



## **Financing mechanism for forest mitigation options**

**A background/working paper for the TFD Dialogue in Montreux, Switzerland**

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Prepared by Carmenza Robledo and Jürgen Blaser, Intercooperation

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## Some important abbreviations

<b>AFOLU</b>	Agriculture, Forestry and Land Use
<b>AWG-LCA</b>	Ad Hoc Working Group on Long-term Cooperative Action
<b>CDM</b>	Clean Development Mechanism
<b>LULUCF</b>	Land Use, Land Use Change and Forestry
<b>MRV</b>	Monitoring, Reporting, and Verification
<b>NAMA</b>	Nationally Appropriate Mitigation Action
<b>ODA</b>	Official Development Assistance
<b>SBSTA</b>	Subsidiary Body for Scientific and Technological Advice
<b>SFM</b>	Sustainable Forest Management

## 1. Introduction

The present document has been written as part of the dialogue on possibilities and challenges for forest stakeholders when mitigating climate change through REDD+ activities. The objectives of the TFD REDD Dialogue are to:

- i. define the challenges and opportunities of the current financial mechanism options debated by the international community;
- ii. elaborate on the possible solutions for identified challenges;
- iii. develop a series of recommendations to be considered by leaders in the negotiations leading the COP-15 in Copenhagen.

The dialogue has been structured in a series of meetings along of the Climate Change negotiations, especially in 2009. The first dialogue in the series was convened on 25-26 April, 2009. It was hosted by the United Nations Forum on Forests (UNFF) during its 8th Session in New York City, USA. The dialogue brought together over 50 leaders from a wide spectrum of forest sector stakeholders involved in the debate on REDD. The second meeting will take place on 19-20 June, 2009 in Montreux, Switzerland.

Six working groups were established for deepening the discussions: business/private sector, environmental NGOs, intergovernmental organizations, communities-indigenous & women, governments and research. These groups elaborated on the following items: scope of REDD, institutional agreements, generation of funds, access to funds, reimbursement, delivery mechanisms, sharing benefits, effective participation, perverse incentives and the support that science can give to REDD-plus.

This paper builds on the discussions in New York and on the expert meetings, submissions and discussions within the different negotiation processes within the UNFCCC. It focuses on financing mechanisms for REDD-plus and it is aimed to facilitate the next step in the dialogue process towards Copenhagen.

## 2. Background

### 2.1 Mitigation options

According to the Intergovernmental Panel on Climate Change<sup>1</sup> (IPCC), a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks in the long term, while producing an annual sustained yield of timber, fiber or energy from the forest, will generate the largest sustained mitigation benefits (IPCC, 2007c, Chapter 9, page 543).

There are three mitigation options: reducing GHG emissions, enhancing carbon sequestration and promoting carbon substitution. Forestry offers the possibility of reducing emissions from deforestation and forest degradation, enhancing carbon sinks through enhancing the sequestration rate in existing and new forests, and promoting substitution of fossil fuels and more energy-intensive materials. There are five types of management practices associated with these groups of mitigation activities: afforestation and reforestation, plantations for bio-fuel production and/or substitution effects through harvested wood products, reducing emissions from deforestation and forest degradation, improving management and forest restoration. These are listed in Table 1.

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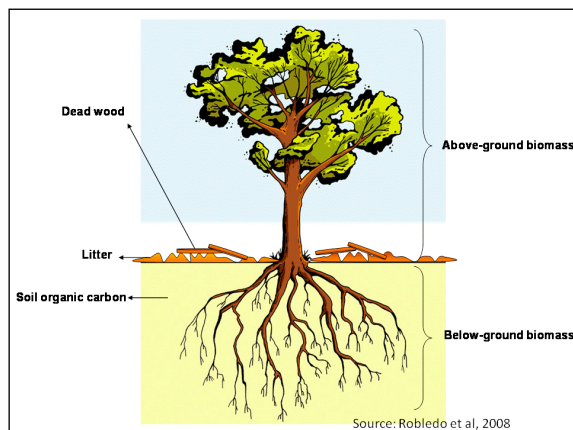
<sup>1</sup> The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation.

**Table 1: Mitigation options in forestry**

Mitigation options (general)	Mitigation options in the UNFCCC or its KP (LULUCF)	Forest Management Options
Reduction of GHG emissions	Reducing emissions from deforestation and forest degradation in developing countries (REDD)	Sustainable management of (natural) forests Committing forests for REDD, including conservation
Carbon sequestration	Afforestation	Plantation, agroforestry, agro-sylvo-pastoral systems
	Reforestation	
	Enhancement of sinks through forest restoration (not yet clearly defined)	In forested areas: enrichment, planting, guided natural regeneration
Carbon substitution	Substitution through harvested wood products: using forest products for electricity and fuel	Forest Biofuel plantations, sustainable use of wood production

Carbon can be found and measured in five so-called “pools” or “reservoirs”: below-ground biomass (BGB), above-ground biomass (AGB), litter, dead wood, and soil organic carbon (SOC) (see Figure 1). Ideally, one should collect data of changes in carbon stocks in all five pools, but doing so in an accurate and cost effective manner remains a major challenge.

Figure 1: Carbon pools in forests



## Reducing emissions from deforestation and forest degradation - REDD

Deforestation, as defined in the framework of the UNFCCC, is the direct human-induced conversion of forested land to non-forested land. There is yet no agreed definition on forest degradation under the UNFCCC<sup>2</sup>. According to the FAO, the rate of deforestation during the 1990s was 12.9 million hectares yearly, corresponding to emissions of 5.8 GtCO<sub>2</sub>/yr (FAO, 2006 and IPCC, 2007c). Over 85% of the current GHG emissions from deforestation and forest degradation (DD) take place in the tropics, making LULUCF the single most important source in these countries (Stern, 2007; FAO, 2005).

Deforestation causes significant GHG emissions – an estimated 7.6 billion tones of CO<sub>2</sub> per year in 2000, about 15 to 20% of all GHG emissions (ICPP, 2007; Baumert et al., 2005).

Houghton (2005a) estimates that forest conversion, forest degradation and shifting cultivation altogether were responsible for carbon emissions equivalent to 15 – 35% of fossil fuel emissions in the 1990s. While these figures have a large degree of uncertainty, they stress the relevance of including efforts to combat deforestation in climate negotiations.

<sup>2</sup> See also Annex 3 on definitions of forest degradation.

Figures on the GHG emissions from forests degradation are not yet as detailed as from deforestation. ITTO (2002) estimates the extent of degraded forest in the tropics to about 850 million ha, corresponding to 40% of the entire forested area in the tropics.

Drivers for deforestation and forest degradation differ greatly by activities, regions, system boundaries and time horizons. A report prepared for the UNFCCC Secretariat quantified the mitigation potential of REDD based on an analysis of the opportunity costs of different use alternatives (Blaser & Robledo, 2007). This analysis considered a simplified approach to characterize the following direct drivers of deforestation and forest degradation:

- Commercial agriculture (national and international markets)
  - Commercial crops
  - Cattle ranching (large scale)
- Subsistence farming
  - Small scale agriculture/shifting cultivation/slash and burn agriculture
  - Fuelwood and NTFP gathering for local use, mostly family-based
- Wood extraction
  - Commercial timber (legal and illegal) for national and international markets
  - Traded fuelwood (commercial at sub-national and national level).

According to this study the regions with the highest emissions from deforestation and forest degradation are situated in the humid and semi-humid tropics, in particular in Africa, Asia and Latin America (see figure 4). In the majority of countries in temperate areas and boreal climatic zones forest areas are stable or increasing.

It can be observed in figure 2 that in terms of direct drivers of deforestation small scale agriculture, mainly related to poor communities without appropriate management skills and assets play an important role followed by commercial agriculture and timber production (see figure 4 and table 3).

Currently the distribution of emissions among these categories is changing rapidly due to the increasing demands for biofuels, especially from palm oil (see section 2.1.3). In absolute terms these data shows the importance of promoting sustainable forest management for reducing GHG emissions while ensuring other forest functions.

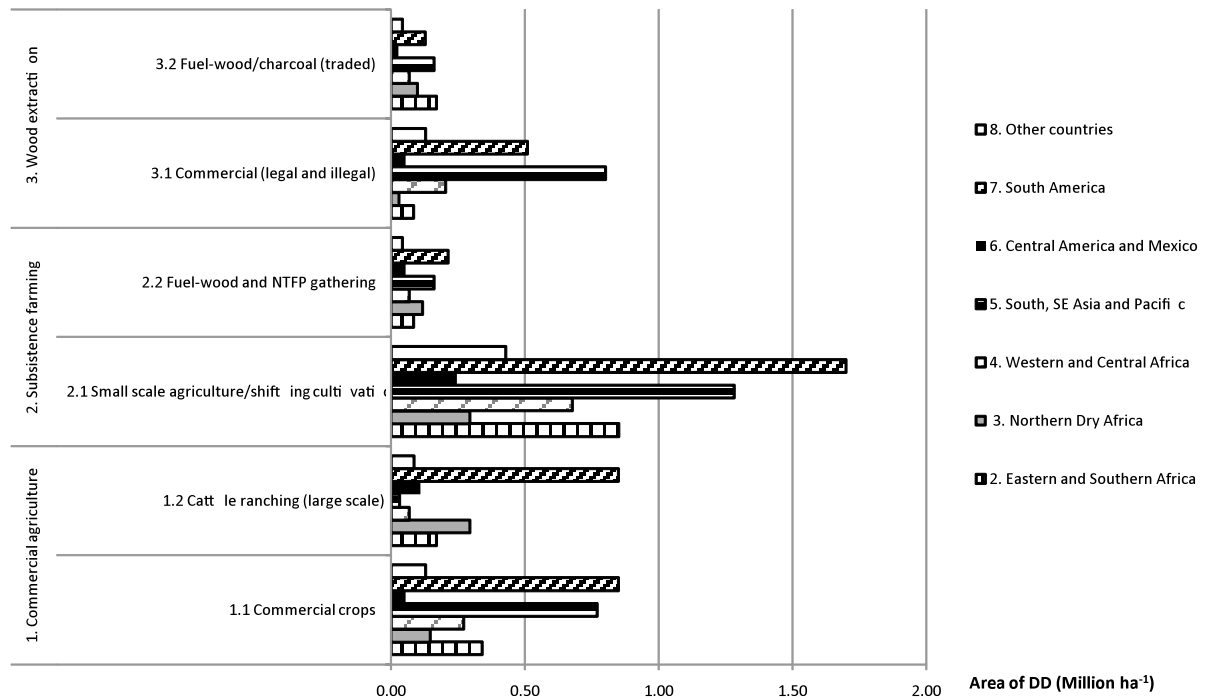
Reducing deforestation and degradation is the forest mitigation option with the largest and most immediate carbon stock impact in the short term per hectare and year globally. The opportunity costs of reduced deforestation depend on the causes of deforestation (commercial agriculture, subsistence farming, wood extraction), the associated returns from the non-forest land use and the returns from potential alternative forest uses.

Based on the opportunity cost of direct drivers as a basis, Blaser and Robledo (2007) calculated that if emissions from deforestation and forest degradation were to be reduced to zero by 2030, a minimum investment of \$12.2 billion<sup>3</sup> per year would be necessary to compensate the opportunity costs of deforestation and forest degradation (UNFCCC 2007a). According to this calculation, an average price of \$3.0/tCO<sub>2</sub> will cover the opportunity cost of deforestation and forest degradation of 8.5 million of hectares yearly. This would represent an emission reduction of 4.0 GtCO<sub>2</sub>/year (65% of the emissions). For this scenario, the price of \$3.0/tCO<sub>2</sub> could also improve livelihood conditions in many regions, as this price is higher than the opportunity cost of the poverty-driven deforestation and forest degradation. However, such an improvement would depend on various factors, especially on the administration and transaction costs of REDD activities and the specific conditions of each region (socio-economic, institutional, access to infrastructure, etc.) (UNFCCC 2007a).

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<sup>3</sup> \$1 Billion = \$1000 Million

**Figure 2: Share of deforestation and forests degradation per direct driver and region**



Source: Author's calculations based on UNFCCC 2007 and 2007a; and Blaser and Robledo 2007  
 DD: Deforestation and Forest Degradation, Database used: FAO-FRA 2000 and 2005

However calculations of the mitigation cost need to go beyond opportunity costs and also include the cost of the measures required to change deforestation and degradation patterns. These include *inter alia* capacity building, changes in ownership, clarification of rights to carbon pools access to sustainable products, implementation of sustainable use practices, etc. Further, the costs of estimating and monitoring emission reductions will have a great impact on the cost of REDD and on the minimum payment or compensation required for its success. Lack of clarity on the latest leaves many negotiators and also scientists wondering about the feasibility of implementing REDD when the data are so scattered and weak. However, techniques are today rapidly improving, for example, through considerable efforts of technology transfer programs such as the World Bank's Forest Carbon Partnership Facility (FCPF), UN-REDD and the work in improving remote sensing forest monitoring promoted *inter alia* by various members of the Collaborative Partnership on Forests.

### **REDD-plus (REDD+)**

The term REDD-plus was introduced after the mentioning of various forest mitigation options under paragraph 1 (b) (iii) of the Bali Action Plan. The term REDD-plus includes reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries. During the ongoing SBSTA meeting (SBSTA 30) some countries are also including agriculture in the REDD-plus concept. In terms of forestry the term REDD-plus allows addressing mitigation to climate change using all activities included in the framework of sustainable forest management.

How big is then the mitigation potential of REDD-plus, when considering all management options? Table 2 shows the potential by activity as presented in UNFCCC, 2007

**Table 2: Mitigation potential from the mitigation options in forestry**

Forest mitigation option	C potential until 2030(emission reduction or sequestration ) inGtCO <sub>2</sub>
REDD	3.76 GtCO <sub>2</sub> e per year, about 77 GtCO <sub>2</sub> e until 2030
Natural Forest Management of existing production forests	6.6 GtCO <sub>2</sub> e
Forest Restoration	117 GtCO <sub>2</sub> e
Total	200.6 GtCO <sub>2</sub> e

**Managed forests** is here understood as a natural forest that is managed for sustainable timber and non-wood harvesting (e.g. through integrated harvesting and silvicultural treatments), wildlife management and other uses have resulted in changes of forest structure and species composition. All major goods and service functions, including the maintenance of carbon stocks, are maintained intact.

**Forest restoration** is a combination of planting trees and human induced natural regeneration within a degraded forest area but that has lost most of its carbon stock. Forest restoration hence is a strategy applied in degraded primary forest areas. Forest restoration aims to enhance and accelerate natural processes of forest regeneration (including carbon stocks) in order to regain the elastic capacity of the forest ecosystem.

### Points to be retained

- GHG emissions from forest and agriculture are around 30% of the total yearly emissions worldwide
- There are five carbon pools in the forest: aboveground biomass, belowground biomass, litter, dead wood and soil organic carbon. All pools are to be considered.
- Under the current negotiations for a post-2012 regime under the UNFCCC REDD-plus is included
- REDD-plus includes reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.
- It means a potential reduction of 200.6 GtCO<sub>2</sub>e by 2030. With a minimum price of US\$ 4.5 that would mean payments of over US \$ 900.000.000.000. The price US\$ 4.5 could cover the opportunity costs of over 50% of the emissions in developing countries.
- Planning, implementation, monitoring and other transaction costs are not included here as these costs will depend on the requirements to be established by the COP

## 2.2 Methodological challenges

Methodological issues are key for ensuring an accurate and systematic accountability of changes in GHG emissions or in carbon sequestration. Only accurate accountability can warrant a mitigation effect. The Conference of the Parties of the UNFCCC has to provide clear guidance for accounting GHG emissions changes and carbon enhancement that are measurable, verifiable and reportable in a regular and accurate manner. Ideally this guidance should be also flexible and simple enough that can be a) useable and b) affordable under different circumstances, as such as those present in the Parties of the Convention. The balance between accuracy and flexibility in the methods for accounting carbon represent a major challenge for the success of a post-2012 mitigation agreement.

Under the guidance of the SBSTA, the UNFCCC secretariat is undertaking a 2-years working program on methodological issues for REDD. The working program is based on a series of expert meetings on different methodological issues, including i.a. reference levels, permanence, leakages, data requirements. The last meeting took place from 23 to 24 March 2009 and was dedicated to methodological issues relating to reference emission levels and reference levels. The outstanding issues discussed in this meeting and further needs for establishing reference emission levels and reference levels are summarized below under the section on reference levels (section 2.2.1)

### 2.2.1 Reference levels or baseline?

This discussion refers to the methods required for ex-ante estimating the potential emission reductions /enhancements of sinks. It includes the discussion on at which level this estimation should be done: global, regional national and or sub-national.

Reference level/Baselines are an essential part of any arrangement aiming at REDD as they provide the necessary reference against which performance can be assessed. Since the beginning of the REDD discussion some terms have been used, including baseline, reference scenario and reference level.

**Baseline** was defined for the CDM as *the scenario that reasonably represents the anthropogenic emissions by sources or anthropogenic removals by sinks of greenhouse gases that would occur in the absence of the proposed project*. (Decisions 16/CP.7 and 17/CP.7). There are three approaches for estimating the baseline<sup>4</sup>:

- (a) Existing or historical, as applicable, changes in carbon stocks in the carbon pools within the project boundary;
- (b) Changes in carbon stocks in the carbon pools within the project boundary from a land use that represents an economically attractive course of action, taking into account barriers to investment;
- (c) Changes in carbon stocks in the pools within the project boundary from the most likely land use at the time the project starts.

**Reference scenario** was not clearly defined. It seems that the reference scenario focuses on past (historical) data and extrapolates it into the future, similar to one of the three approaches defined for the CDM (approach 22a: *Existing actual or historical emissions as applicable*, in Decision 5/CMP.1).

**Reference level** has been introduced in a report prepared for the Government of Norway in 2009. This term is based on the recognition of a “crediting baseline” that is understood as *“the benchmark for rewarding the country if emissions are below that level (and not giving any reward or—depending on liability— invoking debits if emissions are higher)”*. In this report the authors refer to the crediting baseline as the reference line/level (RL) (Angelsen, et al., 2009, chapter 3.1). Procedures and a set of criteria for setting reference levels as well as a simulation of different options are included in the report.

In the negotiating text currently under discussion in the Climate Talks, the term “reference level” is used, however without any specific definition or mentioning the report by the Meridian Institute.

For estimating the baseline/reference level in REDD activities, two issues should be considered when analysing: scale and time scenario.

- With regard to the scale of the baseline/reference scenario, there are three levels to consider: global, local, regional or national, or even project level.
- With regard to the time period, there are two approaches: to consider only past trends or to consider past and future trends. The first approach is more favourable for countries with high rates of deforestation in the past, as these countries would

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<sup>4</sup> See Decision 5/CMP.1 Article 22.



have the greatest potential for claiming emission reductions in the future (e.g., in the Congo Basin in Africa). The second approach would be more favourable for countries that had a low rate of deforestation in the past but are threatened by a high future deforestation rate.

- Another important question on the baseline/reference scenario relates to approaches for estimating GHG emissions. As the difference between gross and net emissions can be significant. A decision on net or gross emissions needs to consider the wide range of implications of both calculation options. The implications linked to these two different options are currently not clear in the negotiations and should be considered carefully in future sessions before any decision is made.

### **2.2.2. Leakage or displacement of emissions?**

In the A/R CDM, leakage has been defined as the increase in GHG emissions by sources that occur outside the boundary of a given area (in A/R CDM in the project area) which are measurable and attributable to the particular activities envisaged (Decision 5/CMP.1).

In the discussion on REDD, some are referring to “displacement of emissions” when referring to leakages. As displacement of emissions has not been defined yet in any of the existing decisions, there is a lack of clarity about the differences between “displacement of emissions” and “leakages”.

The main discussion on leakage revolves around differences on how to deal with it, depending on whether the national and/or the sub-national approach is to be used. In general terms, the discussion on leakage tends to accept that if an accurate national baseline/reference scenario and monitoring system can be set at the national level, risks of unaccounted leakage would disappear. This affirmation is based on the idea that if any displacement of activities or communities due to a REDD activity takes place, national inventories will reflect it. Therefore emissions resulting from displacement will need to be considered in the calculation of the net emission amount for the sector in a country.

**A key aspect in the discussion on leakage/emission displacement is how to define what “outside the boundary” means.** Is it meant to consider any displacement of GHG emissions within the region, the country or also at the international level?

There is some literature analysing potential international leakage in the forest sector. International leakage has not been considered for any other sector under mitigation yet, even though international leakage in sectors such as energy or transportation could be even higher than in the forestry sector. There are different reasons for it, but perhaps one of the most important is that quantifying and moreover monitoring international leakage would have strong technical and legal implications, e.g., on international liabilities, and therefore it is very difficult to implement.

### **2.2.3 Permanence**

The issue of permanence is related to the possibility that carbon in reservoirs can be emitted at any time, making emission reductions/enhancement of sinks non-permanent. Permanence relates to the period of time that carbon remains in the biosphere. Due to different risks, including fires and pests, carbon can be released into the atmosphere, thereby reducing the climate change mitigation effect.

Proposals for dealing with non-permanence in the LULUCF in the future include (a) using temporary credits;<sup>5</sup> (b) banking credits and debits from one commitment period to the next ; (c) reducing future financial incentives to take into account emissions from deforestation above the agreed level; and (d) by mandatory setting aside of a share of the emission reductions. Furthermore, some Parties consider sustainable forest management as a means to promote the permanence of emission reductions.

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<sup>5</sup> Temporary CERs expire at the end of the commitment period subsequent to the commitment period for which they were issued; long-term CERs are valid until the end of the project's crediting period up to maximum of 60 years.

**The treatment of permanence is especially relevant if Parties agree on a market mechanism for REDD.**

#### **2.2.4 Additionality**

Additionality<sup>6</sup> is the result of the GHG emissions reduced by the project (project scenario) minus those emissions that would occur in the absence of the project (baseline), minus the leakage caused by the project. It is a term used within the CDM and therefore applies only to project activities undertaken in non-Annex I countries. Currently, additionality is estimated and monitored using the approved A/R CDM methodologies.

As the current negotiations on REDD-plus are under the Convention and financing solutions for REDD-plus activities are still under discussion. The question as to whether activities in REDD-plus have to be additional or not is open. A tendency to include additionality in REDD-plus is perceived in the corridors of the negotiations.

#### **2.2.5 Environmental and Socioeconomic impacts**

Until now, environmental and socio-economic impacts have been considered only in the A/R CDM, and that only for negative impacts. Positive socio-economic and environmental impacts (or co-benefits) are not considered in the modalities and procedures and therefore there is no need to report on them.

In Annex I countries, socio-economic or environmental impacts regarding LULUCF activities or activities in other sectors are not ruled under the Kyoto Protocol. Furthermore, CDM projects outside A/R CDM do not need to take into account social impacts. This means, e.g., that many potential negative impacts of biofuel project activities on social systems are simply not considered, addressed or monitored. This is an issue of concern, especially when discussing the potential of biofuels for substitution.

#### **2.2.6 Monitoring, verification and reporting**

Maintenance of the reservoirs (pools) needs to be regularly monitored, and under the CDM also verified. These data have to be consistently reported so that a clear quantification of the global emission reductions can be calculated. To do so, reliable methods are needed to accurately assess emission reductions over time. While such methods exist, they tend to be very expensive. The experience in the ongoing A/R CDM shows that monitoring costs can be very high (in some cases 25% of the total project cost). Similar indications have been done by Annex I countries on their costs for monitoring and reporting. Monitoring and reporting requirements need to be agreed in such a way that accurate quantification of the emission reduction over time is possible, while at the same time making technologies and capacity building available for developing countries.

### **Points to be retained**

- The main methodological issues are
  - o Establishing the mitigation potential → Reference levels, baseline, reference scenario
  - o Additionality
  - o Permanence of the emission reductions/of the sinks
  - o Reduction of leakage/displacement of emissions
  - o Environmental and socio-economic impacts
  - o Requirements for monitoring, verification and reporting
- Many terms in the discussion have not been yet defined in any COP decision/ have been defined in some kind of publication/ were defined for the A/R CDM

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<sup>6</sup> The definition of additionality, as in Decision 17/CP.7, para. 43: A CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity.

## Points to be discussed:

- Need for clarification of the impacts of methodological terms on the potential for REDD-plus; with especial regard of the impacts on defining reference levels/baselines including
  - o Use/or not of historical data for setting the reference level
  - o Use/ or not of potential future emission scenarios
- Who has access to which data? Even if a lot of data is available and tools are available, not all stakeholders have access to them. The more sophisticated a tool is the higher the possibility that many stakeholders will be excluded of their use
- Which are the acceptable methodological requirements for each group of stakeholders
  - o Look at common positions
  - o Look at possible fracture lines
- Which are the strengths and difficulties for each stakeholder for facing the methodological challenges in REDD-plus (e.g. the private sector could have access to GIS technology, indigenous people could have knowledge of management practices that improve permanence, etc)

## 2.3 Governance challenges

Governance issues are essential for using REDD-plus as a mitigation option in a post 2012 agreement. An important difference to methodological issues is that governance challenges cannot be fully addressed by any centralized authority and the Conference of the Parties of the UNFCCC, its Secretariat or its supporting bodies. Governance issues are to be addressed at the global, national, sub-national and local levels and are to be coordinated with other sectors.

**Facing governance challenges needs to be a very high priority for successfully realizing the mitigation potential offered by REDD-plus (and obtaining the financing required).**

### 2.3.1 Institutional architecture

The term institutional architecture refers in this document to the agreements and regulations that will be required for using REDD-plus activities in the context of the UNFCCC. The term institutional architecture includes agreements among different stakeholders and regulations from the public sector. It covers the global, national, sub-national and local levels.

At the *global level* consistency should be mandatory, including among all UN Conventions and treaties and multilateral agreements under the international law: e.g. UDHR and its related agreements, Convention concerning Indigenous and Tribal Peoples in Independent Countries – especially the Declaration on the Rights of Indigenous Peoples<sup>7</sup>-, UNCBD, UNCCD. Customary rights are often recognized in agreements and regulations at the international level.

At the *national level* countries have to define national regulative framework for implementing those international/multilateral agreements that a given country has signed/ratified and on bilateral agreements; e.g. national regulation on tenure, use and access to forest and carbon pools, as well as national regulation on environmental services. Ideally agreements and regulation at the national level are coherent among sectors. Here a potential fracture is given; because countries are not all signatories of the same global agreements. For example, there is a concern that customary rights are not considered when using REDD-plus in countries with which are not signatories of the Convention concerning Indigenous and Tribal Peoples in Independent and/or its Declaration. If this happens the success of any REDD-plus activity will be highly jeopardized. Consequently, it is essential to identify the most important potential fractures for the institutional

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<sup>7</sup> The United Nations General Assembly (GA) adopted the Declaration on the Rights of Indigenous Peoples on September 13, 2007. The Declaration has been negotiated through more than 20 years between nation-states and Indigenous Peoples.

architecture of any multilateral agreement on REDD-plus and to ensure that the corresponding safeguards are included.

At the *sub-national and local levels* it is necessary to facilitate agreements among forest stakeholders and when required, to promote appropriate regulation on tenure, use and access of/to forest and carbon pools as well as on environmental services. Awareness on customary rights and rights of local communities is as strongest as this level, but regulations are not always inline. Ideally agreements and regulation at the sub-national and local levels are coherent among sectors and with the other levels.

If safeguards are included in the REDD-plus agreement, it will be necessary to create the corresponding groups of interest at the national, sub-national and local levels.

The importance of assuring that all sectors of the society participate in the design of the institutional architecture on REDD-plus has been repeatedly highlighted. What is now urgent is that forest stakeholders realize at which level and when they need to act. The Forest Dialogue (TFD) can facilitate discussions on this subject.

### **2.3.2 Legal aspects: tenure→ property and uses rights**

There is great diversity in forest tenure and use rights contexts across countries with REDD-plus potential. All have a different mix of strengths and weaknesses when possible arrangements for REDD-plus are considered.

It is also well known that forest owners and forest users are in many cases not the same. In stronger terms, it can be stated that hundreds of millions of people living in or near forests and making use of forest lands and resources have no or few secure rights and tenure over these lands and resources. In many cases, the lack of rights and tenure is directly related to poverty and to the destruction and degradation of those resources. This issue considerably affects the possibility to use REDD-plus in an equitable manner. In this context the main question is who owns the carbon credits, certificates and/or other benefits, when reducing GHG emissions or enhancing carbon sequestration through forestry activities.

It is therefore necessary to ensure that a) carbon rights are clearly defined in national legislation and b) that this legislation empowers local indigenous people and local communities.

Additionally, as we have said above, over 40% of the deforestation and forest degradation worldwide is a consequence of poverty. What is thus necessary is to reduce the emissions and, when possible, to increase sequestration capacity, through forest conversion and degradation while promoting an improvement in the living conditions of forest dependent indigenous people and communities.

### **2.3.3 Participation and empowerment**

There are different levels in the civil society. At the base are individuals who, according to different characteristics, can be grouped in social groups (e.g. farmers, settlers). The local community covers all these different social groups acting in a given landscape. Participation implies that all social groups that depend on forests should be involved in planning and implementing REDD-plus activities.

Participation goes far beyond simply being informed, and requires that social groups are able to make their priorities and expectations clear, are included in decision making, obtain benefits, assume responsibilities and are fully recognized for their involvement. The participation of civil society is more likely to be strong if their forest rights and tenure are strong.

The following are the important elements in ensuring participation of local social groups (including indigenous people and local communities) in REDD-plus:

### **Empowerment**

Empowerment is a complex process that starts with the awareness of lack of (decision making) power and of the right to access this power. Through empowerment, new social groups can actively participate in REDD-plus, i.e. accessing new governance spaces.

### **Knowledge sharing**

Ideally, knowledge sharing should consist of at least two processes: valuing local and traditional knowledge and disseminating scientific knowledge.

*Valuing local and traditional knowledge.* In terms of addressing climate change, it is important to value local knowledge. The role of local knowledge in managing the forest for REDD-plus is highly relevant. Since climate change is having an impact on forest ecosystems, the extent to which this knowledge can be helpful will depend on specific circumstances.

*Disseminating scientific knowledge.* If the results of scientific research are not available to forest dependent people, it will not be possible for them to understand the innovations required for REDD-plus.

### **Promoting forming associations**

Social groups interested in participating in planning and implementing these measures often only can benefit from creating associations that help them to bring their priorities onto the agenda. Ongoing experience has demonstrated the advantages of promoting associations based on complementarities, e.g. public-private-civil society partnerships, company-community partnerships, civil society-private sector partnerships, etc.

## **2.3.4 Sharing benefits and responsibilities**

REDD-plus activities can bring many collateral benefits, including income improvement. The questions here are: Who will get this income? What is necessary to ensure that indigenous people and local communities participate as beneficiaries in the REDD-plus? We foresee at least four requirements:

- a) Recognition of the key role of indigenous people and local communities in undertaking these activities
- b) Understanding of new business opportunities and the role of forest dependent people in making these opportunities possible
- c) Creation of a legal framework that reflects a) and b)
- d) Creation and application of business mechanisms that facilitate the participation of all forest users in business aimed at adapting to or mitigating climate change

With regard to the need of sharing responsibilities, one needs to remain that REDD-plus activities have long-term effects that imply also some responsibilities. If a forest is lost, due to e.g. a forest fire, who is liable for the GHG emissions or for the reduction in forest goods and services aimed at reducing vulnerability? Clarification concerning liabilities is therefore extremely important when considering REDD-plus. The following issues are to be considered:

- Clarification and, whenever possible, quantification of existing and future risk of forest loss and reduction of forest ecosystems;
- Participation/role of different forest users in increasing/reducing these risks;
- Definition of legal instruments for an equal sharing of responsibilities. Such instruments are to be linked to the business mechanisms for sharing benefits.

### **Capacity building**

Improving capacities is a key issue in making progress in governance and should be considered for the public sector as well as for the private sector and the civil society. Capacity building should increase the skills of different actors to participate in REDD-plus including accessing

different governance spaces, using or modifying existing mechanisms or proposing new ones when required.

### **Mechanisms for decision-making**

Addressing climate change is very much a global issue, for which international mechanisms for decision-making have been established. These mechanisms refer to the set of rules used in a specific governance space to agree, disagree and dispute. On the other side, activities in the forest sector aimed at adapting to and mitigating climate change are implemented at the local level, where other decision-making mechanisms are in place. The first challenge is therefore to ensure mechanisms for decision making on forest resource and climate change, either (i) are integrated at local, national and international levels or; (ii) make it possible for actors from a given governance space (e.g. local) to have access to decision mechanisms from other governance spaces (e.g. national, global). It is essential to highlight the importance of using participatory mechanisms for decision-making and to promote the understanding of the priorities and decisions at all levels when addressing climate change in the forest sector.

### **2.3.5 Coordination with other policies**

REDD-plus can have many implications on specific land use planning (e.g., whether forests are available for sustainable forest management; or whether available land is to be used for biofuels or food crops production). Country's priorities should be reflected in sectoral and cross-sectoral policies that allow an appropriate implementation of REDD-plus activities

#### **Points to be retained**

- Governance challenges include the definition of the institutional architecture of a REDD-plus agreement, the clarification of land and carbon tenure and rights of use and access, improving participation in such a way that decision making can take place under consideration of the priorities of different stakeholders, clarification of benefits and responsibilities sharing and coordination with other sectors
- These challenges are relevant at the global, national, sub-national and local levels but at different extends and with differentiated priorities according to the stakeholder
- Needs for building/improving capacities are also to be addressed to the situations of different stakeholders
- Governance issues are extremely relevant for achieving GHG emission reductions / enhancements of sinks; especially with regards to ways and means to address permanence and leakages and for estimating reference levels in an accurate manner

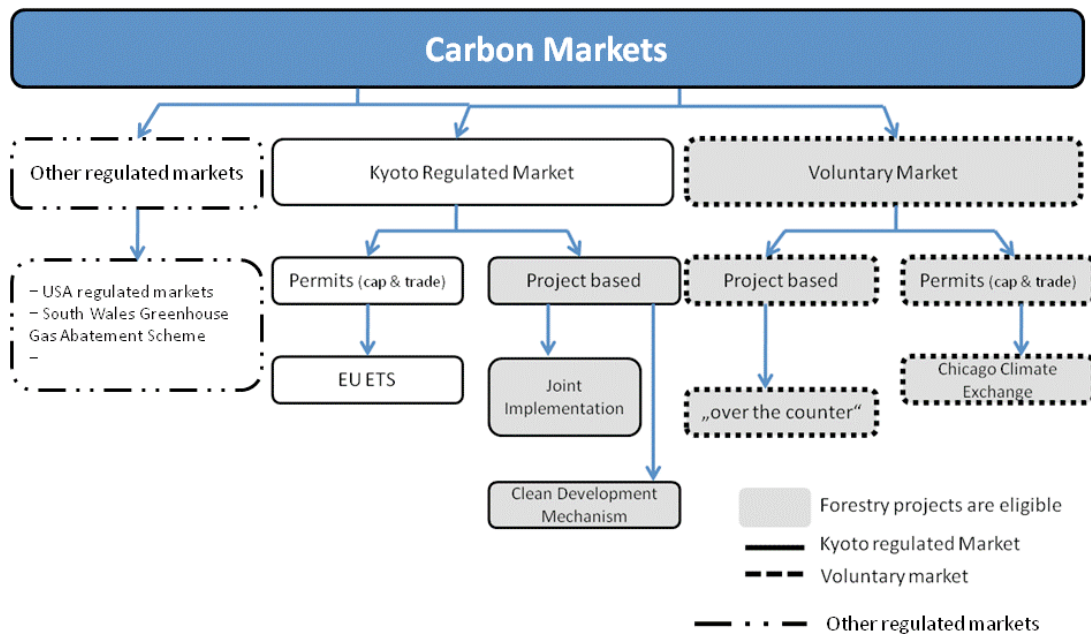
#### **Points to be discussed:**

- Are there other governance challenges for REDD-plus that need to be addressed?
- Which governance issues can be solved/should be addressed at which level.
  - o Global
  - o National
  - o Sub-national (country regions)
  - o Local
- Which are the most important safeguards to be included in a REDD-plus post-2012 agreement?
- What process can TFD facilitate at the global, national and sub-national/local levels until COP 15 and beyond?
- Which capacities need to be build/improved? How can other forest programs support improvement in capacities for REDD-plus?

### 3. Previous existing financing mechanisms

Currently one can distinguish between three carbon markets: those aimed at fulfilling commitments under the Kyoto Protocol (Kyoto regulated market) those regulated markets outside the Kyoto Protocol, and those trading voluntary emission reductions (voluntary markets) (see figure 3). There are basically two modalities of trading options: permits or allowance trading, and project.

Figure 3: Carbon markets



The reduced participation of the forest sector is a consequence of the fact that forestry activities, especially those under the CDM, are not included in the biggest market--the EU Emission Trading Scheme (EU ETS). For this reason many potential buyers have lost interest in forestry activities as these seem to be less valuable as a consequence of the decision made by the European Union.

#### 3.1 Kyoto Market

Forestry activities in the tropics under the Kyoto regulated market are reduced to afforestation and reforestation in the CDM (A/R CDM). Let us take a look on possibilities to trade Certified Emission Reductions (CERs) from these activities in the international Kyoto markets.

##### 3.1.1 Allowance based markets (cap and trade)

###### European Union GHG Emission Trading Scheme

On January 2005 the European Union Greenhouse Gas Emission Trading Scheme (EU ETS) commenced operation as the largest multi-country, multi-sector GHG emission trading scheme worldwide. The scheme is an allowance-based transaction system that enables developed countries and countries with economies in transition to purchase carbon credits from other

developed countries and economies in transition to fulfill their emission reductions commitments. It is based on Directive 2003/87/EC, which entered into force on 25 October 2003, and involves all EU member states. Credits traded under the system are called European Union Allowances (EUAs). According to the World Bank, in 2007 the EU ETS market traded 2,060.8 MtCO<sub>2</sub>e, and the market was valued at \$50,097.4 million (Capoor and Ambrosi, 2008). Unfortunately, forestry activities in developing countries are not yet eligible in the EU ETS.

### Green Investment Scheme

The Green Investment Scheme (GIS) is a newly developed, voluntary mechanism in the framework of the Kyoto Protocol's International Emissions Trading (IET). It is designed to achieve greater flexibility in reaching the targets under the Kyoto Protocol while preserving the environmental integrity of IET. Under the GIS a Party to the Protocol expecting that the development of its economy will not exhaust its Kyoto quota, can sell its excess Kyoto quota units (AAUs) to another Party. As the GIS is a scheme only useful for Annex I countries it is not yet an option for promoting mitigation forestry activities in the tropics.

### Project based transactions

The CDM accounted for the vast majority of project-based transactions (at 87% of volumes and 91% of values) and JI saw transacted volumes doubling and values tripling in 2007 over the previous year. The CDM alone saw primary transactions worth US\$ 7.4 billion (€ 5.4 billion), with demand coming mainly from private sector entities in the EU, but also from EU governments and Japan (Capoor and Ambrosi, 2008). Unfortunately, the inclusion of forest activities in the CDM market is still extremely reduced, even below 1%.

Based on the previous experience on forestry options in the Kyoto markets, it can be said that simplicity is needed at the level of rules, modalities and procedures, if REDD-plus activities are to be successful. An overload of regulations, as happened within the CDM will make it extremely difficult to reduce emissions from deforestation and forest degradation in developing countries.

## 3.2 Other regulated markets

### 3.2.1 Offsets markets in the United States of America

The USA has not yet ratified the Kyoto Protocol. In order to compensate for the lack of national CO<sub>2</sub> regulation, several states have established their own regulations alone or in conjunction with others. Legislation is also quickly evolving at the national and multi-state level as more states step up to the plate on climate legislation and members of Congress announce new legislative proposals on a monthly basis. As of March 2008, legislators in the 110<sup>th</sup> US Congress introduced more than 195 bills, resolutions, and amendments addressing climate change. Currently, GHG emissions markets exist or may soon exist under the following regimes:

- Oregon Standard
- Regional Greenhaus Gas Initiave (RGGI)
- Global Warming Solution Act (AB32)
- Western Climate Initiative
- Midwest Regional GHG Reduction Program (MRP)
- The Climate Registry

The majority of these schemes look for reductions in GHG emissions in the energy sector. However, some of them, like the Oregon Standard, include sinks projects. In general all these schemes trade emission reductions occurred only in the USA. However they are increasingly accepting purchase offsets from CDM projects.



## The New South Wales Greenhouse Gas Abatement Scheme

The New South Wales (NSW) Greenhouse Gas Abatement Scheme (GGAS) is an Australian mandatory state-level program designed to reduce GHG emissions associated with the production and use of electricity and to develop and encourage activities to offset GHG emissions (Hamilton et al., 2008). The initiative does not accept credits, such as CERs or ERUs, from outside the state. According to the World Bank, outside the Kyoto markets, the NSW GGAS is the world's largest, regulated cap-and-trade GHG market, with about 25.41 MtCO<sub>2e</sub> traded in 2007 and an estimated value of US\$ 224.10 million (Capoor and Ambrosi, 2008)

### 3.3 Voluntary Markets

The Ecosystem Market Place reported **42.1 MtCO<sub>2e</sub>** transacted on the “over the counter market” in 2007. Combined with the **22.9 MtCO<sub>2e</sub>** transacted on the Chicago Climate Exchange (CCX) in 2007, a total volume of **65.0 MtCO<sub>2e</sub>** is said to have been transacted in the voluntary carbon market in 2007.

#### Chicago Climate Exchange (CCX)<sup>8</sup>

The CCX was launched in the United States in 2003. CCX Members make a voluntary but legally binding commitment to meet annual GHG emission reduction targets. Those who reduce below the targets have surplus allowances to sell or bank; those who emit above the targets comply by purchasing CCX Carbon Financial Instrument (CFI) contracts.

The CCX does not separate out the number of project-based credits from allowance-based credits exchanged and the CCX has not been able to provide insight in the numbers behind the transactions. It is therefore impossible for us to determine the volumes on the CCX that are actually offset project related (Hamilton et al., 2008).

#### The Over-the-Counter Market (OTC)

Outside of the CCX one finds the wide range of voluntary transactions that make up a voluntary market not driven by any sort of emissions cap. Since this market is not part of a cap-and-trade system, where emission allowances can be traded, almost all carbon offsets purchased in this voluntary market originate from project-based transactions. Because it does not operate via a formal exchange, these transactions were labeled as the voluntary Over-the-Counter (OTC) market in a report prepared by the Ecosystem Marketplace and New Carbon (Hamilton et al., 2008).

Forestry projects were dominant in the OTC market in 2006 with a share of 37%. In 2007 this share was reduced to 15% (Hamilton et al., 2008). There are many possible reasons for this fall, including the increment in the offer of other kinds of projects (e.g. renewable energy) or a potential loss of trust on forestry projects. Forestry projects, in particular those involving afforestation/reforestation, have remained some of the highest priced project types throughout 2006 and 2007, with weighted average prices of US\$ 6.8 to US\$ 8.2 per tCO<sub>2e</sub> (ibid).

Due to the latest developments in the negotiations within the UNFCCC, the possibility of using REDD-plus activities has augmented the interest in forest mitigation options. There are however many uncertainties regarding the final decisions to be taken in Copenhagen in 2009.

### Points to be retained

- There are three basic types of markets
  - o Regulated by the Kyoto Protocol

<sup>8</sup> For more information regarding the Chicago Climate Exchange visit <http://www.chicagoclimatex.com/>

- Regulated outside the Kyoto Protocol
  - Voluntary Market
- Precious experience on emission reductions through forest conservation and sustainable management were undertaken during the Activities Implemented Jointly (AIJ) phase

### Points to be discussed:

- Which are the advantages and disadvantages of a market approach for each stakeholder group?
- Which are the advantages and disadvantages of a fund approach for each stakeholder group?
- Which are the advantages and disadvantages of a combined approach for each stakeholder group?

## 4. Financing mechanisms after 2005

Considering the various mitigation options of forests in the climate change agenda, important new funding mechanisms have been developed over the past 2 years, at bilateral and multilateral level, all of them with the overall intention to further explore and develop forest mitigation option in a post-2012 climate regime. At the multilateral level there have been essentially three funding mechanisms initiated over the past 2 years, which are supported by a considerable number of donor countries:

- (i) The World Bank's Forest Carbon Partnership Facility (FCPF)
- (ii) The UN-REDD Programme
- (iii) The Forest Investment Program (FIP) under the Climate Investment Fund.

While FCPF and the UN-REDD focus to a certain extent on REDD, the now emerging FIP has a more holistic approach in addressing forest mitigation options.

### Forest Carbon Partnership Facility (FCPF).

For more than 10 years, the World Bank Group has supported carbon markets through a number of different funds. with carbon investments increasing since 2000 (from US\$ 145 million/year in 2000, to US\$ 415 million in 2004: and on to a total of US\$ 1932 million in 2006). There are two funds that particularly address forest related issues: the Biocarbon Fund, which has provided funding for LULUCF -including A/R CDM- projects since 2000 (see details under [www.worldbank.org/biocarbonfund](http://www.worldbank.org/biocarbonfund)), and a new instrument, the Forest Carbon Partnership Facility ([www.carbonfinance.org/fcpf](http://www.carbonfinance.org/fcpf)). The FCPF, launched at COP-13 in Bali and operational since July 2008, assists developing countries in their efforts on REDD. Nine donor countries and one organization have so far committed funds to the FCPF and the total secured budget reaches US\$ 120 million. The FCPF has the dual objectives of building capacity for REDD in developing countries, and testing a program of performance-based incentive payments in some pilot countries. Two separate mechanisms have been set up to support FCPF objectives:

- **Readiness Mechanism:** the Facility helps a considerable number of countries to arrive at a credible estimate of their national forest carbon stocks and sources of forest emissions, as well as assist the country in defining their reference scenario based on past emission rates for future emissions estimates. The Readiness Mechanism offers these countries technical assistance in calculating opportunity costs of possible REDD interventions, and designing an adapted REDD strategy that takes into account country priorities and constraints. Up to March 2009, 37 developing countries submitted their so-called Project Idea Note (PIN) to FCPF. Based on an approved and commented PIN, the countries are then invited to prepare a Readiness Plan (R-Plan) for which they can receive a financial support up to 200,000 US\$ from FCPF. The RPlan defines a work program of an implementation phase over two the three years with a budget of up to 2-3 million US\$ per country. In June 2009, three countries

(Guyana, Panama and Indonesia presented their R-Plan to the Governing Body of FCPF (the Participants Committee). 10 other countries are currently preparing their R-Plan.

- **Carbon Finance Mechanism:** a number of countries will be selected after 2009 to participate in this mechanism through which the Facility would implement and evaluate pilot incentive programs for REDD based on a system of compensated reductions. The structure of these incentive payments would build on the options for REDD that are currently being discussed within the United Nations Framework Convention on Climate Change (UNFCCC) process, with payments made to help address the causes of deforestation and degradation. Within the Carbon Finance Mechanism, payments would only be made to countries that achieve measurable and verifiable emission reductions.

#### **UN-REDD:**

The UN-REDD programme has been launched in September 2008. It is a collaborative programme between three UN-agencies: FAO, UNDP and UNEP. UN-REDD has two components: (i) assisting developing countries to prepare and implement national REDD strategies and mechanisms; and (ii) supporting the development of normative solutions and standardized approaches based on sound science for a REDD instrument linked with the UNFCCC. The programme will help empower countries to manage their REDD processes and will facilitate access to financial and technical assistance tailored to the specific needs of the countries. In its initial phase the programme will assist nine developing countries (Africa: DRC, Tanzania and Zambia; Asia: Indonesia, PNG and Vietnam; Latin America: Bolivia, Panama and Paraguay) in establishing systems to monitor, assess and report forest cover. Norway, which is looking for ways to offset carbon dioxide emissions from its growing natural gas export business, donated US\$52 million to finance the initial phase of UN-REDD and other bilateral donors are interested to contribute.

#### **Climate Investment Funds.**

A new Climate Investment Funds (CIF) was launched in July 2008 by the World Bank Group. The objectives are (i) scaling up investments in low-carbon technology (Clean Technology Fund) and (ii) supporting various programs to test innovative approaches to climate action (through the so-called **Strategic Climate Fund**). The Strategic Climate Fund also implies the elaboration of a Forest Investment Program (FIP) as one of the targeted programs. The CIFs combine significant concessional financing with international financial institutions, public and private sector flows, the Global Environment Facility (GEF) and other climate financing (such as carbon finance).

#### **Forest Investment Program (FIP):**

A 2007 UNFCCC study<sup>9</sup> and the recent mapping study on forest financing sources<sup>10</sup> have shown that the current financial flows into the forest sector are grossly inadequate for meeting the investment needed to address climate change through forest measures. Current REDD programs such as the Forest Carbon Partnership Facility as well as the UN-REDD are not designed to cover transformational investments necessary to achieve emission reductions. These challenges are recognized by the Forest Investment Program (FIP) as part of the targeted programs. The FIP is actually in a design phase (since October 2008) and a decision on its launching will be taken in early summer 2009. The FIP should be established with a view to mobilizing significantly increased funds (in the order of magnitude of US\$500-800 million) to accelerate efforts in developing countries to reduce deforestation and degradation, and to promote improved sustainable forest management, including forest restoration as a means to reducing carbon emissions and the protection of carbon reservoirs.

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<sup>9</sup> UNFCCC. 2007. Investment and Financial Flows to Address Climate Change. Bonn.

<sup>10</sup> PROFOR. 2008. Mapping of Existing and Emerging Sources of Forest Financing

## **REDDES**

ITTO has initiated a new thematic programme called Reducing deforestation and forest Degradation and Enhancing Environmental Services in tropical forest REDDES. The REDDES Programme is aimed at preventing and reducing the loss of environmental services from tropical forests due to deforestation and degradation.

The REDDES Programme contributes to the implementation of the CPF Strategic Framework for Forests and Climate Change<sup>11</sup> in those areas of assistance which are relevant to ITTO's work; i.e. (i) incorporate adaptation and mitigation in national forest programmes and other development strategies; (ii) build capacity for SFM and forest-based climate change mitigation and adaptation; (iii) enhance the biophysical adaptation of forests to climate change while safeguarding the livelihoods of forest-dependent communities and small forest owners and protecting forest biodiversity and other essential forest services; (iv) reduce and eventually eliminate unsustainable forest activities; (v) enhance capacity to design, monitor, verify and report on climate change mitigation and adaptation efforts; and (vi) explore ways of securing international and national financing and private-sector investment.

ITTO's comparative advantage is in capacity building at the implementation level, demonstration and scaling up through dissemination of information on technical aspects and lessons learned on PES under the REDDES Programme

ITTO is receiving the proposals for the first round of financing under the REDDES. An interesting first observation is that many of these are proposals that include activities on REDD-plus under the framework of sustainable forest management.

### **Bilateral Cooperation**

Cooperation agencies from donor countries include programs that facilitate CDM activities and trade of CERs, inter alia: Austria, Australia, Belgium, Denmark, Finland, France, Germany, Italy, Japan, Luxembourg, The Netherlands, Portugal, Spain, Sweden and the United Kingdom. Forestry activities are included in different ways in all these programs.

## **5. Financing REDD- plus in a post 2012 agreement<sup>12</sup>**

REDD funding needs will increase over time and vary in nature. In the short term, interim funding is needed for readiness (such as provided through FCPF and UN-REDD), capacity building and initial investment (such as proposed by the FIP, Forest Investment Programme). Over time, substantially increasing funds will be needed. In addition, a crucially important characteristic is the certainty and predictability of continued financing.

To provide the substantial and sustainable funding in the long term, the possible sources include grant, loan, guarantee financing from e.g. multilateral banks and carbon markets (auctions and sales). REDD activities in developing countries in the long term thus can be financed through three main options (Global Canopy Programme 2008):

- i. a voluntary fund could operate at the national (i.e. uni- or multilateral) or international scale raising funds e.g. from ODA and other public and private sources;
- ii. a direct market mechanism for REDD credits would be traded alongside existing certified (or verified) emissions reductions (CERs), and could be used by companies in Annex I countries to meet emissions targets in their national cap-and-trade systems; or

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<sup>11</sup> CPF 2008. Strategic Framework for Forests and Climate Change. A proposal by the Collaborative Partnership on Forests.

<sup>12</sup> This section is updates the one presented to TFD in the paper by Marku Simula, April 2009

- iii. a hybrid/market-linked mechanism would generate finances through either an auction process or by establishing a dual-market in which REDD credits are linked to but are not fungible with existing CERs. Norway's proposal to auction Assigned Amount Units (AAUs), the Center for Clean Air Policy's "Dual Markets" approach and Greenpeace's TDERM are examples of market-linked mechanisms.

**Box 1: Options for near term financing from REDD**

The World Bank recently made some proposals for anticipated longer-term flows or assets if direct funding cannot be obtained in the short term. Four types of such "frontloaded" funding could be explored:

- (1) REDD-specific bonds of existing multilateral development banks.  
*This would imply that e.g. the World Bank issues REDD bonds against long-term assets specifically granted to the WB for this purpose.*
- (2) An international finance facility for REDD.  
*This implies to establish a facility with an own regulatory status and rating for using long-term assets grant.*
- (3) Niche market/private investment structures.  
*This model would be channel investment for socially conscious investors, using existing MDB issuance capacity, and at the same time channeling investment funds through private sector financial institutions.*
- (4) Revenue enhancement/risk mitigation.  
*A fund established to lower the risk to bondholders or local and international private sector investors interested in REDD.*

(see World Bank sheet, prepared by Susan McAdams June 10, 2009)

Recent developments and the analysis on weaknesses and strengths of each option suggest that a combination of these approaches may be needed to address the specific forest and socio-economic conditions and the particular needs of developing countries. A common critical requirement for all the options is good governance to make contractual, performance-based REDD financing effective in practice.

In general, non-Annex I Parties call for new and additional contributions from developed countries. This may limit the financing potential of the first option and the sustainability of its funding flows as emissions reductions generated through a voluntary fund cannot be used for compliance by participating developed countries<sup>13</sup>. This is why many stakeholders have emphasized the need for market-based approaches.

However, the role of the market-based approach implemented on sub-national or project level is one of the contentious issues in the REDD financing options. It has been seen problematic for a number of reasons such as (a) interfering in the developing countries' sovereignty, (b) possible conflicts or difficulties related to the property rights of the forest carbon, (c) slowness of the complicated but necessary policy and institutional reforms which would lead to long delays in the implementation, (d) unfair competitive conditions to countries and communities that are less prepared, etc. On the other hand, advocates for the market-based approach argue for (i) possibility for rapid implementation, (ii) large-scale funding potential since ODA and other public sources may not be able to match the needs in a sustained way, (iii) possibilities for effective risk management as problems of implementation are easier to address at local than national level, etc.

In any case the governments' role would be crucial to create an enabling environment for the markets (a) to set up necessary national-level rules and rights for actors, (b) to contain other land use pressures on forests (incl. revision of land-use related fiscal and other incentives), (c) to map and plan land use and identify priority areas for REDD implementation, and (d) to establish reference levels and monitoring systems of deforestation, degradation and leakage, (e) to clarify tenure, use rights and access to carbon pools, etc. (Moura Costa 2008).

Recognizing these issues, a "nested" approach has been proposed by CATIE and supported by several Latin American countries drawing on the pioneering experience of Costa Rica and Colombia. It aims to address project-level risk within national-level accounting mechanisms, i.e. individual carbon projects would not be credited unless the overall country emissions reductions were below the national reference level. While being one of the hybrid/market linked approaches

<sup>13</sup> E.g. Moura Costa (2008)

this also represents an example of joint public and private sector engagement in implementing REDD.

Obviously, both private sector investors and intermediaries (financing institutions, traders, certifiers, verifiers, consultants, etc.) in developed countries have an economic interest to promote the market-based approach for REDD financing.

A key argument against market-based approaches has been possible risk of flooding the international carbon market with REDD credits if they are fungible with other carbon credits. The theoretical potential supply of REDD credits is large, their delivery costs are estimated to be low<sup>14</sup> and they could depress the international carbon prices having a negative impact on reducing carbon emissions elsewhere and in other activities. Experience demonstrates that this does not exist beyond paper. Real conditions of the sector and previous experience in forestry demonstrate that the sector reacts in a slowly manner to this type of innovations. However, an option for addressing this risk would be to establish a quota of REDD-plus equivalent to the yearly emission of the sector in the past as per the 4AR of the IPCC. In clear terms that would imply that around 20% of the global reductions could be achieved using REDD-plus. Other options have been also discussed and decisions will be made by the COP.

To address the problems related to the market-based approaches, a number of other proposals have been made. The Coalition of Rainforest Nations<sup>15</sup> has proposed developing countries to acquire AAUs from REDD countries against REDD credits and sell these). The Waxman-Markey Bill proposal<sup>16</sup> in the United States includes sale of Annex I country AAUs by developing countries. Greenpeace has proposed a Tropical Deforestation Emissions Reduction Mechanism (TDERM)<sup>17</sup> which would be a hybrid market-linked fund which would trade REDD credits that would not be fungible with the current CDM market and the price of these credits would be set either by auctioning or by setting a price linked to the price of Kyoto credits. The European Union has proposed an EU Global Carbon Mechanism<sup>18</sup> which would be financed by proceeds of auctioned allowances in the EU ETS as the main source of EU contribution in the short term. A REDD bond scheme has been proposed by the Prince's Rainforest Project<sup>19</sup>.

### **Towards an ideal system**

Elements for an 'ideal' system of REDD financing schemes could include the following elements: (i) effectiveness in achieving climate change mitigation objectives, (ii) due consideration of co-benefits, (iii) predictable, sustained and adequate funding to cover the large-scale needs of implementing forest mitigation options, (iv) in order to meet these funding needs, integration of financing from a variety of sources, including from the private sector, (v) a phased approach starting with capacity building, (vi) equitable access, (vii) flexibility of entry in different phases of implementation, and (viii) possibility for performance-based payments from early implementation. Angelsen et al. (2009) in a document prepared for the Government of Norway, provides an example of phased approaches for REDD financing:

- Phase 1: An initial support instrument that allows countries to access immediate international funding for national REDD strategy development, including national dialogue, institutional strengthening, and demonstration activities.<sup>20</sup>
- Phase 2: A fund-based instrument that allows countries to access predictable REDD finance, based upon agreed criteria. Continued funding under this instrument would be results-based, but performance would not necessarily be monitored or measured only on the basis of

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<sup>14</sup> The costs would vary between countries and forestry situations. The lowest cost estimates based on opportunity costs start from less than USD 0.10/tCO<sub>2</sub> (Woods Hole 2007.)

<sup>15</sup> [www.rainforestcoalition.org/](http://www.rainforestcoalition.org/)

<sup>16</sup> [www.energycommerce.house.gov/index.php?option=com\\_content&task=view&id=1560&Itemid=1](http://www.energycommerce.house.gov/index.php?option=com_content&task=view&id=1560&Itemid=1) - 41k -

<sup>17</sup> [www.greenpeace.org.uk/media/reports/tropical-rainforest-emissions-reduction-mechanism-tderm-a-discussion-paper](http://www.greenpeace.org.uk/media/reports/tropical-rainforest-emissions-reduction-mechanism-tderm-a-discussion-paper)

<sup>18</sup> <http://ec.europa.eu/environment/forests/deforestation.htm>

<sup>19</sup> [www.princesrainforestsproject.org/](http://www.princesrainforestsproject.org/)

<sup>20</sup> FCPF and UN-REDD are already providing assistance to several countries for readiness capacity building.

emissions and removals against reference levels. Performance would be related to the implementation of National REDD Strategy Policies and Measures (PAMs).

- Phase 3: A GHG-based instrument that rewards performance on the basis of quantified forest emissions and removals against agreed reference levels. In this phase transition from global facility to integration with compliance markets would take place.

Besides the need for a phased approach, other issues that seem to be key in the discussion on how to finance REDD-plus activities are size of the market, availability of funds and/or funds and accessibility to funds. These and other important issues depend on how the COP decide to include REDD- plus in a post 2012 mitigation agreements and in the National Appropriate Mitigation Actions (NAMAs). These issues are presented in the next section

### **Points to be retained**

- The three major market options in place are (i) the Kyoto regulated markets; (ii) Other regulated markets and (iii) Voluntary markets. New options for including REDD as a market options are being discussed and some pilot activities for “learning by doing” are being undertaken.
- Experience on forestry in the Kyoto regulated markets is rather disappointing. Although stakeholders in developing countries have made a great effort for using the A/R CDM, only less of 1% of the transactions in the CDM is from forestry projects.
- Overruled methodologies, modalities and procedures increase the transaction costs of mitigation far over the potential payments by buyers.

### **Points to be discussed:**

- What are the requirements from forest stakeholders for establishing a REDD-plus market?
- What would be the minimum carbon price required if sustainable development is to be achieved through REDD-plus activities? Is it feasible to get this price from potential buyers? If not, what would be necessary to create such a demand?
- Which are the stakeholders interested in a market approach for REDD-plus and what is its rational?
- Which are the stakeholders against a market approach? Or which are the concerns around a market approach for REDD-plus?
- Discuss the proposals made by the World Bank on Options for Near Term Financing from REDD (Box 1, and sheet apart). What value do you give to such approaches?

## **6. Developments under the Ad-Hoc Working Group on Long-term Cooperative Action (AWG-LCA)**

This section is based on the options included in the negotiating text (NT) prepared by the AWG-LCA chair on the AWG-LCA deliberations (FCCC/AWGLCA/2009/8 and its updates to be made public in the third week of June).

The following aspects were reflected in the NT of the AWG-LCA-Chair:

1. Mitigation actions by developed countries [literal A] (which has a strong link to the AWG-KP process Art. 3.9 review on the modalities for Annex one parties for achieving their commitments);
2. Mitigation actions by developing countries [literal B] (NAMAs), including MRV of actions and support
3. Treatment of REDD-plus [literal C] including policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests

and enhancement of forest carbon stocks in developing countries). Two major approaches are considered: (i) Integrated under or to be integrated as a NAMA; or (ii) Standing alone mechanism.

The discussions and proposals include

- Phases
- Funding mechanisms (means of implementation
- Monitoring, reporting and verification; and
- Institutional arrangements.

The negotiating text recognizes the need that developed country Parties show leadership in mitigation commitments or actions, in supporting developing country Parties in undertaking adaptation measures and nationally appropriate mitigation actions (NAMAs), and in assisting them through the transfer of technology and financial resources to move towards a low-emission development pathway. Furthermore, the shared vision for long-term cooperative action aims to achieve sustainable and climate resilient development and to enhance actions on adaptation, mitigation, technology, finance and capacity building, integrating the means of implementation to support action on adaptation and mitigation in order to achieve the ultimate objective of the Convention.

Paragraph 55 establishes the country Parties with nationally appropriate mitigation commitments or actions either mandatory or voluntary. Further, §65 presents the options for developed country Parties for achieving their quantified emission limitation and reduction objectives. It presents 3 options:

Option 1: mostly through domestic actions; {and they may acquire, from developing country Parties, emission reduction units provided that the acquisition of emission reduction units is supplemental to domestic action} {, which should fulfill at least 90 per cent of their commitments exclusively from domestic actions. A maximum of 10 per cent of their commitments should be achieved through the use of flexibility mechanisms, including offsets}; or

Option 2: domestically; if developed country Parties intend to achieve any proportion of their emission reductions abroad, commitments to undertake deeper emission reductions would be required, as well as clarity on the proportion of emission reductions to be achieved domestically and abroad; or

Option 3: internally and not through flexible market mechanisms.

Paragraph 65, though not emphasized in the June meeting of the AWG-LCA in Bonn, is extremely important for defining the potential size of a REDD-plus market, because it determines if emissions reductions from REDD-plus can or cannot be used for fulfilling GHG reduction commitments from Annex I countries. REDD carbon market potentials, indeed, seem to be quite limited considering these options. In addition, a new negotiation position has been brought up by G77 and China that REDD should be an offsetting measure and possible carbon markets should be developed without considering mitigation commitments of Annex-I countries.

REDD-plus is mentioned in the negotiation text under literal B, mitigation by developing countries. REDD-plus, however, is not mentioned at all in literal A (by developed countries) because no party provided input in this regard, but REDD is still an option for CDM (AWG-KP), though without a firm lobby. With regard to mitigation by developing countries, REDD-plus is mentioned as one of the activities that could be included in a NAMA (§ 73(f)). Because of this it is necessary to have a careful reading of what a NAMA can become, even if there is still a lot to be negotiated.

Some key elements from NAMAs seem to be:

- NAMAs will be instruments designed at the national level. Guidance will be given by the COP or a body created for this aim.



- Developing country Parties will contribute to enhanced mitigation by developing NAMAs. Activities under the NAMA's need to be country driven and aimed at promoting sustainable development. It is still not clear if and how voluntary commitments can be properly included.
- A register for reporting progress in the implementation of NAMAs is under discussion; if needed, with measurable, reportable and verifiable support by developed country Parties.
- Developing countries may register their NAMAs on a voluntary basis. The level of mitigation effort by developing countries shall be commensurate with the level of support received from developed countries. Such measure also includes a MRV component.
- A support and accreditation mechanism is an alternative to the register. Such a mechanism could have a "support" and "accreditation" path.
- Options for mechanisms for registering and facilitating implementation of NAMAs are explained in §81
- NAMAs should get support for its implementation.
- There could be unilateral NAMAs (as those financed fully by the developing country). These can register their progress using the National Communications.
- In section E the possibility to create a NAMAs crediting mechanism is presented, as well as a sectoral crediting mechanism.

**Regarding financing REDD-plus**, the negotiating text differentiates between funding

- (a) Readiness activities phase of REDD-plus actions, and the subsequent policy implementation and demonstration activities phase, including the activities to be implemented up to 2012, and
- (b) The full implementation phase of REDD-plus activities in developing countries (table 3).

*Table 3. REDD+ financing, options in the AWG-LCA-text*

Phase	Options	Approaches
The readiness activities phase of REDD-plus actions, and the subsequent policy implementation and demonstration activities phase, including	A readiness fund established under the COP to support capacity-building, technology transfer, policy implementation and institutional arrangements.	
	REDD-plus readiness windows of the relevant Convention funds	
	Auctions of allowances for implementation of national policies and measures	
	Limited access to the market for emission reductions achieved by demonstration activities.	
	A special climate change fund to finance activities, complementary to the financing provided by the Global Environment Facility and by bilateral and multilateral funding, for enhancing the capabilities of developing countries to monitor changes in their forest cover and the associated carbon stocks and for designing and implementing policies that reduce deforestation and forest degradation.	

Full implementation phase	Using public funds	A specialized fund established under the COP for REDD-plus
		Specialized funds or funding windows established under the COP
		Trust funds for community forestry accounts, a Convention adaptation fund, by which conservation and sustainable forest management could be supported as adaptation measures, and/or a forest reserve fund for conservation and sustainable forest management under the mitigation fund
	Use of markets	Access to the carbon market through issuance of carbon credits for emission reductions from deforestation and forest degradation
		Access to the carbon market for emission reductions from deforestation and forest degradation, and for conservation and enhancement of carbon stocks in existing forest
	Combination of markets approaches and funds	A fund for conservation additional to ODA, international levies and/or market-linked mechanisms
		Funds for capacity building, conservation efforts and sustainable management. Use of markets or funds will depend on host countries
		A combination of market based and non-market based approach
		A special climate change fund complementary to the Global Environment Facility and bilateral and multilateral funding,

With regard to monitoring, reporting and verification (MRV), the negotiation text mentions the progress made by SBSTA on methodological issues and the need to consistently include REDD-plus activities in the NAMAs.

### Points to be retained

- The Climate Talks in Bonn represent a step forward towards an agreement in COP 15
- The negotiation text presents options with regard to the following relevant issues for the inclusion of REDD-plus in a post 2012 mitigation agreement
  - o Size of the “potential REDD-plus market”
  - o Integration of REDD-plus in the NAMAs
  - o Funding mechanisms for a phased approach for REDD-plus

### Points to be discussed:

- Which is the position of each stakeholder group with regard to the options presented in the negotiating text?
- Are there new points of consensus / fracture lines?
- How can we accentuate our “ideal REDD financing approach” with the actual negotiation options relating to REDD?

## 7. Stakeholders perception

During the meeting in New York 6 working groups were organized. Table 4 summarizes the main points discussed by in the working groups. Some issues seem to be of greater importance for the whole group of stakeholder representatives that participated in this meeting. These are:

- ✓ the need for including the widest possible set of forest mitigation options;
- ✓ the need for recognizing value of the forest beyond carbon;
- ✓ the need for a credible monitoring, reporting and verification (MRV) system/mechanism;
- ✓ wide acceptance to the phased approach;
- ✓ the need of combining financing sources including grants, loans and investments;
- ✓ the need establishing and enforcing coherent legislation from national to local level;
- ✓ the importance for improving governance in the forest sector;
- ✓ the need for clarifying the role of governments and for promoting appropriate legislative frameworks; and
- ✓ the need for clarifying ownership as well as access and use rights of forest and carbon pools

There are two other issues that although mentioned by the majority of the working groups, a great divergence on how to treat these issues appears obvious in the analysis:

- Participation
- Access ownership and distribution of benefits (including revenues) and responsibilities

	Business/private sector	Environmental NGOs	Intergovernmental organizations	Communities-indigenous & women	Government	Research
<b>Scope</b>						
A system for financing REDD-plus needs to be flexible and adaptive	X					X
Widest possible SFM activities should be included, relation to AFOLU	X		X		X	X
Relation/boundary with other sectors (e.g. energy)	X		X			
Ensure that policy makers are aware about the value of the forests beyond carbon	X	X		X	X	
Credible MRV is important	X		X		X	X
Need to clarify main concepts (e.g. additionality, reference level)		X				
<b>Approaches</b>						
Phase approach is adequate	X	X			X	X
Combination of grants and loans are applicable	X		X		X	X
Need to consider other funding source, e.g. investments and trade capital (after capacity building)	X				X	
National ↔ Local level (policies, funds, etc)		X	X			X
Recognize experience and knowledge from local stakeholders, especially indigenous peoples and communities				X		

<b>Benefits and responsibilities</b>						
Need to clarify size of risks and/or of potential benefits	X				X	
Need to clarify (in the negotiation) how to distribute revenue	X					X
Need to ensure equal sharing of benefits and responsibilities (social and geographical equity)		X		X		
Revenues to be distributed from the national to local. Entry points of revenues: national					X	X
Need to ex-ante clarify co-benefits and its “ownership”, ex-ante investment and ex-post revenues	X				X	X
<b>Market requirements</b>						
Clarification who is the buyer and who is the seller	X				X	
Need of support from the public sector for a good participation of the private sector in a REDD-plus market	X				X	
<b>Governance</b>						
Improvement on governance of forest resources is key for ensuring success of REDD-plus	X	X	X	X	X	X
Shall be in line with human rights and with the related existent international agreements				X		
Ensure participation (different positions regarding participation of who and at which level)	X			X	X	X
Systematic use of tools on transparency and participation	X			X		
National mechanism for participation (oversight committee)				X		X
Clear role of government and legislation at different levels (national, sub-national and local); e.g. implementation, facilitator, insurance and risks management	X		X		X	
Need of a code of conduct at the local level agreed by local stakeholders	X					
Clarify ownership, access and use rights of forests and carbon pools	X			X	X	X
<b>Science</b>						
Need for sound science: accurate and applicable under developing countries circumstances	X					
Need to recognize existent knowledge and to widespread new knowledge				X	X	
Use IPCC reports, methods and tools						X

## Points to be discussed:

Participants in the Montreux meeting should discuss in more detail the issues mentioned at the beginning of this section. Based on such a discussion, participants should start a process of defining clear messages for the next two TFD meetings, i.e. the messages for consideration in the decision-making process on REDD-plus.

## 8. Points of Consensus and Fracture Lines<sup>21</sup>

Perhaps the most resounding consensus reached in New York Dialogue of TFD was the importance, from a climate mitigation perspective, of ensuring that **REDD plus is properly integrated into post-2012 arrangements and the value of ensuring such measures are harmonized with policy frameworks that promote Sustainable Forest Management**. This constitutes an opportunity for developing countries to advance or accelerate more coherent sectoral and cross-sectoral strategies as, for REDD policies to be effective, a series of

<sup>21</sup> This section has been extracted from the co-chairs summary of the meeting in New York.

institutional, legal and capacity-building measures will have to be implemented. It also presents an opportunity to advance forest-consultation and decision-making processes to include key stakeholder groups, with particular emphasis on forest rights-holders.

Consensus was also reached on the scope of activities for which REDD financing should be available. Dialogue participants agreed that the **full spectrum of activities outlined in the Bali Action Plan, i.e. avoided deforestation and degradation, conservation, sustainable management of forests and enhancement of carbon stocks** (i.e. restoration of degraded forest lands) should be included under the umbrella of REDD plus.

It was also generally agreed that a **phased approach**, as outlined in the Options Assessment Report commissioned by the Government of Norway, provided a useful framework to consider how funding could flow to REDD candidate countries and how different sources of funding (including fund-based and market-based) might be combined. While the dialogue did not have time to consider triggers for moving from one phase to another (and thus deploying different funding sources), it was recognized that countries would require space to develop their capabilities to implement credible and efficient REDD policies and that there could be no single blueprint for forest nations to move from REDD Readiness to REDD policy and measures and eventually to measurable, verifiable and credible emissions reductions.

Interestingly the recognition of “no one single blueprint” also exposed a fracture line among the different interest groups as to how resources (be they market or fund-based) for REDD should be allocated internationally. If on the one hand participants were aware that funding must come from different sources that range from ODA to the carbon markets, there were some divergences on whether the funds should be directed to countries based on demonstrated performance, mitigation potential or on need. There were important discussions over some kind of rating or certification system for the “quality” of the carbon emission reduced (linked to a country’s institutional, legal and ethical standing), which should ultimately guide donors and investors in the provision of financial resources for REDD.

As for how the financial resources dedicated for REDD could be disbursed within a national context, there was general consensus among dialogue participants for the need to retain flexibility and the merits of a “**nested approach**”, which provides for an overall national framework (thus dealing more effectively with permanence, leakage and additionality) while accommodating sub-national (project-based) approaches. However, no consensus was reached on the specificities of a nested approach for revenue disbursement, with the different groups presenting different proposals on how it should unfold. While there was widespread agreement on the need for effective and intense “on the ground” participation by key local stakeholders (and in particular rights-holders), there was little agreement on the specific role of national governments (i.e. the balance between facilitator, broker, regulator, arbitrator, direct beneficiary etc).

There was no consensus on the level of explicit social and environmental safeguards necessary to guide the implementation of REDD and the distribution of REDD benefits. Representatives of Indigenous Peoples highlighted the principle of Free, Prior and Informed Consent, and the fact that over 150 countries have now endorsed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Representatives from women’s groups and forest-dependent communities also voiced their concern as to the extent to which the access and use rights of traditionally marginalized groups would be respected. There was also discussion but no resolution on how historical legacies of good stewardship might be addressed. This included whether and how community-based restoration activities undertaken before REDD was conceived could be “grandfathered” into the scheme and equally whether countries with high forest cover and historically low deforestation rates could be rewarded for responsible past actions. It was stressed that, in such cases, care would need to be taken not to compromise the integrity of Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC). In other words, the focus of any action still has to be justified on the basis of its contribution towards stabilizing atmospheric concentrations of GHGs.

Finally, dialogue participants agreed that REDD policies can only be implemented with **effective multi-stakeholder involvement** at the local and community level, where deforestation occurs. The need for a multi-stakeholder engagement strategy, with some form of independent oversight, was also identified although the specifics of such arrangements could not be agreed upon.

### **Task for the Montreux Dialogue:**

The task for the second dialogue in Montreux, Switzerland (19-20 June 2009) is to apprehend the development on REDD financing on the CC-negotiation front, to integrate new developments into the discussion, to reinforce some of the points of consensus and beginning to bridge some of the points of disagreement that arise from the first TFD meeting in New York.

- Issues that need to be clarified in order to define if there is an agreement or a fracture line
  - What does it mean “a flexible framework”?
  - Commitments/voluntary commitments/non-commitments by NAI?
  - National/sub-national and nested approach?
  - How to integrate the phased approach into the negotiation system?
  - The question of benefit sharing.

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