'annexe 1 et susceptibles de bénéficier du fonds de stabilisation (Fds): SFT
Prime à l'aménagement : PAi = [SAi/SFT] x Fds
Prime de responsabilité dans la régulation du climat pondérée par le taux de déforestation sur les forêts non aménagées : PRi = [(SFi-SAi)/SFT] x Fds / [λ x TXi],
λ étant une variable d'ajustement permettant d'affiner les stratégies de récompenses.

Prime reçue par un pays i s'engageant dans la réduction d'émissions issues de la déforestation :

PTi = PAi + PRi
PTi= [SAi/SFT] x Fds + [(SFi-SAi)/SFT] x Fds / [λ x TXi]

Fonds d'activation
Dans le but de faire participer le plus grand nombre de pays en développement aux systèmes de crédits REDD et au fonds de stabilisation, des contraintes liées au renforcement de capacités devront être surmontées. Il est nécessaire de développer des capacités nationales pour concevoir des scénarios de référence et mettre en place des politiques et mesures pour réduire les émissions issues de la déforestation. L'activation de cet appui facilitera la

coopération et le renforcement de capacités au travers des institutions idoines dans chaque pays.

Des ressources financières sont nécessaires pour une participation rapide et maximale des pays en développement. Des financements supplémentaires devront être utilisés pour s'assurer que les informations nécessaires (inventaires forestiers, télédétection, équations allométriques, etc.) soient disponibles dans les pays et que ces derniers puissent modéliser des scénarios de référence, développer des politiques et mesures pour réduire les émissions résultant de la déforestation.

Le fonds d'activation soutiendra le lancement de trois types de voies volontaires pour les pays en développement afin qu'un système d'incitations positives puisse opérer dès la prise en compte du processus par la convention jusqu'à la mise en œuvre lors de la seconde période d'engagement :

1) Instruments sans mécanisme de marché, ou basés sur un fonds,

2) instrument basé sur des mécanismes de marché,

3) appui à la stabilisation.

Ces voies seront appuyées par de nombreuses activités pilotes.

Une nouvelle offre doit être générée pour une mise en œuvre réelle de politiques de réduction d'émission globale

Les efforts pour réduire les émissions résultant de la déforestation par les pays en développement ne pourront générer des bénéfices additionnels sur le climat que si une demande effective des pays de l'Annexe I, basée sur un mécanisme de marché de type « Cap and Trade » lié à des engagements des Pays du Nord existe réellement. Les réductions d'émissions résultant de la déforestation ne devront pas entrer en compétition, du fait de prix plus bas, avec celles réalisées par d'autres mécanismes comme le MDP. Etant donné que des montants significatifs de crédits REDD potentiels seraient générés à court et moyen terme, une demande constante est essentielle pour maintenir une progression dans la stabilisation de notre climat.

Crédits pour l'action précoce

Un accès immédiat au marché du carbone pour les pays en développement susceptibles de réduire leurs émissions résultant de la déforestation est essentiel. Si les Parties attendent jusqu'à la fin de la première période d'engagement, sur la base des taux actuels de déforestation au niveau mondial, elles perdront l'opportunité de réduire significativement les émissions résultant de la déforestation. De plus, l'action précoce permettra l'apprentissage pour les pays en développement souhaitant réduire leurs émissions résultant de la déforestation à une échelle appropriée. Seul un signal clair au travers de décisions intermédiaires des Parties peut éviter cela.

PAPER NO. 10: GERMANY ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES

SUBMISSION BY GERMANY ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES

This submission is supported by Bosnia and Herzegovina, Serbia, Former Yugoslav Republic of Macedonia, Croatia and Turkey

Berlin, 27 February 2007

Subject: **Reducing emissions from deforestation in developing countries**
Views on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; improving the understanding of reducing emissions from deforestation in developing countries; and relevant provisions of other conventions and the work of multilateral organisations.

1. Introduction

The SBSTA at its 25th session invited Parties and accredited observers to submit views on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing emissions from deforestation in developing countries. The SBSTA also invited Parties to consider, as appropriate, the relevant provisions of other conventions and the work of multilateral organisations.

2. General Remarks

The EU notes that deforestation, particularly in tropical countries, contributes approximately 20 % to global human-induced CO2 emissions. Effective action to reduce deforestation in developing countries is needed to achieve the objective of Article 2 of the United Nations Framework Convention on Climate Change, and provide multiple benefits towards sustainable development.

At SBSTA 27 the EU will seek a substantive outcome of the two-year process on reducing emissions from deforestation in developing countries. A substantive outcome could include options for policy approaches and an identification of associated methodological requirements to be forwarded to the COP for consideration and decision. Such approaches should be consistent with broader post-2012 considerations and be seen in the broader context of the role of LULUCF in climate change mitigation actions and sustainable development.

3. Critical elements for implementing policy approaches and positive incentives

Any acceptable way forward will need to focus on rewarding real reductions in emissions leading to preservation of carbon stocks, while avoiding perverse incentives. Achieving this will require action at the national as well as the international level, respecting the sovereignty of countries. The EU notes that critical elements for policy approaches and positive incentives include:

- the contribution made to long-term sustainable land management, and reducing pressures leading to unsustainable land use or land-use changes;
- recognition of existing commitments under UNFCCC to promote sustainable management, conservation and enhancement of sinks and reservoirs such as biomass and forests;
- simplicity, flexibility and practicality;
- consistency with and/or evolution from existing monitoring methodologies and accounting rules;
- linkage to national programmes, including concrete policies and actions;
- promoting synergies at national and local levels and where appropriate with international initiatives and processes, under CBD, UNCCD, Ramsar Convention, UNFF, ITTA, FAO and regional initiatives e.g. to combat illegal logging;
- Encouragement of early action.

4. Policy approaches

The EU emphasises that concrete policies and actions as part of a global and comprehensive post-2012 agreement are needed to halt emissions from deforestation in developing countries and reverse them in the next two or three decades. Options to reduce emissions from deforestation include effective land use policies coupled with economic incentives.

Current commitments

The EU would like to recall the already existing commitments under the UNFCCC (articles 3.3; 4.1.b.; 4.1.c and 4.1.d) that are relevant to deforestation. Many parties, including developing countries, have implemented effective measures to address emissions from deforestation. Mechanisms to facilitate cooperation among parties in this field include:

- guidance to the GEF,
- the Special Climate Change Fund,
- provisions for technology transfer,
- capacity building and
- the Adaptation Fund.

Also several other provisions under various bodies and processes provide ways to address deforestation. These mechanisms could be strengthened, and this should be done wherever it is effective and feasible. However, experience suggests that they are not by themselves sufficient to achieve significant additional reductions in emissions from deforestation. The EU therefore sees the need for additional efforts, building on current commitments.

Period up to 2012

Practical experiences are needed to explore how additional efforts under the UNFCCC process could contribute to reducing emissions from deforestation. To this end, a preparatory scheme could be established in the period up to 2012 to explore approaches combining national action and international support.

A preparatory scheme could include:

- Assessment of national implementation of policies to combat deforestation.
- Activities to improve the monitoring and reporting capacity required for RED (reducing emissions from deforestation) schemes.
- Processes to define baselines or reference scenarios including the anticipation of future trends.

- Positive incentives to encourage countries to take or intensify actions to reduce emissions from deforestation during the pre-2012 period relative to the baseline or reference scenarios. The nature of the positive incentives required should be assessed further, depending on the architecture of the preparatory phase and the emissions reductions expected to be achieved by the end of the pre-2012 period. Possible options for consideration could include:

  o Voluntary funding

  Participation and payments would be voluntary, the latter from developed countries.

  o Activities Implemented Jointly (AIJ)

  AIJ under the pilot phase were useful for developing Joint Implementation and Clean Development Mechanism. A similar kind of activities could also be useful in the context of reducing emissions from deforestation.

  o Other sources of funding and support

  Initiatives from Parties and organisations such as the World Bank, Regional Development Banks, business enterprises and NGOs, provided that these are acceptable to the Parties concerned.

The EU recognises that several Parties have already started to cooperate on some of these issues and believes that sharing experiences on this regard would speed up the designing of the scheme.

Period after 2012

Concrete policies and actions for reducing emissions from deforestation depend on the development of the negotiations for an agreement on post-2012 climate change mitigation action. The EU notes that an approach that bases incentives, including the carbon market, on quantified achievement in reducing emissions from deforestation needs an agreed emission reduction level developed on the basis of national baselines or reference scenarios.
One possibility would be for Parties to benefit from the scheme by performing better than the agreed emission reduction level. The EU believes that agreed levels should be ambitious, yet realistically achievable, taking into account national circumstances including existing policies and initiatives, historical data, current trends and developments in land use. The agreed level would be negotiated and revised periodically.

Actions to reduce deforestation should generate significant co-benefits and promote sustainable development.

5. Methodologies and modalities

5.1. Monitoring:

The EU notes that reliable monitoring methods are needed to assess emissions relative to the agreed emission reduction level.

In the EU's view the IPCC guidance for greenhouse gas estimation should be a basis for monitoring emissions . The approaches to land identification developed by IPCC allow for both ground-based and remote sensing methods. The most cost effective combination depends on national circumstances but in all cases it is very likely that both remote sensing and ground-based data will be needed, and that there will always be a requirement for an appropriate monitoring system.

5.2. Leakage:

EU's preference is for a system based on national baselines or reference level scenarios in order to minimize leakage at the national level. International leakage could be addressed by a wide coverage. The need to minimise leakage requires consideration of deforestation more broadly than simply assessing it against changes in land use.

5.3. Permanence:

The EU notes that non-permanence is not an issue when possible reversals are compensated. Approaches to deal with non-permanence include (a) using temporary credits in a manner similar to the current A/R CDM projects, (b) reducing future financial incentives to take account of deforestation emissions above the agreed level, (c) bank credits and debits from one period to another, or (d) by mandatory banking of a share of the emission reductions. The transition from unsustainable to sustainable land use management reduces the risk of increases in emissions from deforestation.

5.4. Co-benefits

The EU further notes that methodologies may be needed for assessing co-benefits, in particular with regard to biodiversity protection and sustainable development, using synergies between UNFCCC, CBD, UNCCD and other bodies and processes.

6. Linkages with international processes and organisations

Several processes share similar objectives and are working on the global level to promote sustainable forest management and reduce deforestation. In the EU's view any agreement should work synergistically with these processes at the international and national levels. The EU is interested to explore with other Parties the feasibility of various options including (i) references between legal texts of conventions, (ii) joint arrangements between bodies and organizations, (iii) approaches to funding, (iv) reporting, (v) capacity building, (vi) better coordination at the national level. Such considerations could provide interesting example of sectoral approaches.

The EU believes that an awareness of other processes and organisations, especially at the national level should be encouraged. The most relevant processes at the international level include:

1. The Convention on Biological Diversity (CBD);
2. The United Nations Convention to Combat Desertification (UNCCD)
3. The Convention on Wetlands of International Importance (Ramsar-Convention)
4. United Nations Forum on Forests (UNFF);
5. International Tropical Timber Agreement (ITTA);
6. The Food and Agriculture Organization of the United Nations (FAO);
7. Regional Processes e.g. the Forest Law Enforcement and Governance (FLEG) and the EU Forest Law Enforcement Governance and Trade (FLEGT) Initiative.

The EU is very much committed and engaged to the processes mentioned above and is working actively to make them successful. Knowledge and practical experience are gained through those processes and they increase awareness of the issues of deforestation and sustainable management.

7. Views on potential outcome of the 2-year SBSTA process

In the EU's view, SBSTA 27 needs to draft a decision for COP13. This could be achieved by formal conclusions from SBSTA 27 with the substance contained in the draft COP decision. The draft COP decision could include:

- recognition of the contribution of deforestation to global emissions;
- reiteration of existing commitments on addressing deforestation, including implementation of capacity building and existing commitments on sustainable land use and recognition of the role for national and international initiatives in putting sustainable land use into action and combating unsustainable practices that lead to deforestation or degradation;
- identification of the scope of deforestation in the context of a sustainable land management;
- identification of synergies and opportunities for cooperation with CBD, UNCCD, UNFF and other forest related conventions and processes;
- encouragement of actions as described in this submission for the period up to 2012;
- options for policy approaches along the lines set out in this submission, with an identification of associated methodological requirements;
- possible messages to other processes.

Annex

Notes of the work of relevant processes and organisations

Convention on Biological Diversity (CBD)

The CBD establishes three main goals: conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of genetic resources. Parties are required to develop national strategies.

The CBD addresses forests, one of the richest terrestrial systems, directly through the expanded programme of work on forest biological diversity. It was adopted in 2002 (Decision VI/22) and 21 global outcome-oriented targets in 7 focal areas were endorsed in 2006. It consists of three elements:

- the biophysical aspects, such as the reduction of threats to forest biological diversity through restoration, agroforestry, watershed management, and the establishment of protected areas;
- the institutional and socio-economic environment needed
- assessment and monitoring.

The expanded work programme will be reviewed at COP 9 in 2008.

The implementation of the Convention and the work programme contributes towards the reduction of GHG emissions. The decision VIII/30 on biodiversity and climate change adopted at COP 8 provides guidance to promote synergy among activities for biodiversity conservation, mitigating or adapting to climate change and combating land degradation.

United Nations Convention Combating Desertification (UNCCD)

The UNCCD was adopted in 1992 to combat desertification as a major economic, social and environmental problem of concern to many countries in all regions of the world. National Action Programmes (NAP) are one of the key instruments in the implementation of the Convention. They are strengthened by Action Programmes on Sub-regional (SRAP) and Regional (RAP) level. National Action Programmes are developed in the framework of a participative approach involving the local communities, spelling out the practical steps and measures to be taken to combat desertification in specific ecosystems. Special attention in the NAP to afforestation/reforestation and sustainable forest management activities is paid to conservation of biodiversity, combating desertification, carbon sequestration, other environmental goals and socio-economic aspects, including benefits sharing and poverty eradication.

The COP agreed to work in synergy to the other international Conventions. In particular, in 2004 a workshop was organized by the Secretariat in order to identify options for the implementation of specific synergy actions at local level, relating to forests and forest ecosystems and their use and conservation.

The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)

The Ramsar Convention covers all aspects of wetland conservation and wise use and is the only intergovernmental treaty which deals with a particular ecosystem. The Convention's broad objectives are to stem the progressive encroachment on, and loss of, wetlands and to promote their wise use. The three main pillars of activity are:

1. Designation of wetlands of international importance as Ramsar sites;
2. Promotion of wise use of wetland in the territory of each country;
3. International co-operation to further the wise use of wetlands and their resources.

Through the wise use of wetlands, emissions from forests growing on these wetlands (on peat lands for example) can be decreased. For example, reducing large-scale drainage of peat lands and raising water levels prevent the oxidation of peat and reduce fire risks.

United Nations Forum on Forests (UNFF)

The UNFF was established by the Economic and Social Council of the United Nations (ECOSOC), to carry on the work of the Intergovernmental Panel on Forests and the Intergovernmental Forum on Forests processes.

At its sixth meeting, UNFF6, agreed on a resolution containing four global objectives:

- Reverse the loss of forest cover world wide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation.
- Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest-dependent people;
- Increase significantly the area of sustainably managed forests, including protected forests, and increase the proportion of forest products derived from sustainably managed forests; and
- Reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased new and additional financial resources from all sources to implement sustainable forest management.

International Tropical Timber Agreement (ITTA)

ITTA promotes the conservation and sustainable management, use and trade of tropical forest products coming from sustainable forest management (SFM). ITTO is the implementing body of the ITTA and finances a number of relevant projects. In its status report 2005 it is estimated that approximately 5% of the natural forest of its 33 producer countries are under SFM. SFM is defined as managing permanent forest and is seen as one prerequisite of achieving reduction of deforestation.

Food and Agriculture Organization of the United Nations (FAO)

FAO was founded in 1945 with a mandate to raise levels of nutrition and standards of living, to improve agricultural productivity, and to better the condition of rural populations. FAO is the lead agency for agriculture, forestry, fisheries and rural development. FAO publishes the World Forest Resource Assessment (FRA), which is the most comprehensive information about the world's forest. The 2005 publication is structured after six of the seven thematic elements of SFM including the extent of the forest resource. FAO is developing capacity building activities in order to support developing countries in implementing the UNFCCC and the KP.

FLEG and EU-FLEGT

Three regional FLEG processes (Forest Law Enforcement and Governance) there have been established, all with a ministerial declaration; South East Asia, Central Africa and Europe and North Asia supported by the World Bank.

The EU has supported the FLEG processes and will through the EU-FLEGT (Forest Law Enforcement and Governance and Trade) take action to avoid import of illegal timber to the EU and support initiatives to combat illegal logging in partner countries. This is an attempt to effectively address illegal logging in order to promote sustainable forest management and reduce deforestation.

PAPER NO. 11: INDIA

Country Submission of India
On
Reducing Emissions from Deforestation in Developing Countries

1. Background

The concept of "Compensated Reduction" (CR) was put forth by a group of Brazilian Non Government Organizations. This concept of "Reducing emissions from deforestation in developing countries: Approaches to stimulate action" was placed in the plenary session of the Conference of Parties 11 (COP 11), Montreal on 30th November 2005 on the initiatives of Papua New Guinea and Costa Rica. COP 11 in the decision FCCC/CP/2005/1.2 invited parties and accredited observers to submit their views on relevant scientific, technical and methodological issues by 31 March 2006, and requested the Secretariat to organize a workshop prior to 25th Session of SBSTA.

Accordingly SBSTA 24 decided to organize a Technical Workshop in Rome, Italy from 30th August to 1 September 2006 to facilitate experience sharing and consideration of scientific, socio-economic, technical and methodological issues and policy approaches and positive incentives to reduce emissions from deforestation in developing countries. The country submissions and recommendations of Rome Workshop were deliberated upon in the SBSTA 25 held in parallel with COP 12 at Nairobi in November 2006. It was pointed out in SBSTA 25 deliberations that the countries that have implemented strong conservation measures and regulations leading to enrichment and extension of forest cover also need to be suitably compensated and, therefore, it was essential to identify alternate approaches to reduce emissions from deforestation. India, in furtherance of the conservation and sustainable forest management based approach of Congo Basin Countries for providing positive incentives for the forest area managed sustainably, apart from reducing deforestation, presented during Rome Workshop, proposed the Mechanism of 'Compensated Conservation' to compensate the countries for maintaining and increasing the carbon stocks as a result of conservation and increase/improvement in the forest cover.

The SBSTA 25 accordingly decided to continue discussions on ongoing as well as potential policy approaches, and positive incentives along with related technical and methodological requirements, and invited Parties and accredited observers to submit to the Secretariat by 23 February 2007, their views in the matter for consideration of SBSTA at its Twenty Sixth Session.

2. Country submission

2.1 Forest Conservation and Carbon Capture

The Conference of Parties at its 12th session invited parties and accredited observers to submit their views to Secretariat by 23rd February 2007 on ongoing and potential policy approaches and positive incentives, technological and methodological requirements to their implementation, assessment of results and their reliability, apart from any relevant information and data. The COP requested the SBSTA to consider this information at its Twenty Sixth Session (May 2007).

India has acknowledged the seriousness of threat of deforestation and wishes to participate actively in the international efforts to reduce deforestation at global level. India recognizes immense importance of the forest resources including land use, land use change and forestry (LULUCF) activities in contributing towards changes in emissions related to climate change.

India has a strong policy framework for conservation of its forests. Forest (Conservation) Act, 1980 (FCA, 1980) empowers only the Union Government to allow the diversion of forest land for non-forestry use. Forests are diverted only for essential and unavoidable national developmental needs and for each unit of such diverted land, compensatory afforestation on equivalent non-forest land is mandatory. The total forest area diverted for non-forestry purposes between 1950 and 1980 was 4.5 million ha (m ha) equivalent to an annual loss of 1,50,000 ha of forest land. However, after enactment of FCA 1980, the diversion rate has been reduced to about 30,000 ha annually.

Certain other important acts, rules and instructions having a bearing on protection and conservation of forests are: i) National Forest Policy, 1988, ii) Indian Wildlife (Protection) Act, 1972, iii) Indian Forest Act, 1927, iv) Biological Diversity Act, 2002, and (v) National Environment Policy, 2006.

Further, mechanism of Joint Forest Management, facilitating greater participation of local communities has promoted regeneration and reforestation of about 15 m ha of forest land. India has initiated afforestation programme since 1980's on a massive scale. The cumulative area of forest plantation from 1980 to 2005 is about 34 m ha with an average annual rate of 1.3 m ha. The recorded forest area of the country at the time of independence (1947), as per Central Statistical Organization was reported to be about 40 m ha being about 12.20% of the total geographic area of India (328.72 m ha). The area increased to 68.96 m ha in 1950-51 with the addition of private forests of princely kingdoms. The area further increased to 75.18 m ha by early eighties after consolidation (SFR[1], 1999). Presently, the recorded forest area is 77.47 m ha (SFR[1], 2003).

Due to the aforesaid sustained initiatives, the forest cover of the country is now stable. The latest reports (2001 and 2003) of the remote sensing based biennial assessment of State of Forest Report (India) indicate increase in forest cover of the country. The forest cover which was 64.08 m ha as per the 1987 report (based on 1981-83 satellite data) has increased to 67.83 m ha as per 2003 estimates constituting 20.64 percent of the geographic area. Including the tree cover (forest patches of less than 1 hectare) of 9.99 m ha (3.04%), the total area under forest and tree cover is 77.82 m ha (23.68%). It may be mentioned that as per Global Forest Resources Assessment (2005) of FAO, India along with China are amongst the few exceptional developing countries reflecting net positive change in forest area during 1990s. It is pertinent to mention that out of total GHG emission of 1,226,540 Gigagram/year of the country, LULUCF sector contributes only 14,292 Gigagram (1.16%), as per the NATCOM (India's National Communication to UNFCCC) which is one of the lowest in the world.

As per the projection of Indian Institute of Science, Bangalore, (2006) based on the analysis of forest cover, afforestation and reforestation, and other conservation measures, the forest cover is likely to register an increase during the period 2006-2030, and projected to reach 72.19 m ha (22%) by 2030 under the current trend scenario.

The estimated growing stock of the country in 1980 was 4,196 million M^3 with the net annual increment of 52 million M^3 or 1.24 % of the growing stock (SFR, 1991). The growing stock of the country in 1995 was estimated by Forest Survey of India at 4,740 million M^3 with an average standing volume of 74.42 M^3/ha. The total annual increment of growing stock was estimated at 87.62 million M^3 (Extent, Composition, Density, Growing stock and Annual Increment of India's Forests-FSI, 1995). The growing stock of the country in 2003 as estimated by FSI is 6,414 million M^3 which includes 4,782 million M^3 of growing stock within forest area and 1,632 million M^3 as trees outside forest (TOF). The estimates for removal of firewood from the forests vary largely, and are not reliable. However, as per the Good Practice Guidelines of IPCC, emissions from such removals may be treated as net zero.

[1] **State of Forest Report published biannually by Forest Survey of India**

The model based projection of carbon stocks in India's forests and tree cover, as per studies of Indian Institute of Science, Bangalore (2006), reflects an increase in the carbon stocks as contained in the country's forests from 8.79 GtC in 2005 to 9.75 GtC in 2030.

2.2 ***Proposed Policy Approach and Incentives***

Proposed concept of 'Compensated Reduction' favours the countries with high deforestation rates, with the quantum of compensation likely to be proportionate to the reduction effected in current rate of deforestation.

India, therefore, as deliberated in COP 12 at Nairobi, proposes a new potential policy approach based on socio-political commitment and technological capabilities of the country. India proposes that the countries like India that have implemented strong conservation measures and regulations be suitably compensated. The proposed mechanism of "Compensated Conservation" is intended to compensate the countries for maintaining and increasing their forests as carbon pools as a result of conservation and increase/improvement in forest cover backed by verifiable monitoring systems. The conservation in India and other countries has been achieved, and is being sustained at huge costs on account of revenue loss from harvests and non-conversion to other more profitable land uses.

The incentive is proposed on maintaining and increasing the carbon stocks as a result of demonstrated implementation of strong conservation policies, and consequent increase/improvement in forest cover. This would be a strong incentive for developing countries to maintain and develop their existing forests. The incentive for maintaining baseline stock would act as insurance cover against loss of associated carbon stocks and would encourage the developing countries for enhancement of extent and quality of forest cover, associated with increase in carbon stocks, and simultaneously contribute towards conservation of biodiversity. Such incentive needs to be provided to developing countries for effecting expansion, increment or enrichment of their forests from a previously set baseline, that may be fixed at 1990 or other appropriate level.

As per the policy approach of Compensated Conservation, for India, such incentive would not only be admissible on the incremental stock of 0.96 GtC between 2006-2030, the projected increase from 8.79 GtC in 2006 to 9.75 GtC in 2030), but also on the baseline stock of 8.79 GtC as on 2006 (Indian Institute of Science, Bangalore 2006).

The proposed policy approach of "Compensated Conservation" is intended to operate within the framework of international conventions, protocols, rules and regulations relating to climate change.

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PAPER NO. 12: JAPAN

Japan's View on Reducing Emissions from Deforestation in Developing Countries
Submission from Japan

1. introduction

At its 25th session, SBSTA invited Parties and accredited observers to submit their views on reducing emissions from deforestation in developing countries to facilitate discussions at the second workshop focusing on: the discussions of ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing emissions from deforestation in developing countries. SBSTA also invited Parties to consider, as appropriate, relevant provisions of other conventions.

Japan welcomes the opportunity to submit its views on this issue taking into consideration previous international discussions and information from Parties, observers and the secretariat.

2. General Views on Ongoing and Potential Policy Approaches and Positive Incentives

Possible Outcomes of 'Incentive Approach'

Reducing emissions from deforestation in developing countries is global issue to be tackled to meet the ultimate objective of the Convention. As already stated in our first submission on this issue (FCCC/SBSTA/2006/Misc.5), Japan recognizes it is important to reduce and further reverse the loss of worldwide forest coverage through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation.

In this respect, Japan believes that 'positive incentives' to reduce deforestation in developing countries could lead one of the possible measures to achieve the objective of Article 2 of the Convention. However, as discussed in the first workshop, causes of deforestation are rooted in various and complex social/economical needs such as expansion of agricultural/grazing land, energy security, expansion of infrastructure and development of forest resources. Therefore, Japan believes that it is necessary to take into account the various fundamental problems such as alternate livelihood, poverty alleviation, reformation of land-use policy, establishment of sustainable forest management practices and price formation system of forest related products and services.

Enhancing Sustainable Forest Management

While policy approaches discussed under this issue aims to reduce GHG emissions, policy instruments should be designed taking into account enhancement of sustainable forest management. With a view to various and essential functions of forests, policy and measures to address deforestation/forest degradation should focus on not only carbon flux but also promotion of sustainable forest management and conservation of biodiversity.

Financial resources for policy approaches

Considering positive incentives, financial sustainability and stability is fundamental for ensuring ecological sustainability and community participation. Therefore, various technical points such as sustainability, stability, scale and efficiency should be carefully assessed on financial resource basis, i.e. ODA, possibly related funds or market mechanisms, taking into consideration of future framework of actions taken under the Convention and the Kyoto Protocol.

3. Technical and methodological issues

Issues to be further assessed

In the previous submission, Japan stressed that 1) causes of deforestation, 2) practicability, 3) consistency of current system should be carefully assessed for the consideration of scientific, technical and methodological issues. Especially, Japan suggested that causes of deforestation should be fully

reviewed at first in order to ensure that different policies and measures are appropriately applied depending on the causes of deforestation. Japan acknowledges that Parties discussed and exchanged information on wide range of causes in the first workshop, and draw outputs that there is no universal approach that could control deforestation and that a balance of regional specific factors would have to be considered. Based on these outputs, our discussions should focus on practicability and consistency with the current system including AR-CDM in the future discussion.
As for technical issues to be discussed, Japan mentioned some key issues in its previous submission such as additionality, leakage, non-permanence and accounting method in the case of reversing from source to sink. These issues should be practically assessed taking into account consistency with relevant rules and discussions under the Kyoto Protocol and IPCC Good Practice Guidance for LULUCF.

Technical Points on Evaluation of effect of 'positive incentives'
Introducing 'positive incentives', additionallity of human induced activities would be carefully assessed on an equitable basis. Not only physical aspects such as base-line or reference emission rate but also impact of additional policies and measures towards sustainable forest management should be considered. Scientific and equitable methodologies should be designed through experimental studies conducted in several countries and regions in cooperation with relevant international organizations, NGOs and Parties in this regard.
In this respect, monitoring methods should be developed with focusing on land-use change as well as land-cover change. Felling occurring in the course of sustainable forest management and deforestation/degradation must be distinguished to ensure sustainable forest management in the long term perspective. However, present remote sensing technology has some constraints to clearly distinguish these changes. Technical guidelines is needed to describe technical requirements including ground survey and alternative technologies as additional information based on IPCC Good Practice Guidance for LULUCF and IPCC 2006 Guidelines in terms of monitoring land-use change.
In addition, the data obtained by the Advanced Land Observing Satellite (ALOS) developed by Japan are expected to contribute to development and improvement of observation technology on emissions from deforestation/forest degradation.

4. Synergy with Relevant Organizations

As mentioned in the previous submission, Japan believes that it is efficient path to have synergy with relevant organizations and institutions including member organizations of Collaborative Partnership on Forest. Especially, Japan emphasize that it is important to focus attention to one of the descriptions of Global Objectives toward 2015 agreed on 6th meeting of UNFF that "reduce and further reverse the loss of worldwide forest coverage through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation" and actions to be taken under this issue should lead to not only slowdown deforestation but also reverse the loss of worldwide forest coverage through sustainable forest management.

PAPER NO. 13: MALAYSIA

REDUCING EMISSIONS FROM DEFORESTATION IN DEVELOPING COUNTRIES

Submission of Views by Malaysia

The 12th Session of the Conference of Parties (COP) to the UNFCCC invited , Parties and accredited observers to submit to the Secretariat, by 23rd February, 2007, their views on issues relating to reducing emissions from deforestation in developing countries, focusing on the discussions of on-going and potential policy approaches and positive incentives, the technical and methodological requirements related to their implementation, the assessment of results and their reliability, and improving the understanding of reducing emissions from deforestation in developing countries.

Malaysia had submitted her views on this issue based on the request of the 11th Session of the COP and again welcomes this opportunity to make a submission and presents the following views.

General Principles of Curbing Deforestation

As indicated in the previous submission (FCCC/SBSTA/2006/MISC.5), Malaysia recognizes the importance of tropical forests in mitigating the adverse impacts of climate change. In this respect, we are pleased to highlight that Malaysia is bestowed with relatively large tracts of natural tropical forest which covers about 60 % of our total land area. At the same time, the forests in Malaysia also play a significant role in the socio-economic development of the country. As such, it is to our own interest to conserve and manage our forest resources on a sustainable basis. Thus, the discussion on seeking incentives for reducing emissions from deforestation in developing countries (REDD) is pertinent to Malaysia.

Malaysia shares the view elaborated in the Stern Review (The Economics of Climate Change) that curbing deforestation is a highly cost-effective way of reducing greenhouse gas emissions while at the same time helping preserve biodiversity and protecting soil and water resources. Such efforts are also in line with other multilateral environmental agreements as well as national policies. Malaysia believes that efforts in curbing deforestation in developing countries will indeed result in attaining real and measurable benefits for the climate which is in accordance with Article 2 of the convention. Currently there are no opportunities under the protocol that provides incentives for curbing deforestation in developing countries. In this respect, it is opportune that significant positive incentives that are credible be provided to developing countries for reducing emissions from deforestation. For the purpose of providing such incentives, Malaysia also feels that the definition of deforestation needs to be broad enough to cover the various levels and patterns of forest degradation. This is important as any level of degradation exists on the continuum between completely sound, protected forests and complete deforestation. As such, a pattern of continued forest degradation will contribute significantly to a net increase in emissions, eventually culminating in complete deforestation and should therefore be differentiated from sustainable forest management.

The application of these incentives however must be implemented in a fair and equitable manner to ensure that countries with different capacities and socio-economic status are not disadvantaged. Malaysia particularly would like to ensure that the mechanism to be developed for the provision of positive incentives will not be disadvantageous to countries that have

relatively large tracts of natural forests and historically have been able to maintain a low deforestation rate or that have managed to control deforestation through sustainable forest management practices.

Policy Approaches for Reducing Emissions from Tropical Deforestation

Malaysia believes that the basic principle of applying policy approaches to reduce emissions from tropical deforestation in developing countries is that it should be fair and equitable and should promote significant retention of forested lands. Malaysia recognises that selective harvesting based on sustainable forest management principles does not contribute to deforestation and results in a stable forest ecosystem in the long run.

Retention of Remaining Forests

Policy approaches on reducing emissions from deforestation should be designed to be sufficient and cost effective and derived based on measures taken as well as the opportunity costs foregone. In this regard, developing countries that have been able to retain large tracts of natural forests will be under greater pressure to convert forest to other land uses such as agriculture and industries. In this regard, incentives for such countries should be maximized to ensure that the remaining forest remains intact. Both total protection and sustainable forest management practices should be considered as positive practices to avoid deforestation.

Capacity Building

Developing countries with forests are very diverse in their socio-economic status. In this respect, their ability to implement measures to avoid or curb deforestation varies significantly. Provision of incentives will encourage the formulation and implementation of effective measures to reduce deforestation which in turn will also provide other benefits to developing countries such the conservation of biodiversity and the maintenance of soil and water resources. Malaysia believes that new and additional funds will have to be set aside for developing countries to assist in building technical and institutional capacity to implement effective measures to reduce emissions of GHGs from deforestation. Such funds must be made available early by Annex 1 Parties should not be taken from those funds that have already been allocated or planned under the ODA.

Mechanism for Positive Incentives

Malaysia recognizes the role of the CDM in providing incentives for afforestation and reforestation (AR) activities undertaken in developing countries. In this respect, any mechanism to create positive incentives for reducing emissions from deforestation should not undermine the existing AR CDM mechanism, and should be seen as further enhancing the involvement of developing countries in emissions reduction. However areas of A&R that have been allocated for CDM should not be eligible under the REDD mechanism. In formulating appropriate mechanisms on positive incentives for reducing emissions from deforestation in developing countries, Malaysia believes that it should be voluntary, flexible, and offer a range of incentives that would be applicable to to the wide variety of forestry environments, management regimes and socio-economic and development conditions of developing countries. To encourage Annex 1 countries to invest in REDD credits, consideration could be given to using REDD credits for meeting part of their commitments. However, Malaysia would like to reiterate our stand that domestic efforts to reducing emissions by Annex 1 Parties remain the most effective effort to reducing emissions and mitigating climate change.

The mechanism must be flexible enough to cater for countries that have low deforestation rates and are practicing sustainable forest management. Malaysia is concerned that the determination of baselines or reference scenarios on deforestation rates for ascertaining the positive incentives may result in providing perverse incentives to countries that have already undergone significant deforestation and are currently are currently at a socio-economic condition that enables them to significantly reduce or stabilize deforestation. In this respect, the calculation of such reference scenarios should be based on a sufficient period of time (at least ten years) with reliable data. Preferably, reliable satellite data should be used as a minimum standard to detect changes in the extent of forest for the specified periods. The existing IPCC guidelines should be adopted as a common approach to reporting among developing countries.

Malaysia can see the advantages of having national based approach for the REDD mechanism as it would simplify reporting and validation processes. However, project based approach should also be considered. Learning from the experience of A&R CDM mechanism, project based approach will only be attractive with the institution of innovative and simpler accounting, validation and monitoring processes which will result in significantly lower transaction costs and facilitate implementation.

Malaysia welcomes early discussion on this issue of providing positive incentives as reducing emissions from deforestation is widely recognized as a highly cost effective method of emissions reduction. In this regard, Malaysia would like to urge Parties to adopt a positive attitude in negotiations on this matter and support and facilitate the development of a simple and flexible mechanism that will benefit not only the developing countries but more importantly the global climate system.

Forest Research Institute Malaysia
Ministry of Natural Resources and Environment
Malaysia
23rd February 2007

PAPER NO. 14: MEXICO

SUBMISSION BY MEXICO

REDUCING GREENHOUSE GAS EMISSIONS FROM DEFORESTATION IN DEVELOPING COUNTRIES

I. Mandate

The Subsidiary Body for Scientific and Technological Advice (SBSTA), at its twenty-fifth session (Nairobi, 6–14 November 2006) invited Parties and accredited observers to submit to the secretariat, by 23 February 2007, their views on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing greenhouse gas (GHG) emissions from deforestation in developing countries.

Mexico welcomes this opportunity to provide views and submits the following inputs on these issues.

II. Relevant background information

This submission builds on the information presented and generated during SBSTA sessions, formal and informal workshops on this issue carried out in the last couple of years and on previous submissions by Parties. Additionally, we would like to point out some findings provided by the *Stern Review on the Economics of Climate Change* relevant to the proposals presented in this submission[1]:

- Curbing deforestation is a highly cost-effective way of reducing greenhouse gas emissions and has the potential to offer significant reductions fairly quickly. It also helps preserve biodiversity and protect soil and water quality.

- Policies on deforestation should be shaped and led by the nation where the forests stand but there should be strong help from the international community, which benefits from their actions.

- Compensation from the international community should be provided and take account of the opportunity costs of alternative uses of the land, the costs of administering and enforcing protection, and managing the transition. Research carried out for this report indicates that the opportunity cost of forest protection in 8 countries responsible for 70 per cent of emissions from land use could be around US$5 billion annually, initially, although over time marginal costs would rise.

- Carbon markets could play an important role in providing such incentives in the longer term. But there are short-term risks of de-stabilizing the crucial process of building strong carbon markets if deforestation is integrated without agreements that increase demand for emissions reductions, and an understanding of the scale of transfers likely to be involved.

[1] Source *Stern Review, Final Report*. Part VI, Chapter 27. Cambridge University Press, 2006.

- Action to preserve the remaining areas of natural forest is urgent. Large-scale pilot schemes are required to explore effective approaches to combining national action and international support. Early crediting for the second commitment period could be a feature of pilot schemes.

III. Basic elements and principles

We believe that avoiding emissions from deforestation is a priority issue for most developing countries, and that Parties should not miss this opportunity to design and agree upon effective and equitable schemes.

In our view, any arrangement under the UNFCCC aimed at reducing GHG emissions from deforestation in developing countries should consider four basic elements (see Figure 1):

A) International sources of funding,

B) International mechanisms for application,

C) Implementation instruments and

D) Internationally agreed methodologies and accounting systems.

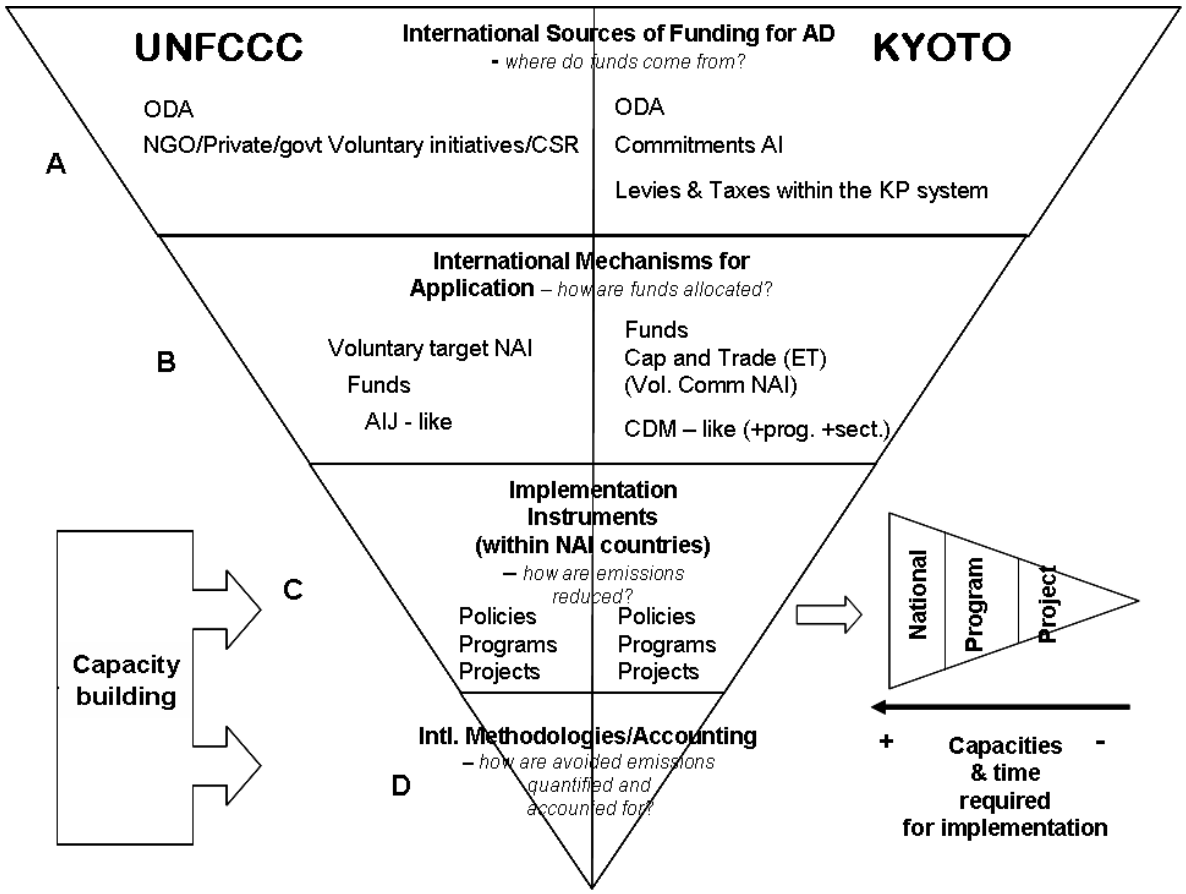
Additionally, capacity building efforts are required to ensure the successful implementation of initiatives and the accurate measurement of their carbon benefits.

Examples of these elements already exist under (or outside, but as a result of the existence of) the UNFCCC and the Kyoto Protocol, and some others have recently been proposed by other Parties.

However, effectively addressing emissions from deforestation in developing countries might entail the combination of existing elements, or even the creation of new ones, based on the experience gathered so far on their application and considering the required volume of funding and the different circumstances and levels of capacity of such countries.

These basic elements are presented below, together with some principles that we consider indispensable for the success of any proposal on this subject.

Figure 1. Basic elements (with exemplified options) of an international arrangement under the UNFCCC to reduce emissions from deforestation in Developing Countries



A) International sources of funding

In our opinion, international sources of funding to address emissions from deforestation should be:

a) *Sufficient*. The amount of funds available will be closely related to the volume of reductions that will be achieved. Implementing measures to avoid emissions from deforestation can be expensive. However, the cost per ton of CO2 not emitted can be competitive in carbon market.

b) *Continuous and predictable*. Addressing emissions from deforestation effectively implies a long-term effort. Individuals, communities and governments implementing measures to tackle deforestation require certainty regarding the flow of funds available to support their efforts over time.

c) *Additional*. International funds (both public and private) directed to avoiding emissions from deforestation in developing countries should not be distracted from other areas, or switched from one country to another.

While already existing options under the Convention, such as ODA and voluntary carbon markets - promoted originally by the pilot phase of Activities Implemented Jointly (AIJ) and mostly driven by NGOs and socially and environmentally responsible companies - have been very useful and sometimes successful, it is clear that significantly cutting emissions from deforestation in developing countries will require an unprecedented effort.

Therefore, we consider that options associated to the carbon market are most likely to provide enough resources to achieve significant emissions reductions in the forest sector of developing countries, provided deeper mitigation commitments are taken on post – 2012 by Annex B countries.

Nevertheless, in our view this effort should be undertaken jointly by Parties to the Convention and to the Protocol, and options should be open to allow the former to participate, for instance, in creating the capacities needed to implement successful measures, including pilot activities.

B) International mechanisms for application

Ideally, any international mechanisms for the application of resources to address emissions from deforestation under the framework of the UNFCCC should be:

a) *Voluntary*. Participation by developing countries shall be voluntary, and the existence of such mechanisms shall not imply new commitments of any kind for these countries.

b) *Ensure the environmental integrity of the climate change regime*. Adopted mechanisms should include provisions to ensure their contribution to the achievement of the ultimate objective of the UNFCCC.

c) *Equitable*. Every developing country wanting to reduce its emissions from deforestation should be able to use the agreed mechanisms at some level, regardless of its capacities and circumstances. This flexibility is required not only to ensure an equitable and wider participation, but also to facilitate a timely and effective reduction of emissions from deforestation, since it allows more countries to start addressing this problem immediately.

d) *Efficient.* These mechanisms should operate efficiently, imply low transaction costs and facilitate the implementation of activities (i.e., not impose artificial barriers to their development). Accordingly, the use of institutions and mechanisms already established should be prioritized over the creation of new ones.

Taking these principles into account, we consider that almost all of the options known so far and presented in Figure 1 could be applied - provided that they be linked to a reliable source of funding (A above) - with the exception of emissions reduction commitments for developing countries under the

Kyoto Protocol, which would not be acceptable at this point and would contradict the decision adopted by the COP/MOP2 regarding the review of the Protocol, which states that "the second review of the Kyoto Protocol pursuant to Article 9 shall take place at its fourth session in 2008 (…) the second review shall (…) not lead to new commitments for any Party".

Moreover, in order to ensure an equitable participation by all interested developing countries, mechanisms should be able to accommodate different levels of capacity, so that countries may be able to increase their participation as they enhance their capacities, thus allowing for a wide participation whilst guaranteeing the environmental integrity of the regime. Limiting the scope of these mechanisms to national-level approaches, for instance, would severely restrict the participation of most developing countries due their current lack of institutional and technical capacities, thus delaying emissions reductions currently achievable.

C) Implementation instruments

In our view, instruments for the implementation of measures for the reduction of emissions from deforestation in developing counties should ideally comply with the following principles:

a) *Sovereignty*. Developing countries should freely decide what instruments to cut emissions from deforestation best accommodate their interests, circumstances and capacities, as well as what may be the best moment for their implementation.

b) *Sustainable development*. Instruments aimed at reducing emissions from deforestation should be designed in line with national sustainable development goals, and facilitate the achievement of economic, social and environmental objectives. They should also be respectful of relevant international conventions and agreements.

c) *Long-term social and climate benefits*. Implementation instruments should be designed so as to ensure both durable economic benefits for individuals and communities and long-term emissions reductions. These instruments should ideally promote behavioral and structural changes.

d) *Efficiency*. Instruments should be designed in a way that the costs of implementation and bureaucracy be minimal to allow for those reducing emissions on the ground to receive most of the resources in a timely manner.

e) *Adequacy*. Implementation instruments chosen should be coherent with existing levels of capacity (see Figure 1 above).

D) Internationally agreed methodologies and accounting systems

Methodologies and accounting systems should be defined only after the elements mentioned in the previous sections are agreed upon. They shall build on existing methodologies and accounting approaches and ensure the environmental integrity of the climate regime without posing unnecessary

costs and/or obstacles to the implementation of activities to reduce emissions from deforestation. They should also be transparent, in order to generate credibility in the mechanisms and the regime itself.

IV. Proposals

Taking into account the information and principles presented in the previous sections, Mexico proposes the following options to address GHG emissions from developing countries and looks forward to discussing them with other Parties.

A) Market-based options

The options presented below would require that the level of commitments beyond the first commitment period of the Kyoto Protocol be adjusted to accommodate the reduction potential of this and other new alternatives in order to avoid weakening the market signal in favor of the development and deployment of new mitigation technologies such as renewable energies.

1. Including project activities that reduce GHG emissions from deforestation in the CDM during the second commitment period of the Kyoto Protocol

In our view, the CDM has all the necessary elements to successfully promote activities to avoid emissions from deforestation in developing countries. It provides the only means for developing countries to participate in the (formal) international carbon market, which is considered as one of the most important new sources of funding in the next decades, with participation from both private and governmental resources.

Moreover, the CDM could - with minor modifications based on work already underway – cover a wider scope of application, from small projects to programmatic and sectoral ones, thus offering options for countries with different circumstances and capacities. The institutional capacities already established – plus those to be developed before the start of the second commitment period - by the Executive Board, Designated Operational Entities and Designated National Authorities would also facilitate the equitable implementation of projects and reduce transaction costs.

2. Launching a Pilot Phase for Large Scale Initiatives under the Convention

As mentioned in section II of this submission, action to preserve the remaining areas of natural forest is urgent, and large-scale pilot schemes are required to explore effective approaches to combining national action and international support. Therefore, we propose the establishment of a Pilot Phase for Large Scale Initiatives under the Convention aimed at promoting actions to reduce emissions from deforestation in developing countries.

Under this pilot phase - which should be implemented in parallel with the inclusion of activities to avoid emissions from deforestation in the CDM in the second commitment period - developing countries could voluntarily engage in initiatives at the municipal, state or national levels with the support of Annex I Parties and/or international funds and organizations.

Initiatives achieving real, anthropogenic, measurable and additional emissions reductions that may be expected to be long-lasting could be, if desired by the Host Party, verified and certified and registered as CDM activities in a subsequent commitment period. These large-scale initiatives would only be able to claim CERs retroactively, avoiding double counting the credits already issued to individual CDM projects or programs. Alternatively, such initiatives could continue under the pilot phase and generate verified emissions reductions, which could be sold in carbon markets outside the Kyoto Protocol.

In our view, this option could entail the following benefits:

- Providing incentives for immediate actions that would voluntarily reduce emissions from deforestation in developing countries at all levels (projects and programs in the CDM and large-scale initiatives under the pilot phase), according to their interests and existing capacities.

- Letting Parties know *ex ante* the amount of credits from large scale initiatives that could enter the market in a subsequent commitment period, thus allowing them to adjust emissions reduction and limitation commitments accordingly in order to preserve the environmental integrity of the regime and maintain the stability of the carbon market.

- Allowing non-Parties to the Protocol to participate in addressing emissions from deforestation in developing countries.

- Providing developing country Parties – at the municipal, state and sectoral levels - additional incentives to develop carbon-related capacities in the LULUCF sector.

B) Funds

1. Establishing an Avoided Deforestation Carbon Fund

Considering that funds based on voluntary contributions from Parties would not provide the level of funding and predictability required to significantly reduce emissions from deforestation in developing countries, we propose the creation of an Avoided Deforestation Carbon Fund, which would be fed by a X% levy on Emissions Reductions Units or Assigned Amount Units, similar to the one imposed on CERs. This Fund would be aimed at providing resources for the implementation of specific activities that should directly reduce emissions from deforestation in developing countries.

The Fund would act as a “common carbon fund”, where the emissions avoided by the activities funded would generate credits, which would be owned exclusively by the non-Annex I “project developers” (as in the case of unilateral CDM). This would provide such “project developers” an entry to the carbon market (through registration by the CDM following the usual procedures), which would in turn entail

additional funds and incentives to continue, reinforce and expand conservation activities. This fund's replenishment instruments are based on the polluter pays principle, which justifies the issuance of credits.

Obviously, this option would imply the insertion of activities to reduce emissions from deforestation in the CDM, including the development of projects outside the fund. The establishment of the Avoided Deforestation Carbon Fund would ensure the implementation of projects with high social and environmental benefits, regardless of the buyer's preferences in the carbon market.

C) Support for capacity building activities

In our view, the creation of a Fund to support capacity building activities related to avoiding emissions from deforestation in developing countries should be considered urgent and independent of the approaches eventually adopted to deal with such emissions. Negotiations on this Fund and its rules should start as soon as possible.

PAPER NO. 15: NEPAL

NEPAL
25th Session of SBSTA
Agenda item 5
(In Relation to FCCC/SBSTA/2006/L.25)
Reducing emission from deforestation in developing countries

Background

Reducing emission from avoided deforestation has not yet been recognized under the Kyoto Protocol. In Nepal, over 25% of the forested land is handed over to the local communities for its management and protection from the state. Although the process of devolution in forest resource management started since mid 1980s, Nepal started handing over of government-managed natural forests to local community user groups from mid-1990s based on the Forest Act, 1993 and Forest Regulation, 1995.

To date, over 1.1m ha of government-managed forest has been handed over to about 14000 user groups with an outreach to nearly 8 million population (almost 40% of the population). In field trials, such community managed forests have been reported to sequester anywhere around 2 - 4 t ha^{-1} yr^{-1} in above ground biomass only under normal management conditions which means after extracting forest products such as fuelwood, timer, fodder, grass/herbs, litter, non-timber products for supporting their sustenance needs. The local institutions, known as Community Forest User Groups, are faced with a dearth of financial resources as much of their products are sold at minimal price in the local market. There is tremendous scope to generate revenue from CER traded internationally to benefit the environmental and social aspects of managing such forests. Sale of carbon credits on the one hand would provide livelihood opportunities to poor marginalized communities thereby helping in poverty reduction and contribute to the sustainable development principles of the climate change regime on the other.

Policy recommendations

In order for rural people to be benefited, the policy under the UNFCCC for avoiding emission from deforestation should address the concerns highlighted below:

1. Baseline period should be more realistic taking into account the deforestation rate in the countries concerned in order to provide additional benefits to local and poor communities that dedicated themselves to conservation earlier.
2. Community managed forests are avoiding deforestation in natural forests. The CER from avoiding deforestation must be regarded at par with regular CER as real emission is reduced. This is real emissions reduction, and should not be rewarded therefore with tCERs or lCERs
3. Transaction cost to measure carbon pool in small patches of forest scattered over the mountainous terrain is expensive. Hence, a generalized baseline should be developed at the national level rather than at project levels. Research has shown that local communities can effectively and efficiently measure the changing carbon stock in their forests using standard forest inventory methods for example as suggested in the Good Practice Guide.
4. The definition of forest must be developed at country level taking into account geographic aspects such as mountain, mid hills and low land forests.
5. Capacity building and financial assistance are urgently needed in particular to mountainous and land-locked countries for maintaining reliable forestry database compatible with carbon assessments at national level and for training the local forest users to monitor their forest carbon stocks at local level.

PAPER NO. 16: NEW ZEALAND

Avoided Deforestation

New Zealand views

New Zealand has previously submitted its views on the issue of avoided deforestation in developing countries (FCCC/SBSTA/2006/MISC.5 refers).

The SBSTA has invited Parties to submit their views on ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; assessment of results and their reliability; and improving the understanding of reducing emissions from deforestation in developing countries (FCCC/SBSTA/2006/L.25 refers).

New Zealand believes that the issue of avoided deforestation in developing countries should be considered alongside other processes that discuss a future climate change framework. This issue should also be viewed alongside other discussions on land use, land use-change and forestry.

An effective global response to climate change will require all countries – developed and developing – to contribute as best they can. Anything less than broad and balanced participation and action will be inadequate to deal with the magnitude of the challenge. A global response should include action to protect and enhance forest sinks and reservoirs.

We note the complexity of this issue. The complexity arises because of differing national circumstances and the numerous causes and drivers of deforestation. This is perhaps a pointer to the role the SBSTA should play on this issue. A 'one size fits all' approach will not be sufficient; neither will action alone at the multilateral level. The term 'flexible basket' of approaches has been coined as a necessary prerequisite. It is clear that various actions, at multiple levels, from the multilateral level right down to the local level will need to be employed. The SBSTA must therefore remain focussed on what it can reasonably do at the multilateral level. The SBSTA should not be prescriptive. Instead, it should create an enabling environment for voluntary participation by Parties. In that way the sovereignty of national governments is respected and governments can employ flexibility at the local level to respond to national priorities.

The Rome workshop on avoided deforestation provided an opportunity to hear expert views on this issue. It was clear from this workshop that despite substantial national, bilateral and multilateral support to efforts to reduce forest loss, deforestation continues to be a major problem. Clearly, the international community has a role to play. New Zealand fully endorses the summary of the workshop provided by the Secretariat.[1] In particular, we reiterate the following points on financial mechanisms and other alternatives:

- The international process should aim to complement national policies and efforts to reduce emissions from deforestation as well as add to efforts that are already in place;
- The consideration of approaches to reward or compensate actions needs to be broad and include several possible alternatives;
- There is a need to find additional and innovative financial mechanisms, and funding needs to be certain, long-term and sustainable;
- Incentives should recognize actions to reduce emissions from deforestation, which could be assessed relative to a reference baseline;

[1] FCCC/SBSTA/2006/10 refers.

- It is important to ensure that compensation or rewards are received by those actors who undertake actions on the ground. Institutions play a major role in ensuring that actors on the ground are compensated.

Amongst many proposals, a voluntary fund and more market based approaches have been suggested by Parties. New Zealand favours a system that creates sufficient incentive for developing countries to avoid deforesting i.e. a system that would generate revenue from standing forests over time. The weakness of the fund idea, in the absence of any underlying commitments, is that it creates no incentive. Given that governments would contribute to a fund, it simply risks being under resourced because of competing priorities elsewhere which more directly match recipient countries' development priorities.

On technical and methodological issues, we note that tools, methods and data are available and the science is robust enough to monitor and estimate emissions from deforestation within an acceptable level of certainty.

We welcome the views of others and look forward to working constructively to advance this issue.

PAPER NO. 17: SOUTH AFRICA

Submission by South Africa

Reducing emissions from deforestation in developing countries

Views on: ongoing and potential policy approaches and positive incentives, and technical and methodological requirements related to their implementation; on assessment of results and their reliability; and on improving the understanding of reducing emissions from deforestation in developing countries

Background

South Africa supports a focus on stabilizing and then growing the standing crop of carbon in tropical forests and their soils as a critical adjunct to reducing emissions from fossil fuel combustion. We note that the southern African region is characterised by low rates of deforestation in general. Thus we would favour the consideration of incentives to reduce or avoid deforestation, as well as incentives to reduce emissions resulting during the process of deforestation. It is noted that in intact forest, carbon stocks are at a very low risk of loss, and thus represent a pool of sequestered carbon that is effectively permanent. Atmospheric CO2 fertilization may to some extent even enhance this pool of carbon.

Ongoing and potential policy approaches and positive incentives

South Africa has adopted an approach of conservation and sustainable use that has benefits both for carbon and biodiversity, and the maximum value for livelihoods. In pursuing this approach, we seek to maximize synergy of country commitments relating to reasonable steps to address climate change under the UNFCCC, conservation of biodiversity under the CBD, and sustainable development under the WSSD.

In the consideration of potential additional measures, South Africa would draw attention to the need for clear objectives that underpin policy approaches and incentives. Such objectives might include the achievement of certain targets in relation to avoided deforestation (ie preventing the conversion of a stated cover of pristine and near pristine forest at the global, regional and country level). Objectives of slowing rates of deforestation, as well as beginning the process of forest regeneration and restoration could also be defined at this range of scales.

Policy approaches and incentives may vary in relation to national population demands and needs in the relevant country of provenance, and in relation to the nature of the forested land under consideration, such as its level of fragmentation, standing biomass and species composition relative to a so-called “pristine” state. A “one size fits all” approach is not likely to achieve the defined objectives. We support the consideration of a full range of incentive approaches.
Particular consideration of the merits of a “Payment for Ecosystem Services” incentive should be undertaken, especially in the light of benefits to local economies and livelihoods. For example, the value of the ecosystem service might be calculated as a percentage of the total value of carbon sequestered on an annual basis.

Technical and methodological requirements related to their implementation

In identifying the technical and methodological requirements, it is essential that definitional issues be clarified upfront. We believe that a standard definition of forests is complicated by continental and regional differences in species composition and local conditions, including

historical factors. The distribution of potential naturally forested area per region might be described consistently by climate and soil factors, and by making use of ever-improving simulation models of vegetation structure and function. The distinction between naturally occurring Forest and non-Forest is not absolute, and should be applied with reference to local circumstances. This should recognize that forests are characterized by an appreciable cover of trees, but could preferably be defined by a minimum potential standing biomass per unit area which aggregates to a minimum carbon density value at the landscape scale, rather than a minimum tree cover or tree height cut-off.

Assessment of results and their reliability

We have no comments at this time.

Improving the understanding of reducing emissions from deforestation in developing countries taking into consideration relevant provisions of other conventions and work of multilateral organisations.

South Africa emphasizes the importance of identifying the opportunities for synergies and co-operation between multilateral environmental agreements, and maximizing the potential for enhancing efficiency, effectiveness and impact. In this context South Africa would call for an improved understanding of unintended consequences of, and linkages between other climate change, biodiversity, forestry, water, landuse, energy and industrial international policies and measures. For example, the unintended consequences of the mitigation actions that are driving biofuel development, on the rate of deforestation, and its contribution to GHG emissions.

PAPER NO. 18: THAILAND

Submission of the Kingdom of Thailand on reducing emissions from deforestation in the developing countries

Introduction

Climate change is a global problem, with global causes and effects. Preventing dangerous man-made climate change and dealing with the impacts that cannot now be avoided requires efforts by all sectors, consistent with their responsibility for greenhouse gas emissions, their capacity to take action, and the effects they will experience. Globally, forest ecosystems play a key role in addressing climate change by absorbing carbon dioxide from the atmosphere and storing it in growing vegetation and soil. Deforestation caused by the unsustainable harvesting of timber and the conversion of forests to other land-uses leads to significant emissions of this stored carbon back to the atmosphere. Deforestation alone currently accounts for 20% of global emissions of carbon dioxide. Forests and woodlands can also be managed as a sustainable source of wood – an alternative and less polluting energy source to fossil fuels, and a low-energy construction material.

At COP12 in Nairobi the discussion on reducing emissions from deforestation (RED) moved a step forward as a number of countries become more positive about it. This follows a workshop that was held in Rome on 30 August to 1 September 2006.

I. On-going and potential policy approaches and positive incentives

(A) At national level

Thai forestry policy is very much concerned on forest conservation and reforestation. In the forest reserve, the Royal Thai Government declared for logging ban in 1989. In the meantime, national parks and wildlife sanctuaries have been gazetted over hundred sites. Re-Afforestation areas were also increased a million hectares due to the Royal reforestation and private plantation initiatives. According to satellite imagery on the year 2004 and 2005, forest area was decreased only 0.36% of the total country areas of 513,115 km^2 from 32.66% in 2004 to 32.60% in 2005. It is shown a very well management on forest protection and plantation.

As governmental strategy to combat deforestation, it has been established a new policy for an action plan to prevent and control of deforestation in Thailand, such as restructuring of the forest protection and control groups, providing more equipments for forest protection and incentive to people participation to reduce emissions from deforestation. Moreover, scientific, socio-economic, technical and methodological issues are also conducted to estimate and monitor carbon stock changes in the forests, such as field measurements and traditional forest inventories. Methodologies for estimating greenhouse gas (GHG) emissions from deforestation are investigated by remote sensing technology in combination with field data measurement which is ongoing. On this positive policy and incentive to reduce emissions from deforestation, they are based on supporting forest conservation and sustainable forest management (SFM).

The future strategic action of the SFM, there will be focused on (a) net deforestation arrested; (b) most degraded areas rehabilitated; (c) community forests established with a secured tenure; (d) most industrial wood obtained from plantations with less dependence on rubberwood; (e) the wood-based industry having an active role in the development of its raw material supply; (f) all the timber harvesting operations verifiably legal and certifiable for SFM; (g) tree resources outside forests substantially expanded; (h) efficient forest product market with adequate transparency; (i) the international competitiveness of the Thai forest-based industry; (j) bamboo and rattan resources brought under systematic management and sustainably utilised; (k) the protected areas would be managed also for improved livelihoods for the people living in and around them; (l) a firmly grounded forest policy process in place based on national forest plan (NFP) principles; (m) decision-making based on adequate information; (n) forest industry organisation (FIO) privatized; (o) forest communities and forest owners effectively organised; (p) civil society well organised and educated on forestry; and (r) private sector promoting common interests through strengthened associations.

The Thai Government had provided some subsidies and incentives through various programmes for plantation development. Provision from the Bank for Agriculture and Agricultural Cooperative (BAAC) is currently going on in order to concerning the planting as an economic activities. Many

agencies have also supported for the royal reforestation. For reductions in deforestation, any rewards should be distributed among the stakeholders who are responsible for. The landowners would be rewarded on the basis of the amount of carbon that they could reduce, or on the area they managed, or on the opportunity costs they paid for maintaining the forest. However, it would be dealt with the equalities that result from ecosystem difference. The one who could manage for as above mentioned, therefore, there would be eligible for compensation. The rewards could be come from both the host country and Annex 1 countries. For the reward systems, the organisations that concerned on deforestation management would be managed for the costs and distribution of the rewards according to the value of achievements.

(B) At international level

In principle, Thailand supports the idea that reduced emissions of carbon from deforestation should be rewarded on a national basis through an international system. This should be dealt with as a separate system and by a fund from Annex 1 countries which will not count towards emissions reduction commitments of Annex 1 countries during the first commitment period; it should be a voluntary fund. Any payment for reduced emissions from deforestation would bring with it future obligations to maintain the forest. At the regional level, there could be a fund for rewarding to the best deforestation protection.

However, current proposals, such as 'Compensated Reductions', seek to reward national reductions in deforestation based on comparison of future deforestation rates with a baseline which represents historical rates of deforestation. Countries such as Thailand, which as shown above were early movers as regards controlling deforestation through afforestation, reforestation and conservation, therefore, parties to UNFCCC must develop a complimentary instrument to support those countries with historically low rates of deforestation and have effectively and efficiently implement to be enable to get the fund. Thailand, however, suggests that the methodology for valorizing reduced emissions from deforestation should seriously take into account the estimation of *rates of degradation*. Loss of biomass within forest may be a significant contributor to carbon emission, but is not included in simple areal estimates of deforestation. In countries such as Thailand, which have almost halted their deforestation, degradation may still be occurring. Financial rewards for reductions in degradation, on the basis of carbon saved, could be a valuable incentive to combat these processes. Funds made available for this could be used to cover the costs of gathering the additional data that would be required to establish rates of degradation, and to reward stakeholders who are responsible for its reduction.

In addition, any increases in net forest area should be subject to compensation, not merely reductions in the rate of deforestation.

II Technical and methodological requirements

(A) As regards the definition of forest, the UNFCCC uses definitions which are not the same as those of most national forest inventories. This has to be resolved somehow such that local definitions are better respected and that locally available databases can be employed directly. Among other problems UNFCCC requires a country to have *one* definition of forest: countries with multiple eco-zones may have difficulty with this. Moreover the definition of deforestation is simply loss of *area* of forest by the above definition, excluding forest degradation and de-vegetation.

(B) Remote sensing (RS) combined with ground sampling (following IPCC guidelines/as prescribed for GHG inventories) has been proposed as sufficient for reliable deforestation (in the sense of forest area loss) estimates, but such data collection and analysis may require technical assistance and capacity building in many countries, particularly as regards establishing reliable allometric equations.

(C) Data on degradation is difficult to gather. It requires a much greater intensity of ground surveying than deforestation, since RS cannot be used for this (RS cannot see/estimate the biomass density below the canopy). The potential of new technology such a Lidar could be explored, but brings with it even higher costs at present.

(D) The costs of field monitoring may be rather high if it has to be done on a regular and repeated basis. The possibilities of devolving the responsibility for making such measurements to the local stakeholders need to be investigated (accuracy/reliability/credibility)

(E) Any national system which involves rewarding local stakeholders for decreased deforestation or degradation (payment for environmental services, PES) requires an internally transparent system for distribution or rewards. This would have to take into account, among other things (a) the need to reward

those in areas most at risk from deforestation/degradation rather than all users in all forests (b) natural inequalities arising from different rates of growth in different ecosystems (c) the need to avoid perverse incentives. Considerable thought is required in the design of such a system and experiences of different countries in setting up such systems needs to be exchanged.

(F) Methodology for including carbon savings in wood products should be developed and policy devised to include this.

(G) Carbon stocks, particularly soil, should also be accounted for. This involves quite complicated methodology, since although loss of forest would result in major soil erosion in many places, there is difficulty of assessing what this means in terms of carbon emissions to the atmosphere, some soil may simply be transported to another location but not necessarily release the carbon.

(H) Carbon emissions from deforestation and forest degradation could be reported in accordance with IPCC Guidelines and Good Practice Guidance. The IPCC Guidelines and GPG apply a tiered approach. The selection of the tier to use for reporting on carbon stocks is based on national circumstances and related to data availability. Properly implemented, all tiers are designed to conservatively provide unbiased estimates. However, the gross deforestation rates need to be measured using geographically explicit data and may use archived satellite remote sensing data to assess historical deforestation rates.

III. Improving the understanding of reducing emissions from deforestation in developing countries

Although deforestation has been subject to considerable academic study, there has been little attention to the forces behind degradation. The implication that degradation is just a first step on the road to deforestation is not justified in many cases and more contextual research is necessary to help in the design of policy instruments which can be used at national level to combat it.

IV. Other suggestions

In addition to considering how a system of RED could link to and support other environmental conventions such as CBD, Ramsar, ITTO etc, as proposed in FCCC/SBSTA/2006/L.25, it should also relate to the Millennium Development Goals and broader sustainable development aims. The relationship between reduced deforestation and degradation on the one hand and on poverty on the other, needs to be kept in mind and win-win opportunities (carbon payments to poor, marginalised people in and around forests, to encourage more sustainable use of the forest) should be especially sought out.

Thailand reaffirms the concept of polluter pays that Annex 1 Parties that had contributed proportionally with greater amounts of GHG emissions should bear the same proportion of responsibility and mitigation costs.

PAPER NO. 19: VANUATU

Reducing Emissions from Deforestation in Developing Countries

Submission by the Republic of Vanuatu

February 2007

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Submission Overview

Mandate

The Twelfth Session of the Conference of Parties to the UN Framework Convention on Climate Change (the "Convention") invited Parties and accredited observers to submit to the secretariat, by 23 February 2007, their views on issues relating to reducing emissions from deforestation in developing countries, focusing on the discussion of ongoing and potential policy approaches and positive incentives, the technical and methodological requirements related to their implementation, the assessment of results and their reliability, and improving the understanding of reducing emissions from deforestation in developing countries. The Conference of the Parties (COP) invited Parties to also consider, as appropriate, relevant provisions in other conventions and the work of multilateral organizations.

The COP requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to consider the information in the submissions, beginning at its twenty-sixth session (May 2007).

Positive Incentives

The Rome workshop identified a number of positive incentives to address emissions from deforestation.

Vanuatu is currently undertaking the "Vanuatu Carbon Credits" project which is sponsored by the UK Foreign Office's Global Opportunity Fund and the Victoria University of Wellington. The objectives of the Vanuatu Carbon Credits project are to *inter alia* assess Vanuatu's forest resources and rates of forest change; identify drivers of deforestation and forest degradation; analyze the efficacy of three different positive incentives to reduce emissions from deforestation and forest degradation; and link possible incentive mechanisms to national and local sustainable development policies and priorities. A second phase of conducting a pilot initiative is also being considered subject to additional funding becoming available.

The three incentives analyzed in the project are:

i) Emissions trading based on a sectoral baseline and credit approach developed by GtripleC.

ii) Emissions trading based on the Carbon Stock Approach developed by the Centre for International Sustainable Development Law.

iii) The Direct Barter approach developed by Victoria University of Wellington.

Detailed overviews of each of these approaches are attached as Annexes I, II, and III respectively.

By analyzing the efficacy of the three different mechanisms when applied to Vanuatu, Vanuatu hopes to contribute to the current discussions on identifying and developing positive incentives. To contribute fully to the international effort to develop policy incentives, Vanuatu invites interested Parties and observers to consider and comment on these approaches as possible incentive mechanisms that could be considered to reducing emission reductions from deforestation and forest degradation.

In addition to the three incentives being tested in the Vanuatu Carbon Credits project, Vanuatu welcomes other positive incentives for consideration, including incentives that are not based on emissions trading.

When developing or analyzing any positive incentive, Vanuatu suggests they should be considered in the context of the following framework of principles that are based on the preamble and Article 3 paragraphs 3, 4 and 5 of the Convention;

i) *Environmental integrity.* Real benefits must be generated for the global atmosphere. As a result, domestic leakage and permanence need to be addressed, and any incentives must address the drivers of deforestation and forest degradation.

ii) *Comprehensive.* To be comprehensive emissions from forest degradation must be addressed and included in any incentive mechanism, as emissions from degradation are a significant source of emissions for some countries.

iii) *Support Adaptation.* Forest degradation results in a loss of biodiversity and decreases a forests ability to adapt to changing climatic conditions. In addition to being comprehensive, creating positive incentives to reduce emissions from forest degradation will also help adaptation efforts. This is particularly important in small island developing states such as Vanuatu that are particularly susceptible to the effects of climate change and will have the greatest difficulty in adapting.

iv) *Effective impact.* An incentive must generate emission reductions on a sufficient scale to have a real and positive effect on the global atmosphere. As emissions from deforestation and forest degradation account for at least 20% of global emissions, any trading mechanism should allow credits from reducing emissions from deforestation and forest degradation to account for a correspondingly significant share of the international emissions trading market.

v) *Cost-effective.* Emissions trading should be utilized as a cost-effective mechanism to addressing climate change. Emissions trading should be considered in conjunction with other incentive mechanisms and policy approaches that may also generate cost-effective reductions.

vi) *Adaptable to different countries.* Incentives should be adaptable to different socio-economic contexts in different developing countries. In this regard, countries with low historic emission baselines should be able to participate equitably, particularly when future deforestation or forest degradation rates are expected to increase. Small as well as large countries should also be able to participate.

vii) *Flooding.* Efforts to reduce emissions in other sectors should not be undermined. To create additional demand for emission reductions from deforestation and forest degradation Parties listed in Annex B to the Kyoto Protocol should make meaningful commitments to reduce emissions, and should also consider extending these commitments to other sectors not currently accounted for.

viii) *Support Sustainable Development.* Incentives need to be consistent with and promote developing countries sustainable development objectives. With this in mind any incentive should respect each country's sovereignty over its forests.

ix) *Open and Inclusive.* Incentives need to promote a supportive and open economic system that promotes the equitable participation of all developing countries. To this end, any tradable credits should be treated fairly in the emissions trading market and should not be unfairly discriminated against, as unfair discrimination against forestry based credits in effect discriminates against many developing countries' whose main means of participation in international emissions trading is through forestry based initiatives.

Reflecting the principle in the Marrakesh Accords that early actions should not be discredited, Vanuatu would like to emphasize that developed countries should 'credit early action' by ensuring that emission reductions generated by developing countries engaged in early efforts to reduce their emissions from deforestation and forest degradation can be creditable in future commitment periods post-2012. Such 'credit for early action' should be eligible for retroactive recognition should a future mechanism evolve. This will allow emissions markets to more quickly bring revenues to support developing country policies to reduce emissions from deforestation or forest degradation and also provide important learning opportunities.

Policy Approaches

Vanuatu welcomes the report from the Rome workshop that summarized a number of policies that can be used to address deforestation. It is noted that all of the policies except for one report either variable, moderate, low, or even negative success, with success often dependent on local circumstances. From this it seems that policies are likely to fail if countries do not have adequate resources to identify, develop, and implement appropriate policies. The Vanuatu Carbon Credit project aims at linking positive incentives with national and local development priorities.

Vanuatu suggests that Parties should share their own national policies and lessons learned from implementing these policy approaches. Rather than attempt to identify a set of international policies, Vanuatu suggests to focus on positive incentives that can be linked to nationally developed policies. These policies can be tailored to national interests, including national priorities under other international environmental law conventions such as the Convention on Biological Diversity. For example, the invasive vine *Merremia peltata* is a significant problem in Vanuatu's forests. It becomes established within degraded forests, covering and killing parts of the forest which leads to further degradation and loss of above ground biomass. Policies that aim at controlling and eradicating this vine in Vanuatu will both reduce emissions from degradation and reduce biodiversity losses. Developed countries and multilateral organizations should assist developing country Parties develop their own policy approaches that are best suitable to their local conditions and which can be linked, where appropriate, to positive incentives.

Vanuatu supports the request for supplemental funding and capacity building. Supplementary resources should be made available for developing countries to build the technical, legal and institutional capacity necessary to implement actions aimed at reducing GHG emissions from deforestation and forest degradation. Funding for emission reductions from deforestation and degradation should be additional to current and already established ODA programs.

Technical and Methodological Requirements

A forest area change assessment is integral to an evaluation of national deforestation and forest degradation rates and a national carbon stock assessment.

Pilot projects using remote sensing and ground-based carbon stock assessments are needed to test the feasibility of an international initiative to reduce emissions from deforestation and forest degradation. The value of pilot projects can also help to show developing countries the benefits of building historical databases.

To contribute to this process, the Vanuatu Carbon Credits project aims to follow existing guidelines in its forest assessment (e.g. GOFC-GOLD technical guideline for remote sensing and IPCC LULUCF/AFOLU GPG).

One critical issue for the Remote Sensing community is to test the degree to which satellite observations are useful in a number of cases and conditions. In this regard Vanuatu faces several changes that are expected to occur in other developing countries:

i) There are not any previous satellite based land cover/forest monitoring studies of any significance.

ii) Continuous optical observations are challenged by persistent cloud cover.

iii) Vanuatu is a remote island with only basic/limited satellite coverage and requires large amounts of initial data to cover all islands.

iv) Vanuatu's mountainous topography complicates image interpretation and mapping process.

v) Invasive species of vine (*Merremia peltata*) covers parts of degraded forests and dead trees, which may make satellite interpretation difficult.

The Vanuatu Carbon Credits project will employ and integrate a number of satellite data following the observation model of GOFC-GOLD for monitoring tropical deforestation primarily using historical LANDSAT TM and ETM data for high-resolution change monitoring. A complete coverage for Vanuatu exists for the 1989/90 and 2000-2003. An additional Vanuatu coverage is expected for the year 2006/07.

In terms of the approach of the remote sensing component phase I (to be completed by the end of March 2007) of the Vanuatu Carbon Credits project is to deliver forest cover maps and deforestation maps and associated area estimates for two time steps: 1989/90 and 2000-2003. If sufficient additional funding can be identified, additional remote sensing will use ancillary data for an internal validation and detailed studies on spatio-temporal deforestation processes using the mapping products and very-high-resolution satellite datasets for selected test sites or hot spots.

Assessment of Results and Reliability

Vanuatu is looking forward to reporting on a preliminary assessment of results from the Vanuatu Carbon Credits project.

Annexes

This submission presents three annexes describing possible future mechanisms. The Carbon Stock Approach is a project-based mechanism, the Sectoral Crediting Baselines Approach is a sectoral or programmatic mechanism, and the Direct Barter Approach is a macroeconomic (national) mechanism.

Annex I: Carbon Stock Approach

Summary

The Carbon Stock Approach[1] extends the principles of a voluntary emission trading to forest carbon reserves in developing countries. The objective of the approach is to mobilize private sector funding for the protection of forests. It is an approach that promotes private and public participation on all levels (local, regional, international) while avoiding the need for project specific baselines. It allocates a finite number of carbon credits to participating countries that represent the tonnes of carbon stored in a country's forestry resources in a base year. A portion of these forest resources are put into a reserve. The remaining areas outside the national reserve that are put under permanent protection or management will become eligible for generating credits that can be traded in the global carbon market. This creates a system which allows public and private entities in developing countries access carbon finance directly if they establish protection systems over their forest resources. This approach overcomes a number of difficulties associated with a national baseline and credit mechanism requiring that requires central oversight and coordination.

Background and Assumptions

Concept

The objective of the Carbon Stock Approach is to design an incentive mechanism that reduces the deforestation and forest degradation in developing countries. The mechanism aims to include the private sector in the protection scheme by enabling private sector participation and creating tradable carbon credits. Private, market-based self interest will be harnessed for the broader public goods of mitigating climate change, protecting biodiversity and avoiding further degradation of soils. The mechanism acknowledges that funds will have to be mobilized from the inception of the scheme to trigger the needed projects and measures.

The Carbon Stock Approach can be used in addition or as alternative to baseline and credit approaches. It has been developed to try and pose a solution to the following problems the authors see in the national baseline and credit approaches.

i) *Reliance on government oversight and management of national or regional incentives to reduce deforestation and forest degradation.* The forest administration and local forestry agencies are often characterized by weak governments, poorly enforced – and sometimes contradictory – policies and regulations, and corruption. It is therefore recommended to complement public policies with private action and set incentives for the protection of forest areas by private (and public) entities.

ii) *Failure to allow direct participation in the carbon market by both public and private entities.* Allowing direct participation by the private sector provides two benefits. First, private sector participation is the best option to generate the significant amount of finance required and enable direct participation in host countries. Second, private participation also allows local stakeholders direct access to the benefits of the mechanism without the need to going through potentially weak government agencies.

[1] The Carbon Stock Approach has been prepared by the Centre for International Sustainable Development Law ("CISDL") and the Global Public Policy Institute ("GPPI"), as accredited independent observers. Vanuatu is testing this approach in its Vanuatu Carbon Credits project. A more detailed discussion of the approach can be found in the CISDL and GPPI submission. The CISDL and GPPI submission is authored by Steve Prior, Robert O'Sullivan, and Charlotte Streck. The authors would like to thank M. Estrada, S. Gregory, J. Niles, L. Pedroni and B. Schlamadinger for their comments and input on earlier versions.

iii) *Failure of ex post crediting to generate financial incentives at the start of an activity, which is when it is needed most.* This has been observed in CDM LULUCF projects that rely on temporary crediting combined with ex post generation of credits under a baseline scenario.[2]

Assumptions

Table 1. The Carbon Stock Mechanism is based on the following assumptions:

Use of Market Mechanisms	We consider market mechanisms which rely on the payment for environmental services as the most promising tool to create sufficient financial transfers to motivate conservation of forests in developing countries. In order to mobilize the necessary capital and investment flows into developing countries, we recommend the development of a mechanism which is built on emission trading and the transfer of carbon credits.
Private sector participation	Mobilizing resources from private sector entities is essential for an effective protection of the world's forests. Traditional ODA financed protection measures have proven inefficient in the protection of the world's forests and in the limitation of further GHG emissions from deforestation and forest degradation.
Voluntary Participation	Participation in emission trading should be an opportunity for developing countries rather than a constraint. Creating tradable emission reduction assets through voluntary participation de-links the achievement of an environmental benefit from the obligation to achieve such benefit.
Real Financial Incentives	The financial return of standing forests must be taken into consideration when making land use decisions. Any scheme should be able to provide real financial incentives to conserve forests over the long term. Carbon revenues can be weighed up against other choices, such as to log, convert to agriculture or to pasture. Issuance of credits for standing forests will also produce a greater up-front financial incentive to protect the forests.
Inclusion of Degradation	Emissions from forest degradation are an important source of emissions for a number of countries. For an incentive mechanism to be comprehensive, these emissions should be included. Degradation is also often the precursor to deforestation, reduces a forests ability to adapt to climate change, and reduces biodiversity, so reducing degradation will provide a number of other benefits that need to be taken into consideration.
Internationally Accepted Methodologies	The volume would be assessed using methodologies currently under development.[3] The accuracy and precision of the available data will have to be assessed. Additional costs for data collection should be supported by contributions from Annex I countries.
Equitable Participation	The scheme should enable the equitable participation of all countries – including small countries and those countries with historically low levels of deforestation and forest degradation. It should also avoid perverse incentives.

[2] Depending on the crediting mechanism chosen in the Carbon Stock Approach this problem may still persist. However, a possible crediting mechanism to overcome this problem has been identified and developed. See the CISDL and GPPI submission for a more detailed discussion.

[3] The IPCC's guidelines are one possible example. See also the work of GOFC-GOLD; http://www.fao.org/gtos/gofc-gold.

Overview of the Carbon Stock Approach[4]

The Carbon Stock Mechanism involves:

1. Calculating the amount of carbon stock that exists in a country's forests;
2. Issuing credits representing the carbon stored in the above ground biomass of national forests;
3. Establishing a reserve over part of the national forest area;
4. Approving eligible projects that commit to protecting forest area outside the reserve (but included in the national forest stock) and periodically verifying the quantity of carbon stock being protected;
5. Issuing a corresponding amount of tradable credits to the approved projects. This involves either temporary crediting or permanent crediting. It is also linked with issues of permanence and protecting sovereignty.

A number of additional issues are also discussed including:

6. Participation criteria;
7. Force majeure;
8. Increases in carbon stock.

The following section provides an overview of the Carbon Stock Approach. A detailed description and discussion follows.

Forest Assessment

Countries that voluntarily choose to participate in the mechanism assess the above ground carbon stock within their forests[5] on a particular date or over a particular period of time (the "Assigned Carbon Stock"). This assessment is reported to the UNFCCC Secretariat.

Issue Non-Tradable credits.

Non-tradable carbon units – called "Carbon Stock Units", are allocated by the Secretariat or the country on the basis of accounted carbon. Soil carbon is disregarded as it is difficult to accurately assess and is best protected by maintaining above-ground biomass. Disregarding soil carbon reduces the total number of credits and also ensures a conservative approach.

Establish the Reserve

Countries establish a reserve over a certain amount of their forest. In practice the size of the reserve will be negotiated by the countries participating in the mechanism either as part of the overall post 2012 negotiations or as a separate mechanism. The reserve should reflect those areas of forest that are not under existing or future threats of deforestation, and which the participating country does not aim to develop to further its own sustainable development. If part of the reserve is lost (for reasons other than force majeure) the host country would need to add additional forest areas to the reserve in an amount that would over-compensate for the loss within the reserve. The reserve volume may or may not be re-negotiated over successive commitment periods. Determining how much is set aside as a reserve, and determining where to establish the reserve will be difficult. However, it is not expected to be more difficult that estimating a national baseline or negotiating a quantified emission limitation and reduction commitment for Annex I Parties.

[4] See the CISDL and GPPI submission for more detail.
[5] See the CISDL and GPPI submission for a more detailed discussion of what constitutes a "forest".

Define a Trading Mechanism

A trading mechanism (the "Carbon Stock Mechanism" or "CSM") is defined. To be eligible to trade the amount of stock held in the reserve needs to be maintained. The Carbon Stock Units corresponding to the biomass stored in the forest of the core area are not eligible for trading. The carbon stock in forest outside the reserve is by definition threatened by deforestation or degradation in the future and eligible for trading.

Protection Activities and Issuance of Credits

Countries and authorized private entities can propose areas of forest outside the reserve that they agree to permanently protect or sustainably manage. A conservation and management plan is approved by the host country and an independent body. The standing stock within the protected area is assessed more accurately than under the national assessment and the host country converts some of its Carbon Stock Units that are outside the reserve into tradable credits. Tradable credits can be issued for these areas on a one-time or (preferably) renewable basis. The protected area is periodically assessed to ensure permanence.

Renewable or temporary crediting will safeguard against loss of permanence and ensure a sustainable income for participating entities. The reduced price received by project sponsors for temporary credits will be offset by the increased volume of credits available compared to a baseline and credit scenario and the timing of their availability[6] – two key hurdles in CDM LULUCF projects. An ability to have temporary credits re-issued indefinitely rather than replaced at some arbitrary point in the future will also increase the appeal of the credits and overcome the current perverse incentive in the CDM to harvest a forest once the carbon credits can not longer be issued.

Participation criteria

Participation is voluntary. However, to be eligible to participate in the mechanism a country will have to put in place the necessary infrastructure. This infrastructure includes assessing the carbon stock, defining the core area of forest that is not eligible for trading, designating a national authority to approve projects[7], and establishing a registry system that can record issuance and transfer of Carbon Stock Units and be linked into the International Transaction Log. Annex I countries are called upon to support the development of the necessary infrastructure.

If a country fails to maintain the agreed amount of reserve carbon or compliance with the participation criteria, the country will not longer be eligible to approve new projects. Existing projects already approved should still be able to have its carbon stock re-verified as individual projects or communities that are performing as planned should not be penalized by events in another part of the country outside of their control.

Force majeure

Forests are often subject to threats outside of the control of a country, such as accidental fires, cyclones, flooding, and changing weather patterns. The loss of carbon due to these types of force majeure events should not prevent a country from meeting its commitments to maintain the reserve. If a country looses part of its reserve due to a force majeure event, projects should not "punished" by being prohibited from participating in the mechanism or receiving credits from their projects if they are performing.

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[6] See the CISDL and GPPI submission for a more detailed discussion on possible problems with up-front crediting and some suggested solutions.

[7] For convenience this could be the DNA established for CDM projects.

Increases in carbon stock

Increases in carbon stock – both within the reserve and within individual projects are likely to occur. While it may be possible to issue new credits for additional carbon sequestered, we suggest that any increases in carbon within the Carbon Stock Mechanism should be excluded from the mechanism. This serves two purposes. First, a mechanism that allows for a net *increase* in units is different to the proposed approach. It also ensures the mechanism does not compete in any way with afforestation and reforestation under the CDM, or any modified version of the CDM that may include forest restoration projects. Second, to ensure the mechanism is conservative. Including increases in stock could be reviewed in the future after the mechanism has been tested and any problems with its efficacy have been identified.

Comparisons with Other Mechanisms

Table 2 compares the Carbon Stock Approach with the national baseline and credit concept and the CDM. A generic national baseline and credit system was used for the purposes of comparison. The authors recognize that details of specific approaches may differ from the details represented below.

LULUCF activities under the CDM are also included in the table to highlight the differences between the national project based approach of the Carbon Stock Approach and the purely project based CDM. The CDM and the proposed Carbon Stock Mechanism would complement each other as CDM projects can be implemented outside of the boundaries of the accounted carbon stock areas and can promote afforestation and reforestation activities.

The Carbon Stock Approach can also be designed as an ongoing financial mechanism for CDM afforestation and reforestation projects once their crediting period has expired. After the crediting period of a LULUC CDM project expires, the projects can be eligible to receive credits under the Carbon Reserve Mechanism. This will ensure the financial incentive to preserve the forest is maintained, which will overcome the perverse incentive created by the current CDM rules to harvest a CDM forest as soon as it is no longer eligible to generate CERs.

Table 2: A comparison of different mechanisms

Carbon Stock Approach	**National Baseline and Credit**	**Clean Development Mechanism**
Establishing the Mechanism		
Based on assessing total above ground carbon within a country's forests and setting aside a reserve. Reserve will be difficult to agree upon and in effect is similar to a future baseline assessment at a future point in time. Determining the geographic location of the reserve will also be difficult.	Requires the assessment of national deforestation and forest degradation rates, either historical and/or projected. The establishment of a national baseline will be difficult and controversial. Taking into account the occurrence of unplanned and illegal logging activities in many forests, exact data to determine a deforestation baseline are hard to obtain. Historical deforestation baselines also reward high deforestation rates.	CDM already established but reducing emissions from deforestation or forest degradation are not eligible to generate credits. Project specific baselines are not adequate for projects that avoid further deforestation. Not only will it be difficult to determine the baseline of a particular activity; for most avoided deforestation activities it will also be difficult to define project boundaries, avoid and quantify leakage, determine title to carbon credits, monitor the emission reduction, and not to reward illegal activities.
Combined national and project specific approach plus an international mechanism.	National approach plus an international mechanism.	Project specific approach plus an international mechanism.

Other than to assess a country's carbon stock at the reference year or a reference period, it does not rely on availability of historical data or historic changes in forest cover.	Historic data used to establish the baseline may be difficult to obtain or may not exist.	Eligibility requires historic data. Project specific baselines are required.
Assessment at a base year or base period gives an accurate start date for the mechanism. Agreeing on a base year or period will be subject to negotiations and may be difficult.	Historic deforestation rates will always be behind current pressures and will need to be adjusted to take into account future rates.	Historic deforestation rates will always be behind current pressures and will need to be adjusted to take into account future rates.
Countries with low historic rates of deforestation and degradation are not penalized as future deforestation rates and sustainable development objectives are considered when establishing the reserve.	Countries with low historic rates of deforestation and degradation are penalized unless a purely historic baseline is adjusted to consider future deforestation rates.	Eligibility tied to status of land in 1990.
Does not create a perverse incentive to deforest to artificially inflate baseline, but creates a strong incentive to over-estimate future deforestation.	Needs to be carefully designed to eliminate perverse incentive to increase deforestation to inflate a historic baseline.	
Implementation		
Allows decentralized implementation by private and public entities, including local and international private entities as well as local communities. Government involvement is still required in project approval.	Top down implementation requires careful planning and implementation by the government.	Allows decentralized implementation by private and public entities, including local and international private entities as well as local communities. Government involvement is still required in project approval.
Sufficient government resources needed to assess national forest carbon stock, establish and protect the reserve. Individual projects are monitored and protected by project sponsors.	Government is required to have sufficient technical capacity and resources to effectively develop and implement national projects or programs to reduce deforestation in anticipation of future payments. National projects may need to be tailored to address local issues.	Project sponsors need sufficient resources to implement projects in advance of credits being generated. High transaction costs, and long lead times in generating credits acts as a barrier for many projects.
Individual projects can be tailored to address local pressures. National approach prevents national leakage.	May be possible to have regional policies.	Individual project can be tailored to local environments. Not a national approach so leakage would be an issue if extended to REDD projects.
Payments made directly to private or public sector project sponsors.	Central government receives funds and is responsible for the implementation of protection programs.	Payments made directly to private or public sector project sponsors.

Economic Efficacy		
Depending on the crediting mechanism, credits are created and available for sale when the protected area is established.	Credits created and available for sale after the project or program is established and a period of time has elapsed.	Credits created and available for sale after the project or program is established and a period of time has elapsed.
Income generated from sale of credits from the start of the project can be used to finance the project.	Policies and incentives require independent funding when project start, or advanced payments for un-generated credits at a discount.	Projects require independent funding when started, or advanced payments for un-generated credits at a discount.
Volume and price risks minimized as a known volume will be issued at the start of the project at current prices. Risk of loss in cases of non-permanence. Depending on the crediting mechanism chosen, credits can be sold under forward contracts at known prices at a discount.[8]	Volume of credits unknown at start of a national project. Prices received when credits are generated will be hard to predict. Credits can be sold under forward contracts at known prices at a discount.[7]	Volume of credits unknown at start of a national project. Prices received when credits are generated will be hard to predict. Credits can be sold under forward contracts at known prices at a discount.[7]
Potential to flood the market and compete with domestic reductions (and CDM and JI) unless restrictions are placed on volumes or demand for credits is significantly increased (e.g. by tougher Annex I targets).	Potential to flood the market and compete with CDM and JI unless restrictions are placed on volumes or demand for credits is significantly increased. However, market control easier as the market is limited to government to government transactions.	Fear that credits would flood the market have not been realized. Caps on credit volumes have not been met.
Long term stream of credits and income is less certain if permanent crediting adopted. (Not recommended) With temporary crediting the credits will be re-issued and available for re-sale periodically which will create a stream of income over the long term.	Long term stream of credits and income is less certain if permanent crediting adopted. With temporary crediting the credits will be re-issued and available for re-sale periodically which will create a stream of income over the long term.	With temporary crediting the credits will be re-issued and available for re-sale periodically which will create a stream of income over the long term. Permanent crediting not an option.
Temporary credits will be re-issued indefinitely as long as the protected forest remains intact.	Temporary credits can be re-issued indefinitely as long as the protected forest remains intact.	Perverse incentive to cut down the forest once the project crediting period ends as temporary credits can not be re-verified or re-issued indefinitely.
Central government only responsible for periodically assessing carbon stock within the reserve. Assessment of carbon stock within a project outside the reserve is the responsibility of the project sponsors/independent verifiers.	Central government responsible for periodic national assessment of forest coverage.	Project sponsors responsible for assessing carbon within the project boundary. Independent verification.

[8] The size of the discount will be a function of perceived delivery risks. Current discounts for forward purchases of CDM credits have been know to range up to 60%.

Environmental Integrity		
Advanced crediting as potential to generate "temporary hot air" if forest is lost soon after issuance of credits. This can be mitigated by excluding soil carbon to ensure conservative issuance of credits, and can be further mitigated by requiring a portion of issued credits to be banked until a history of protection has been established. Temporary hot air may also be seen to be generated where stock credits are used for compliance, but the underlying forest may not have been lost until some point in the future.[9]	No hot air at issuance as crediting based on ex-post assessments against a baseline. "Hot air" may be created if actual business as usual deforestation rates are lower than the baseline.	No hot air at issuance as crediting based on ex-post assessments against a baseline.
Temporary crediting ensures lost carbon stock is accounted for in subsequent verifications.	A portion of credits can be banked as insurance against future losses if permanent crediting adopted. Temporary crediting ensures lost carbon stock is accounted for in subsequent verifications.	Temporary crediting ensures lost carbon stock is accounted for in subsequent verifications.
Temporary crediting will ensure continued payments over the long term.	If deforestation rates are reduced and flatten over time, under a permanent crediting mechanism credit volumes will be reduced over time as will incentives to reduce deforestation. Temporary crediting will ensure continued payments over the long term.	Temporary crediting will ensure continued payments over the long term until the end of the crediting period at which point there is a perverse incentive to cut the forest.

It is worth comparing the practical effect of the Carbon Stock Approach with a baseline and credit approach using the following hypothetical example:

In 2000 country A assesses its forests and calculates it has 100 tonnes CO_2e stored as carbon. It also estimates that based on future deforestation rates and its sustainable development objectives it will have 50 tCO_2e in 2025 and this amount is put into a reserve. The forest corresponding to the 50tCO_2e outside the reserve will therefore be eligible for protecting under individual projects and receiving tradable credits. Comparing to a national baseline and credit scenario, if deforested in a business as usual scenario this area outside the reserve will also be deforested by 2025. If in 2025 as a result of a positive incentive mechanism there are in fact 70 tCO_2e stored in the countries forests, under both the Carbon Stock Approach and a baseline and credit approach 20 credits would be issued.

[9] See the CISDL and GPPI submission for a more detailed discussion of for mitigation options.

Annex 2: Sectoral Crediting Baseline Approach - Minimizing Carbon Stock Losses from Deforestation and Forest Degradation

Background Context

The term *sectoral approach* now appears frequently in 'post-2012' international climate change policy literature and discussions. It is mooted that this may provide a way forward and resolve some of the contentious policy issues that have hampered progress thus far.

There are two main families of "sectoral approach" proposals. These are quite separate, but potentially mutually compatible.

The first is what is often called the **transnational sectoral approach**. This describes a family of ideas where agreements in some future international regime may be struck with some key sectors rather than have the operations of these sectors covered under country agreements. The sectors considered here are usually involved in globally traded, highly energy intensive (or GHG emissions intensive) commodities, such as aluminium, cement and steel.

The second is what can be described as the **in-country sectoral approach**. Here the notion is that in some future international agreement some countries may volunteer emissions management commitments for some of their key sectors rather than for their full economies. This is mostly discussed as an option for engaging greater participation by developing countries than presently occurs under the Kyoto Protocol agreement.

The discussion here sits in this second family of ideas for a sectoral approach and focuses on a sectoral crediting baseline approach for minimising carbon stock losses from deforestation and forest degradation.

Crediting baselines for developing countries are generally proposed to be 'no lose' in nature. There would be no compliance consequences if these countries failed to meet their baselines. However by beating these baselines they would receive tradable emission credits that industrialised countries could use to help comply with their targets.

Unlike with the CDM where activities sit outside the main quantitative agreement, there would be no requirement for any additionality assessments for these credits to be considered fully legitimate in the international carbon trading system. The whole point of this form of commitment, therefore, is that baselines could be met by these countries' reasonable efforts so that the international carbon market could be a major source of inward financial resources.

Description of Proposed Approach

Given that reducing emissions from deforestation and degradation (REDD) has a separate UNFCCC COP agenda track, it is feasible that COP decisions may be taken separate from or part of a post-2012 international mitigation agreement. The model outlined here can be generally described as an open 'bottom up' proposals approach that could play into either of these COP processes.

Countries can be expected to justify their proposals in the full light of scrutiny by other countries in the negotiating process. The key point about an agreement of this nature is that by having other countries agreeing to a baseline for a specific sector in a developing country, credits can be generated at a national level without project-specific baselines that require an international assessment of additionality.

In this discussion the term 'sector' is used in a general sense. While it does mean activities in a given sector, in this case the land use, land-use change and forestry (LULUCF) sector, it does not necessarily mean economy wide coverage. In fact, what is proposed here is that it covers carbon stock management activities within a geographic area defined by the country. In practice, this 'programme management area' would represent those areas of the country where there is a significant risk of reductions in carbon stock by deforestation or forest degradation.

One option for this approach would be to establish baselines on the basis of emissions[10]. A conceptual depiction of this is shown in Figure 1.

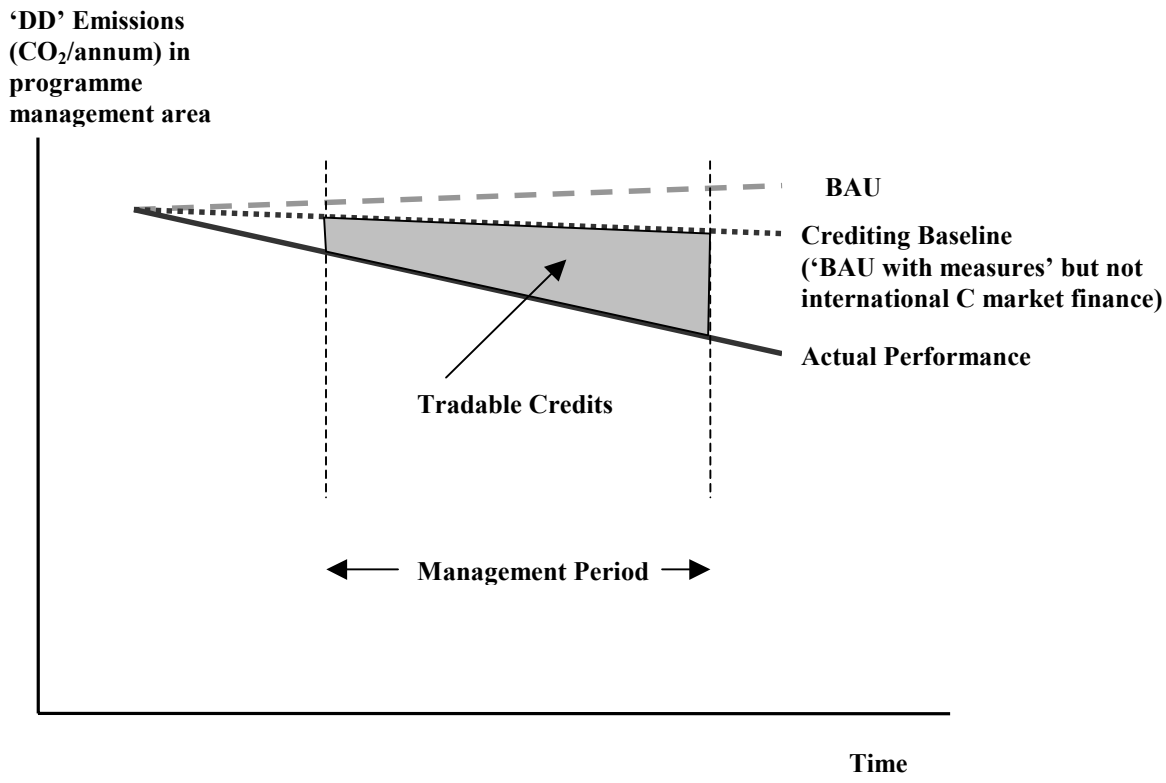

Figure 1. Establishing emission baselines and getting credits

Some of the features that Figure 1 shows are:

- In determining an appropriate crediting baseline, those proposing it and those negotiating it would be trying to assess what measures the country may be able to take to improve the performance of the sector without the need to mobilise inward investment through the international carbon market. These may be 'no regrets' measures worth doing in their own right (e.g. erosion control, water catchment protection, biodiversity protection, improved/diversified forest productivity). They may also be measures that go beyond no regrets but for which some other funding package is available, e.g. from the World Bank or other institutional or private development banks. But at some point a 'line' is reached beyond which actions are unlikely to be taken without the further financial resources that can be mobilised through the emissions trading market that will be created through the overall negotiated climate change mitigation package. It

[10] In a LULUCF case this would be net emissions, i.e. taking account of removals by sequestration as well as deforestation and degradation (DD) emissions.

is this line that the negotiations are trying to identify and agree. This then is the crediting baseline for the 'sector' for this country.

- The amount of tradable credits over the management period is represented by the area between the crediting baseline and the actual performance….the grey shaded area.

The model depicted in Figure 1 might be seen as generically applicable to any emissions sector. However for the LULUCF sector, and with respect to REDD specifically, another option is to have baselines established in carbon stock terms, not emissions.
This is shown in Figure 2.

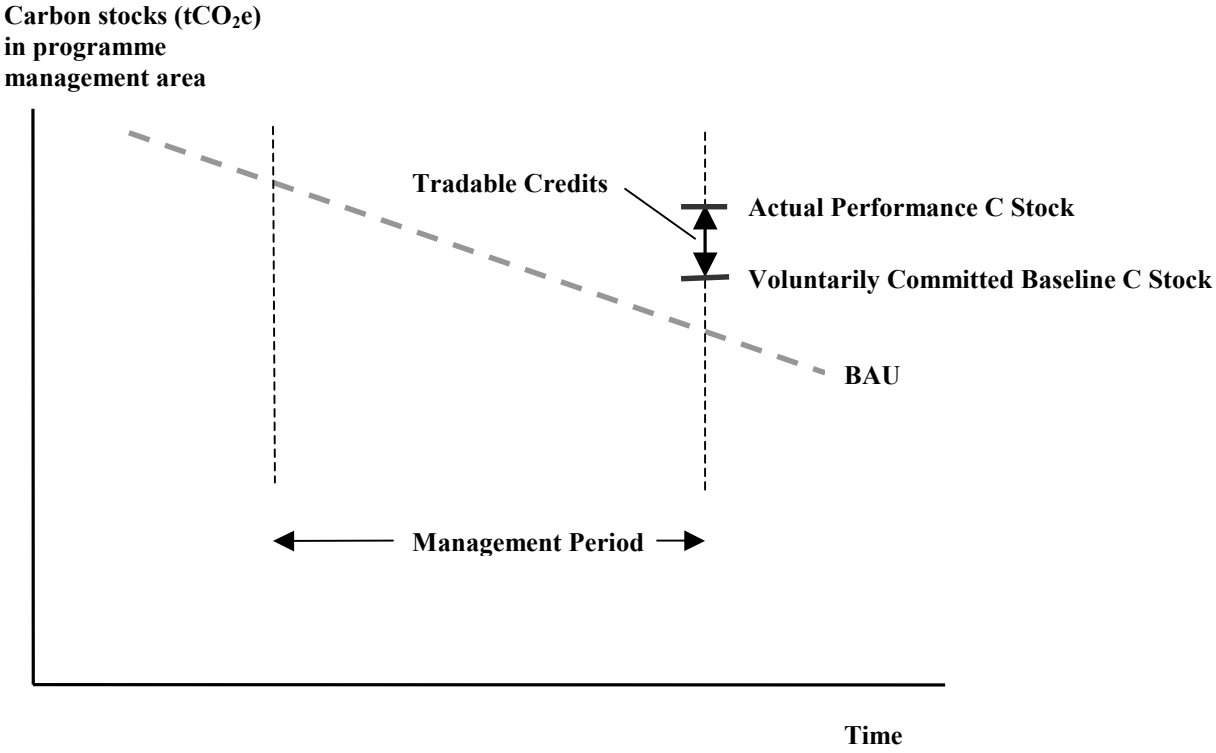

Figure 2. Establishing Carbon Stock baselines and getting credits

It is this option that is further developed here as the proposed approach.

Some of the features that Figure 2 shows are:

- In this depiction, the country has a historical trend of reductions in carbon stocks in its programme management area. If this BAU trend continues it will have a significantly reduced carbon (C) stock at the end of the management period.
- The country voluntarily proposes a commitment of a C stock level at the end of the management period, and this is accepted in the international negotiation process as the crediting baseline C stock. The same issues noted above in the discussion of Figure 1 with respect to measures taken without support through the international carbon market (e.g. no regrets measures) apply here, reflected by the baseline C stock being higher than the BAU stock.
- The country achieves a higher C stock than the baseline C stock at the end of the management period and is awarded carbon credits equal to this difference.

Project activities within programmes

To facilitate activities on the ground that help the country to minimise carbon stock reductions from deforestation and forest degradation and 'beat its baseline', including facilitating the connection of these activities with international carbon financing, a part of this approach is a domestic mechanism for carbon stock management.

Under this mechanism, project proponents would enter into a contract with the host government where they would commit to a minimum carbon stock level at the end of the management period within an identifiable project boundary inside the programme area. They would receive tradable carbon credits upon achieving a higher carbon stock than the project baseline stock.

In essence, this project level activity is managing a portion of the country's full programme area obligation. It could be expected that a third party expert group would assist the parties reach such an agreement by providing the necessary analysis and act as a verifier of the stocks at the end of the management period.

The work of this third party expert group is similar to that of a designated operational entity in the CDM. The key difference is that their work is to inform the process by which this domestic-level agreement is reached between the government and the project proponent.

Projects could conceivably be anything that helps the government meet its obligation. They could reduce historical (and projected) levels of deforestation and forest degradation as well as enhance carbon stocks through forest restoration and afforestation/reforestation.

With a firm contract in place with the government, the project proponents could then enter into a forward contract sale of compliance-grade credits to international carbon market buyers.

Managing Risks

Permanence

The concern of permanence must always be addressed with LULUCF projects or programmes. Will carbon stocks that have been protected or enhanced with carbon credits (which in turn have allowed offsetting emissions elsewhere) continue to exist or will they be disturbed after the management period, e.g. by forest harvesting or fire, storms etc?

The CDM 'temporary credits' approach used for afforestation and reforestation projects could be employed here as well. But another option is that the country guarantees to maintain into the future the carbon stock level at the end of the management period. While this approach places more responsibility onto the country, it would avoid the discounting of the value of credits that is inherent with temporary crediting.

Because of the broader geographic programme scale of this approach, there is less effect from individual disturbances. Should the carbon stock in the programme management area suffer from a significant unavoidable disturbance (e.g. a large forest fire or hurricane) and fall below the guaranteed level, there should be a time limit provision that enables the country to build back up the carbon stock through an active replanting/regeneration programme.

Non-performance

One risk from the perspective of project proponents within the domestic mechanism is that they will deliver a level of performance that under their contract with the government should provide them with

tradable credits, but the overall programme fails to beat the programme baseline by at least as much as the sum of overachievement of all projects. This may lead to some reduced provision of credits, potentially even no credits. Managing this risk will need to be an element of the domestic contracts, as well as the forward sale contracts that project proponents will have with the buyers. As credits, in essence, are just a form of financial commodity, this may involve payments of equivalent value, potentially backed by risk pooling insurance instruments.

One risk from the perspective of governments is that non-performance by specific projects that were being relied on to at least meet their project baselines means that the overall programme fails to beat the programme baseline by at least as much as the sum of overachievement of all projects. This may place liabilities on the government as noted above. Managing this risk will also need to be an element of the domestic contracts.

Institutional issues

Without question, a sectoral approach such as described here places more responsibility on governments than a project-by-project approach such as the CDM. But the potential values of the approach are also much greater. The scale of activities supported by international carbon finance can be much larger. A sectoral programme approach means that small activities can be included that could not possibly be viable in an international projects-based approach. Transaction costs can be much lower; hence more of the money is available to support the local activities and less is lost to others who get fees from the transactional procedures.

However, because of the responsibilities on the host country governments and the 'risk management' nature of the contracts noted above, it can be expected that there will be institutional capacity and legal issues that may currently be significant barriers in some developing countries. Efforts to address these issues will be needed in advance of such a mechanism being implemented internationally.

In particular, there is a risk that some smaller and least developed countries may be 'left behind' because these institutional barriers are comparatively very high. In addition to targeted capacity building for such countries, some possible ideas to address this problem include:

- the 'contacting out' to third party expert groups of some of the programme management tasks – in essence such expert groups would act on behalf of the government, including for example in preparing for and helping the government negotiate the baseline carbon stock with the international community and helping manage the domestic programme
- the involvement of regional institutions that can help manage issues on a regional basis, including international negotiations and in-country programme management

Other Issues

National Leakage: To address national leakage concerns, there would need to be an assessment of overall national carbon stocks at the beginning and end of the management period so as to detect any significant reductions in stock that have occurred outside the programme area. This could be done at a lesser level of measurement stringency, e.g. through satellite imagery.

Accounting treatment of harvesting and harvested wood products: This is an outstanding issue in the UNFCCC process and one which is expected to be resolved as part of the post-2012 negotiations process. One idea related to the proposed approach here is that the carbon stocks assessed at the end of the management period could include any stocks that have been harvested from the programme area during the programme period, but that remain in wood products in the country, e.g. in construction material and furniture in buildings. This would, of course, require an associated inventory effort.

Annex 3: Direct Barter Approach - A Macroeconomic Ecosystem Services Market

Introduction

The Direct Barter approach to the protection of ecosystem services involves negotiating the exchange of an ecosystem service provided by one entity with something of value that can be provided by another entity. The 'seller' is a developing country or an entity within a developing country which presents a portfolio of ('to-be-protected') ecosystem services as large scale barter assets. The 'buyer' is a partner country (or agencies within a partner country including the private sector) seeking to protect these ecosystem services in the interests of global climate commons protection. The value to be exchanged in a barter transaction is determined through barter negotiation between negotiating parties and could include cash, debt cancellation, trading opportunities, employment, migration, technology transfer, education, capacity building – anything that the seller wants from the buyer that the buyer is willing to consider trading. This mechanism is similar to existing market approaches but where the credits are able to be paid by things other than money.

The market for the protection of climate-related ecosystem or biome services is not restricted to private sector transactions in the carbon markets. The intergovernmental community has always had a license to trade what ever two or more trading partners are seeking to exchange across international borders. History offers many examples of large scale intergovernmental transactions through the centuries, several of which are of strategic and historical significance to those nations. Peace agreements and accords, military allegiances, resource exchanges, trans-boundary treaties, migration agreements, and trade deals are all within reach of groups of governments seeking to benefit from an international exchange of value.

As the awareness of the scale of risks associated with the climate change problem increases in the industrialized nations, the willingness-to-pay for global ecosystem services is also on the rise. The Direct Barter mechanism focuses on these kinds of transactions, where 'payments' for ecosystem services for global climate protection arise out of direct negotiation between nations or groups of nations.

The advantage of this mechanism is that it presents an opportunity for large scale transactions that may lie beyond the capacity of private sector actors in carbon markets. It is particularly useful as a means of putting a 'price' on non-market ecosystem and biome services and enabling transactions approaching and including a macroeconomic scale. It also enables carbon to be packaged with other important global ecosystem services (biodiversity, soil and watershed protection, and non-carbon climate-related ecosystem services generated by forest ecosystems) into a portfolio that amounts to a commitment to protect these services for the benefit of the global community in exchange for tangible development benefits to the local community.

Establishing the basis of a potential direct barter market for any host country requires an evaluation of potential barter assets for barter negotiations, and the generation of a portfolio of options that the seller is seeking in exchange for the protection of these services. It also necessitates an appraisal of potential buyer partners (country, sub-national state, or other agency) and their "willingness to pay" for the ecosystem services under negotiation.

The underlying principle of the approach recognizes that

- developing countries are removing or degrading their forests as a means of achieving certain key development goals
- opportunities exist to assist these countries to achieve these development goals in a more sustainable way that provides benefits locally, nationally and internationally

- realigning a sector of an economy to a more sustainable development path through large scale forest conservation programmes comes with significant opportunity costs (particularly in the short term)
- the potential to offset these opportunity costs presents an opening for a Direct Barter transaction
- offsetting these opportunity costs can facilitate the protection of economic sovereignty if it enables a country or sector to achieve its development goals without having to sacrifice its forest-based ecosystem services

A New Zealand Example

An example of Direct Barter in practice was the 2001 transaction between the New Zealand Government and a local community of 35,000 people in a forested region of the country, whose indigenous forests were subject to a major public conservation campaign in the late 1990s. Environmental NGOs were seeking the protection of 130,000 hectares of indigenous forests for biodiversity protection on the West Coast of the South Island. The majority of the local community on the other hand supported the continuation of logging in these forests. Clearly, many in the local community supported the logging because of the economic benefits it generated for that community. The key then was to find a way for equivalent or appreciable economic benefits to accrue to this community without logging the forests.

A Direct Barter proposal was developed to protect the forests in the national interest in exchange for economic development assistance from the Government for the local community. This was originally proposed as an asset swap involving a state owned plantation resource to be transferred to local ownership. The government decided to offer the local community the equivalent value of this state-owned asset (NZ$100 million – US$69 million). The community rejected the original offer and negotiated it up to the agreed NZ$135 million.

The majority of the funds delivered to the local community were placed in a locally controlled Trust to be managed by the community as investment capital for local development initiatives. Most of the funds were invested with the interest made available each year in a contestable fund for loans on business development initiatives. By 2004 this region had become the fastest growing region in the country with a buoyant local economy and local community leaders rejecting political proposals to restart the indigenous logging.

The principle here was to help enable the local community to “log” their forests financially but not physically – i.e. use the value of ecosystem services provided by their forests as leverage for a negotiated Direct Barter transaction that helped them to achieve their locally determined development goals. The transaction was between a rural community with a natural forest asset, and central government with surplus capacity to strategically foster regional economic development. The willingness to pay for this development assistance by central government was increased by the desire of central government to protect the forests in that region in the national interest.

Additionality, Permanence and Leakage

Additionality: Whilst history does provide a record of occasional large scale forest conservation initiatives, a realignment of a country’s forest sector as a sustainable development measure is far less frequent. The scale of transaction targeted by the Direct Barter mechanism is that which would enable an institutional realignment of the forest sector in the direction of sustainable development. By definition such initiatives would tend to be additional because they are designed to change what constitutes business as usual for the forest sector.

Permanence: The forests in question were placed into permanently protected areas managed by the Department of Conservation.

Leakage: the New Zealand Government decided at this point to end its involvement in any logging of indigenous forests. Demand for indigenous timbers is now met through privately owned indigenous forests under a legislative framework that only permits harvesting regimes built on ecologically-based sustainable forest management regimes under government licence. International leakage remains a possibility for this case study - through an increase in demand for unsustainably harvested timbers imported from other countries. Addressing this, however, was beyond the scope of the initiative that protected these particular forests, and remains to be implemented (although there have been ongoing efforts by various actors to address this problem before and since).

All necessary mechanisms to ensure permanence and prevent domestic leakage would need to be a necessary component of the eligibility criteria for a Direct Barter transaction. The political economy of forest protection under normal circumstances is such that it is only politically feasible to address permanence and leakage in stages of on-going campaigns or programmes (and is often incomplete – to the discontent of forest conservation advocates). But the point of Direct Barter is that it involves transactions of such a significant scale that the political economy of forest protection shifts into a higher gear, whereby the "willingness-to-pay" the political and economic price for fully addressing permanence and leakage (through legislation for example) becomes an acceptable and necessary price for the seller to pay in order to secure the transaction. This is one of the reasons why it is ideally a mechanism that involves transactions where the host is a sovereign nation capable of instituting permanence and leakage mechanisms through law. The buyer could be another nation or a private sector agency.

Offsets: One key attribute of this approach is that the carbon savings are absolute for the atmosphere, i.e. there are no carbon credits involved that allow offsetting
emissions elsewhere. This avoids the necessity to calculate the exact volume of carbon involved in such transactions – this would be very difficult for carbon volumes of this scale anyway. Carbon stock estimates would be sufficient. These estimates could be based on remote sensing data combined with forest inventory data for representative forest types and management categories.

Economic Geography

From an economic geography point of view this New Zealand example is similar to the relationship between

a. communities in developing countries seeking to use their natural forest endowments for basic development needs, and
b. communities or agencies in developed countries seeking to protect these forests in the interests of global climate change mitigation.

In both cases, economic development opportunities in the economic periphery are structurally challenging, even though such economic regions may support significant natural forest assets. These forest assets still exist in such regions because the deforestation development path (which has been the norm everywhere else since the industrial revolution began) is yet to arrive, or is in the process of unfolding for the first time. From a local point of view this means that there is usually

- little in the way of tangible development opportunities other than resource extraction and primary production
- low capacity to innovate
- low levels of employment qualifications
- large distance from markets (which limits export opportunities)
- loss of human resources to metropolitan areas
- low levels of local investment capital
- low levels of infrastructure support for local development, and

- economic development and trade structures that make it difficult to add value to locally produced primary production

This combination of factors, in their aggregate, can lead to a relatively low standard of living in comparison with other economic regions. In turn, this leads to a high local demand for basic economic development whereby local natural forests are perceived as a means to this end. Nature conservation in its traditional format has tended to translate locally into an additional hindrance to the achievement of basic development goals.

Supply and Demand

This establishes a clear demand for development services in forested regions of developing countries. Forested regions in particular, possess tradable assets in the form of in-tact natural forest ecosystem services for which there is a growing demand among some (especially OECD) nations with an interest in global climate change mitigation. Furthermore, OECD (or large private sector) partners also have a capacity to pay for these services on a scale that may satisfy the sellers. This produces the basis for a Direct Barter global ecosystem services market because it defines a two-way exchange of value with reciprocal demand and reciprocal benefits.

Voluntary carbon markets and markets for 'corporate social responsibility certificates' are currently trading with forest-based communities on a relatively small scale. Should the UNFCCC develop a compliance market for reducing forest-based emissions then this market will grow significantly. But Direct Barter provides an opportunity for political level 'trade' in much larger scale ecosystem services at a macroeconomic scale as was the case with the New Zealand example. Indeed the Direct Barter mechanism (which lies outside of the scope of the Kyoto Protocol but not necessarily outside the UNFCCC) has the potential to form a component of international trade negotiations that enables the UNFCCC agenda to interface more directly with the WTO.

In a way, Direct Barter is simply an extension of the idea of debt-for-nature swaps, where lender nations would cancel debt in developing nations in exchange for the protection of biodiversity habitat. Direct Barter frames this as a market and aligns it with climate change mitigation policy imperatives (e.g. additionality, permanence, and leakage).

If framed as part of an intergovernmental partnership to protect what remains of the world's forests for the protection of the global climate commons, and a campaign that recognizes that this protection will come at a price, it is conceivable that such an effort will garner support amongst buyers and host nations. Both trading partners can continue to act within the rubric of self interest to voluntarily invest in a large scale climate protection in a way that helps them achieve their respective goals.

It is important that Direct Barter does not have the effect of lowering the international price of carbon by reducing demand for carbon market transactions. But as mentioned above, this is a large scale mechanism aimed at carbon volumes that would commonly lie beyond the scope of most private sector carbon market transactions. Alternatively, it does provide a context for engaging the wealthiest of private sector players who wish to make large scale investments in global climate change mitigation.

UNFCCC and Kyoto Protocol

Like the CDM and the JI mechanisms under the Kyoto Protocol, Direct Barter is partly about providing OECD countries a means of achieving substantial emissions reductions at least cost. The price per ton of carbon for protecting forests in developing countries is likely to be lower than the price per ton of equivalent forest in a developed country. It must be remembered that this price is not necessarily cash, but could be any barter asset that the buyer is willing to offer for transaction (e.g. a trade deal).

It may be appropriate for Direct Barter transactions to lie outside the Kyoto system entirely but comprise a mechanism under Article 3.3 and 3.4 of the UNFCC. Article 3.3 states that efforts "to address climate change may be carried out cooperatively by interested Parties." The scope of such cooperation is not specified and leaves the door open for the development of strategic partnerships and cooperative bilateral and multilateral efforts to mitigate or adapt to climate change. Article 3.4 states that "Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change."

Article 4.1(d) elaborates on this theme whereby "All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall: Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all 11 greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems."

A Possible Process

Because Direct Barter activities are within the scope of Articles 3 and 4 of the UNFCCC it would be appropriate for the UNFCCC Secretariat to function as the facilitator of Direct Barter transactions. For a Direct Barter mechanism to become formalized, a process would need to be defined including the definition of eligibility criteria for forest areas sought for Direct Barter transactions (including additionality, permanence and leakage provisions for host nations), a register of host nations seeking to trade Direct Barter assets, and a register for potential buyers. The annual Conference of Parties could provide a forum for the initiation or negotiation of Direct Barter transactions, with the UNFCCC secretariat providing administrative services. There would be no need for an Executive Board as with the CDM because Direct Barter transactions would take place bilaterally. There would, however, be merit in assigning an office of the UNFCCC the role of a Direct Barter facilitator.

The eligibility of forests for Direct Barter transactions would depend on the ability of such forests to demonstrably contribute to global carbon stocks protection. Forests that are put forward by nations seeking Direct Barter transactions would register these forests as Direct Barter Assets (DBAs). The eligibility of DBAs and their categorization in a Direct Barter Asset Register could fall into two categories – a mandatory category (DBAm) and a voluntary category (DBAv). The mandatory category would encompass the minimum allowable criteria for eligibility as DBAs, and would provide a verifiable minimum requirement for carbon stock protection and permanence and leakage provisions. The voluntary category would include the DBAm criteria but additionally encompass a list of verifiable ecological, social, economic, or cultural co-benefits that may increase the overall quality of the DBA, which may increase its attractiveness to a buyer and potentially affect its selling 'price'.

Eligible DBAm forest assets would need to include the following attributes:

- are not legally protected[11] or are legally protected but where compliance is ineffective resulting in the loss of carbon stocks
- are deemed physically and economically accessible for timber extraction and/or land use change
- are located on lands that are capable of being used for non-forest purposes

Host nations with natural forests would develop a national portfolio of DBAs either as an aggregated block for a single transaction, or as separate entities for separate transactions with potentially different

[11] There would need to be some provision to avoid establishing a perverse incentive to not legally protect forests.

buyers. Host nations could then lodge their DBAs in an on-line Direct Barter Trade Register (Host List) held by the UNFCCC secretariat. Buyers could register their interest in purchasing DBAs of a particular character through the DBA Trade Register (Buyer List). Buyers or host nations could then approach potential DBA transaction partners bilaterally, or through the UNFCCC which could act as a DBA transaction facilitator – matching the needs of respective buyers and hosts on the DBA Trade Register and facilitating negotiations where necessary.

Buyers and hosts could approach DBA transactions individually or as groups of nations (e.g. the Coalition for Rainforest Nations negotiating a large scale transaction with the EU)[12].

Additional Co-Benefits

The voluntary component of DBAv's would not need to be restricted to on-site values, but could include binding commitments to undertake certain off site activities in order to enhance the climate protection value of other resources. For example, a DBAv portfolio could include the proposed protection of natural forest assets, and a binding commitment to undertake one or more of the following within a given management period:

- Additional sustainable forest management programme instead of BAU clear cutting/unsustainable logging for the indigenous forest sector or for large areas not covered by the DBA*
- Institutional capacity building for transforming the indigenous forest sector to a sustainable forest management regime instead of the BAU clear cutting/unsustainable logging mode*
- Additional afforestation/reforestation programme on historically cleared lands (e.g. cleared prior to a 2005 base year).
- Additional agroforestry programme on historically cleared lands (e.g. cleared prior to a 2005 baseline)*
- Additional emissions reduction programmes in agriculture, energy or industrial sectors[13]
- Additional climate change adaptation activity or capacity building
- Additional programmes and/or commitments for the protection of biological diversity or combating desertification in areas not covered by the DBA – enhancing the synergies with commitments under the Convention on Biological Diversity, and the Convention to Combat Desertification
- Additional programmes or commitments for meeting nationally defined priorities of the Millennium Development Goals
- Or any other programmes to more fully accomplish national contributions to global sustainable development priorities.

* Activities potentially capable of generating future carbon finance (from the compliance or voluntary markets) for the host nations.

The point is that developing countries commonly have difficulty meeting certain targets for sustainable development, whereby such sustainable development would benefit global society and the global environment. Attracting a macroeconomic form of carbon finance through the Direct Barter approach could provide a means of enabling a range of sustainable development targets to be reached:

a. if the value of the Direct Barter transaction was worth enough to the seller, and
b. if securing a transaction were enhanced through a binding commitment to harvesting many of the relatively low hanging fruit in sustainable development.

[12] Liability provisions would need to be developed to guard against impermanence.
[13] To avoid cannibalism with CDM opportunities or double counting these could be limited to non-CDM programmes.

Such negotiations may also help to reveal a range of currently undisclosed but potentially mutually beneficial synergies between nations. New Zealand for example, has developed a strong capability for indigenous sustainable forest management (SFM) since it outlawed clear-felling on private land in 1993. This capability could be exported to a Direct Barter partner nation (e.g. Papua New Guinea) as part of a package that included capacity building for SFM combined with sustainable timber certification, and assisted access to niche markets – possibly funded through ODA channels. There are many possibilities, but the key is to give nations an incentive to talk together more about these potential sustainable development synergies.

Conclusion

It is important that the international approach to reducing emissions from deforestation and forest degradation is as inclusive as possible, and allows for the differential capabilities and needs of different nations. It is also important that different approaches be compatible with each other, thereby catering to the needs of different players in the climate change mitigation exercise. Market mechanisms that engage the private sector in new investment streams are an important part of this equation. Grants for project development and capacity building also need to be available and funded to a realistic level because the carbon market will only buy the product of capacity building – not capacity building itself. And larger scale macroeconomic mechanisms also need to be included to cater to the needs and aspirations of political players in world affairs. The Direct Barter approach is one way of engaging public and private sector world leaders in strategic exchanges of value between nations, and has the potential to help steer the strategic direction of development in developing countries to a path capable of delivering much needed development, whilst protecting what remains of world forests.

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