INTERNATIONAL TROPICAL TIMBER COUNCIL

Distr.
GENERAL

ITTC(XLVI)/10
5 November 2010

ENGLISH ONLY

FORTY-SIXTH SESSION
13 – 18 December 2010
Yokohama, Japan

DEVELOPMENTS IN UNFCCC REGARDING FORESTS AND THEIR POTENTIAL IMPLICATIONS FOR TROPICAL FORESTS AND THE WORLD TROPICAL TIMBER ECONOMY

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The views expressed in this report do not necessarily reflect those of ITTO or its country members. The authors want to express their gratitude to Eduardo Mansur and Hwan Ok Ma for their valuable comments and support as well as to Caitlin Connelly for her support in editing this report.

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DEVELOPMENTS IN UNFCCC REGARDING FORESTS AND THEIR POTENTIAL IMPLICATIONS FOR TROPICAL FORESTS AND THE WORLD TROPICAL TIMBER ECONOMY

1 Introduction

Since 2003, member countries have received reports from the ITTO Secretariat on the progress of the UNFCCC and IPCC negotiations on issues related to tropical forests and tropical timber products (see Robledo 2003, Robledo and Masera 2007, Robledo and Blaser 2008 and 2009). The purpose of these updates is to provide technical guidance on the main topics of negotiation (i.e., methodological issues, governance aspects, policy agreements, financing options), outline the relevance of these discussions to member countries, and highlight what ITTO has done or is doing related to the specific topic(s).

The focus of this report is on the developments in UNFCCC negotiations on REDD+[1], A/R CDM[2], and NAMAs[3], since the fifteenth Conference of the Parties (COP15) that took place in December 2009 in Copenhagen, Denmark. It also covers progress made on climate change financing relevant to tropical forests, in particular, to reducing emissions from deforestation and forest degradation in developing countries (REDD/REDD+).

2 REDD+

2.1 Progress in the negotiations

Discussions on reducing emissions from deforestation in developing counries (RED) were initiated in 2005 at COP 11 in Montreal. Over the past five years, the term has evolved in the negotiation process from RED to REDD+. REDD+ is a expansion of the original concept that includes a wide spectrum of forest mitigation options -- from emission reductions to enhancement of carbon stocks.[4]

There are five major categories that are considered highly relevant to the implementation of REDD+ initiatives.

- **Scope and scale** refers to the activities that will be eligible under REDD+ (scope) and the geographical level that will be used for accounting, and monitoring, reporting and verification (scale).
- **Methodological issues** refer to the methods and procedures for estimating, measuring, monitoring, reporting and verifying (MRV) changes in carbon stocks over time as well as methods for defining the "reference emission level" (REL).
- **Governance issues** refer to the societal challenges forest stakeholders could face when integrating REDD+ activities with the management of forest resources and when bringing REDD+ initiatives in-line with development priorities.
- **Long-term financing mechanism** covers the analysis of costs, and funding options for the preparation and implementation of REDD+ and the creation of long-term financing mechanisms for REDD+.
- **The potential role of REDD+ in addressing commitments under the UNFCCC** relates to the question of which Parties under the Convention will be allowed to account for changes in carbon stocks from REDD+ activities as means for meeting emission reduction commitments and under which requirements.

Since 2005, negotiations have addressed and advanced thinking on these categories in varying degrees. This progress is partially a result of early initiatives taken by Parties, observers, and bilateral and multilateral agencies. These early initiatives took the form of pilot REDD+ activities and provide insight and lessons learned, which are reported back to the UNFCCC. Starting in 2007, several funding institutions were launched to support these efforts, including two World Bank managed funds: the Forest Carbon Partnership Facility (FCPF) and the Forest Investment Program of the Climate Investment Funds (FIP/CIF); and other funds such as

[1] REDD+: 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 (according to the Bali Action Plan, paragraph 1b(iii)).
[2] A/R CDM: Afforestation and Reforestation in the Clean Developed Mechanism
[3] NAMA: Nationally Appropriate Mitigation Actions
[4] According to the paragraph 1 (b) (iii) of the Bali Action Plan, the term REDD+ includes 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

the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD Programme) and Interim REDD+ Partnership.[5]

Negotiations at COP 15

The Parties of the Convention were expected to agree upon a framework for REDD+ last year at COP 15 in Copenhagen. Such an agreement should have frame future actions in mitigation and adaptation including clarification on the key REDD+ issues defined above. Further it was expected to get clear guidance on how to support developing countries according to their specific circumstances. However, no agreement was reached despite progress made during pre-negotiation sessions in the lead up to Copenhagen and negotiations at COP 15.

Although a legally binding agreement was not reached at COP 15 on REDD+, some important forestry considerations were included in the Copenhagen Accord (CA) and Parties were able to reach agreement on a key issue related to methodological guidance for REDD+[6].

Reference to REDD+ in Copenhagen Accord (CA)

The CA recognizes the value of REDD+ as a key mitigation option, and therefore the importance of ensuring new and sufficient funding for REDD+ activities. It also introduces the possibility of including REDD+ activities in nationally appropriated mitigation actions (NAMAs), which are voluntarily submitted by non-Annex I Parties to report on mitigation measures. This is noteworthy because REDD+ could be an important mitigation tool for many non-Annex I Parties. Indeed the majority of the non-Annex I Parties that have submitted a NAMA included forestry/REDD+ actions (see chapter 4 for more information).

Decision at COP 15 on related to methodological guidance for REDD+

The decision by Parties related to methodological guidance for REDD+ is a major outcome of COP 15. The decision makes specific request to developing country parties to do the following:

a) Identify drivers of deforestation and forest degradation resulting in emissions and also the means to address these;
b) Identify activities within the country that result in reduced emissions and increased removals, and stabilization of forest carbon stocks;
c) Use the most recent Intergovernmental Panel on Climate Change guidance and guidelines, as adopted or encouraged by the Conference of the Parties, as appropriate, as a basis for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes;
d) Establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems as part of national monitoring systems that:
    i. Use a combination of remote sensing and ground-based forest carbon inventory approaches for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes;
    ii. Provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties, taking into account national capabilities and capacities; and
    iii. Are transparent and their results are available and suitable for review as agreed by the Conference of the Parties.

Post COP 15

REDD+ did not play a major role in formal UNFCCC negotiations during the first semester of 2010. It was on the official agenda at the SBSTA meeting in May, but only in a cursory way[7]. The topic received some attention

[5] A more complete list includes the World Bank BioCarbon Fund, the Congo Basin Forest Partnership, the Congo Basin Forest Fund, the REDDES-ITTO program, Norway's International Climate and Forest Initiative, the Amazon Fund, etc. For the purpose of this paper, only the three funds considered in this analysis are mentioned in the text.
[6] Decision 4/CP 15 Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forest and enhancement of forest carbon stocks in developing countries in FCCC/CP/2009/Add.1.

from the Ad-Hoc Working Group on Further Commitments for Annex-I Parties under the Kyoto Protocol (AWG-KP) in June where the potential role of REDD+ activities was raised in the context of Land Use, Land Use Change and Forestry (LULUCF) discussions underway within that group.

During the AWG-KP meeting, the G77/China presented a proposal for a "Declare and Review Regime" for Annex I Party reference levels under LULUCF. This proposal suggested a review of Annex I Party reference levels for LULUCF and was well received by other Parties. It was viewed as a way to promote more transparency and trust in the effective use of forestry activities as mitigation options. The proposal has the potential to set a precedent for developing methodologies, modalities, and procedures for REDD+ that are consistent for both Annex I and non-Annex I countries.

On the margins of the formal negotiation process, a great deal of movement was witnessed on the financing of REDD+ activities. In a two step process – the Paris-Oslo process – countries agreed to create an interim partnership to facilitate the start of REDD+ activities as well as to promote information exchange and knowledge sharing. In May 2010, 58 countries signed an agreement to establish such a Partnership (for more on the interim REDD+ Partnership please go to section to 2.3 on Financing REDD+, specifically to 2.3.4 on the Partnership).

Current Negotiations under the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA)

The last meeting of the AWG-KP and AWG-LCA took place in Tianjin, China (28 September – 3 October 2010). The issue of REDD+ was addressed in Part C of the AWC-LCA negotiating text, *Enhanced action on mitigation and its associated means of implementation*. The text is short and fully bracketed, which indicates that there are still many issues pertaining to REDD+ that are under discussion. The negotiating text (FCCC/AWGLCA/2010/14) presented two options for REDD+. The following is an analysis of these options.

Option 1 (option is in brackets and contains bracketed text)
(Paragraphs 52 and 53 of the negotiating text)

Paragraph 52, 52 bis, and 52 ter

- **Paragraph 52** of the negoting text contains many brackets. It does include references to key issues, including mitigation options and financing, but the overall concept remains undefined due to lack of agreement on the bracketed negotiating text.
- **52 bis** refers to the reduction of greenhouse gas emission through sinks. The wording is vague rendering the outcome and implications of this option are unclear.
- **52 ter** contains bracketed text that 'declares' the definition of REDD+ defined, but does not actually define the concept. In other words, this option allows for an agreement which is really a non-agreement because the details of what would or would not be included in REDD+ are put off to the future. The adoption of this text would need to be accompanied by a clear roadmap for establishing the design of the mechanism in a period no longer than 2 years (i.e., before the end of the first commitment period of the Kyoto Protocol).

Paragraph 53 (53, a-e)

- **Paragraph 53** only applies if a mechanism has been agreed upon in paragraph 52. The text has many brackets and provides many combinations, including developing and developed country participation in the mechanism.
- The only activity is not bracketed is 53 d, sustainable management of forest.
- It provides options to Parties to reduce deforestation and degradation or reduce emissions from these two processes (deforestation and forest degradation).

[7] Promoting capacity building on the use of the 2006 IPCC Guidelines was one of the major issues related to REDD+ that was addressed in 2010 at the thirty-second session of the SBSTA, held in Bonn from 31 May to 10 June 2010 (FCCC/SBSTA/2010/6)

Option 2 (option is in brackets, but does not contain bracketed text)

This is a more straight forward option that recognizes the need to immediately establish a REDD+ mechanism. In this option, REDD+ is defined as in the Bali Action Plan and supports the provision for positive incentives to increase participation through the establishment of a financing mechanism, which mobilize funds from developed countries. Even if this is not a clear commitment, this second option seems to be the better of the two options presented in the negotiating text.

Other Chapters (Chapters 2-6 of negotiating text)

There are other chapters in the negotiating text, which discuss elements of REDD+ and are relevant to the future of REDD+ and how impacts tropical timber and tropical forestry in general.

- *Chapter 2* discusses i.a. the role that REDD+ (program in this part of the negotiating text) could have in NAMAs. This is particularly relevant because the voluntary character of the NAMAs in this chapter is still in brackets.
- *Chapter 4* deals with sectoral approaches. The proposed roles of the forest sector in developing countries are dealt with in this chapter.
- *Chapter 5* deals with "*options for various approaches, including market mechanisms, to enhance the cost effectiveness of, and to promote, mitigation actions.*" This chapter is relevant for the definition of the funding mechanism for REDD+
- *Chapter 6* is relevant is sections where different options for addressing socio-economic impacts of mitigation actions are presented.

At the meeting in Tianjin, Parties discussed how to address forests more holistically. Among the issues addressed were ecosystem services; the need for REDD+ to contribute to adaptation; concerns that a REDD+ mechanism could create a parallel system of offsets; and the need to ensure environmental integrity of any possible REDD+ market mechanism. There was a general agreement on the consideration of the role of forests in providing ecosystem services and the importance of forests in adaptation.

In Tianjin Parties underscored the need to present the scope and principles of REDD+ and to address safeguards, financing and technical support for REDD+. Parties also highlighted the importance of establishing a REDD+ mechanism, taking a phased approach, creating clean institutional arrangements, and putting REDD+ on the Subsidiary Body for Scientific and Technological Advice (SBSTA) work program. A report from the the Chair of the REDD+ contact group was requested and will be submitted to the next COP (Cancun, 2010) to inform on the status of discussions. However a draft decision won't be prepared for the COP16.

There was general consensus among the Parties that any agreement on the role of REDD+ in post 2012 mitigation commitments can only be discussed once clarity on future commitments by Annex I countries has been achieved.

2.2 Issues

2.2.1 Scope and scale of REDD+

Paragraph 1 (b) (iii) of the Bali Action Plan includes various options related to the **scope** of REDD+ including reducing emissions from deforestation and forest degradation, conservation, sustainable management of forests, and enhancement of forest carbon stocks Out of these terms only "forest" and "deforestation", have been defined under the Kyoto Protocol. For the other terms there is no agreed definition. Despite an attempt made by the IPCC in 2003 to define forest degradation no agreement or recommendation was reached with regard to this term. Similarly there are many definitions of conservation and of sustainable management of the forest. In the case of "enhancement of carbon stocks" there is no available definition neither by the IPCC nor by the UNFCCC.

The lack of definitions is affecting the diversity of REDD+ projects being implemented on the ground. Because there is no consensus on which forest management practices can be included in early REDD+ actions, it is difficult to determine which REDD+ activities should be included or excluded from pilot activities. As a result, the majority of the ongoing pilot activities are only focusing on reducing emissions from deforestation and are not exploring other options included in REDD+ such as reducing emissions from degradation and/or enhancing carbon stocks (i.e., through forest restoration). Consequently, the development of methods for quantifying and

monitoring mitigation effects of REDD+ is being limited to deforestation, which could reduce the possibility of including other activities in the definition of REDD+.

The discussion on the **scale** for REDD+ refers to the geographical level at which carbon accounting, monitoring, reporting and verification should take place in order to ensure accuracy in calculations, and reduce risk of leakages. So far, the discussion has focused on two possible levels -- national and sub-national -- without giving a clear definition about what is meant by sub-national. The lack of definition has allowed for a wide-range of interpretations about what sub-level can mean, and its implications for calculating leakages and strategies for reducing them.

There seems to be a general understanding in the UNFCCC negotiations that developing countries should work towards a national accounting and monitoring system for REDD+. It is also recognized that some developing countries, due to their national circumstances, will also need to use a sub-national accounting and monitoring system. Because emission reductions and enhancement of carbon stocks resulting from REDD+ activities are achieved locally, some pilot activities are working to create appropriate linkages between sub-national and national carbon accounting systems.

2.2.2 Methodological issues

The discussion on methodological issues includes all relevant aspects for estimating, measuring, reporting and verifying changes in carbon stocks over time. It also includes approaches for setting reference emission levels, including the treatment of leakages and permanence, and approaches for monitoring, reporting and verifying (MRV) carbon stock changes over time.

This issue was addressed at COP 15 and resulted in decision 4/CP15. The wording of the decision, however, is vague and does not provide much clarification or guidance on the methodological aspects of REDD+.

The most prominent elements from the decision are noted below.

- Parties should use the most recent IPCC guidelines for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks, and forest area changes.
- Reference levels shall be based on historical data, with adjustments for national circumstances. This may open-up the possibility of including countries with high future potential emissions but low historical emission levels. The argument in favor of this adjustment is based on the understanding that countries with large areas of forest and historically low deforestation rates should not be excluded from any REDD+ mechanism. This is important because such countries could become major emitters in the future, even if they have not been big emitters in the past (i.e., as a consequence of international leakages).
- Definitions, modalities, and procedures are not included in the decision.
- There is a request for promoting capacity building and knowledge exchange amongst Parties.
- Developing countries should establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems.

The COP 15 decision provides agreement on some major issues, but it is not does not provide definitions, modalities, or procedures. In this regard, methodological guidance for REDD+ is not yet defined.

2.2.3 Governance

Governance issues were widely considered during discussions in the AWG-LCA, including safeguards on different aspects of governance such as proper national forest governance structures, respect to knowledge and rights of indigenous peoples and local communities, and promotion of the full and effective participation of relevant stakeholders. To date, there is no clear and agreed upon guidance agreed on these aspects. Neither is there guidance on the how to design and fund corresponding mechanisms.

Decision 4/CP15 recognizes the need for engagement of indigenous peoples and local communities in monitoring and reporting, but does not extend this to full involvement in REDD+ activities, such as in the design and development of programs or in the mechanisms for sharing benefits or liabilities. The decision also does not make reference to the UN Declaration on the Rights of Indigenous People (UNDRIP). Although parties agreed to keep safeguards in the operative section of the text (instead of in the preamble), the safeguards are tucked away behind the words “should be promoted and/or supported” and undermined by the strong opposition

of some countries to monitor and report on these. Without such reporting, there would be, in effect, no safeguards.

Countries and funds implementing pilot activities have had interesting results with regard to the integration of governance issues into REDD+ initiatives. The Forest Carbon Partnership Facility, in its ongoing "readiness" phase, divides governance issues into two major sub-items (WRI 2010):

i) **Governance of REDD+**: Includes stakeholder participation in REDD+ planning and implementation, government coordination in REDD+ planning and implementation, transparent and accountable REDD+ revenue management and benefit sharing, and transparent monitoring and oversight of REDD+
ii) **Governance-related drivers of deforestation**: Includes land tenure, forest management, forest law enforcement, and other forest governance issues relevant for REDD+ (e.g., links to other governance issues that can be related to an effective and efficient implementation of the REDD+ strategy)

2.2.4 Options for long-term financing of REDD+

According to a report prepared for the UNFCCC Secretariat, if emissions from deforestation and forest degradation are to be reduced to zero by 2030, a minimum investment of USD 12. 2 billion per year would be necessary to compensate the opportunity costs of deforestation and forest degradation (Blaser and Robledo 2007). The Eliasch Review (2008), estimates the overall cost of halving emissions from the forestry sector at USD 17-33 billion. This second calculation includes not only opportunity costs but also some assumptions of implementation and transaction costs. These figures show that funding resources need to be seriously scaled up if REDD+ is to become feasible.

The international community understands that developing countries are "*under different national circumstances and have differentiated capabilities.*" Consequently, a phased approach for REDD+ was proposed and is widely recognized. This approach includes three major phases: 1) increasing readiness; 2) starting (funding) early actions; and 3) fully implementing REDD+ potential under consideration of development priorities.[8]

For phases 1 and 2, developing countries need to get additional financial support in order to create the enabling conditions for a full participation in REDD+. Existing funds related to these phases are presented in section 2.3 of this report. For the third phase, full implementation of REDD+ inline with development priorities, Parties have decided to pursue various approaches, including opportunities to use markets, enhance cost-effectiveness of and promote mitigation actions. For Parties negotiating under the UNFCCC, it is clear that developing countries, especially those with low-emitting economies, should be given incentives to continue to develop on a low emission pathway.

2.2.5 Role of REDD+ in fulfilling commitments for a low-carbon global society

To date, there is no clarity about the role of REDD+ would have in a global agreement for mitigating climate change beyond 2012. There are three different options, which are all subject to controversy.

1. Carbon benefits from REDD+ can be used to fulfill commitments made by industrialized countries.
2. Carbon benefits from REDD+ can be used to fulfill (preliminary) commitments made by developing countries with a high evolution of greenhouse gas emission projections.
3. Carbon benefits from REDD+ can be used as a voluntary path towards low-carbon development in developing countries.

This subject has proven to be one of the most difficult topics in the negotiations. The discussion below offers arguments in favor and against each option.

Option A

Carbon benefits from REDD+ can be used to fulfill commitments made by industrialized countries. The major concern here is that such "carbon credits" could inundate the international systems for emissions trading and thus jeopardize incentives for reducing emissions in the energy and

[8] Angelsen, A.,Brown, S., Loisel, C., Peskett, L., Streck, L. & Zarin, D.. 2009. Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment Report. Prepared for the Government of Norway. Available at www.REDD-OAR.org.

transportation sectors. As these sectors -energy and transportation- are seen as the major cause of climate change, the trading of REDD+ credits can be seen as a "perverse incentive."

The major argument in favor of this option is that it could ensure long-term financing of REDD+ activities. Supporters of this option take the view that the forest sector is rather slow in reacting to mechanisms under the UNFCCC and that it is unrealistic to expect an inundation of carbon credits from REDD+, especially considering the huge burdens that these countries have to overcome before being ready for REDD+.

Option B
Carbon benefits from REDD+ can be used to fulfill (preliminary) commitments made by developing countries with a high evolution of greenhouse gas emission projections. Before COP 15,[9] some developing countries announced their willingness to envisage voluntary emission reductions, but no commitments were taken on in Copenhagen, and no progress has been achieved on this issue since then.

Option C
Carbon benefits from REDD+ can be used as a voluntary path towards low-carbon development in developing countries. This is an option that can only work if long-term funds for REDD+ activities are secured. Participation of industrialized countries as well as the private sector needs to be clarified in detail if this option is going to be considered.

2.3 Ongoing REDD+ Financing

The total amount pledged by some EU Member States under the Paris-Oslo Process on REDD+ is around €1 billion over 2010-2012 and represents approximately 15% of the total EU fast start funding.

There is a large landscape of forest carbon funding institutions. By October 2010, there were at least eight funds of considerable size that clearly included REDD in its list of funding options. We differentiated between funds focused exclusively at activities in mitigation – REDD (n=5) and funds financing multiple activities aimed at addressing climate change, including REDD activities (n=3) (table 2.1). There are other funds (e.g., GEF Trust Funds) that can include REDD activities in forests, but they report these under a wider mitigation category. For this reason these funds are not included in the report[10].

Table 2.1: Existing Forest Carbon Funding Institutions

Mitigation- REDD Funds		
Name	Type	Administrated by
Congo Basin Forest Fund (CBFF)	Multilateral	African Development Bank
Forest Carbon Partnership Facility (FCPF)	Multilateral	The World Bank
Forest Investment Program (FIP)	Multilateral	The World Bank
International Forest Carbon Initiative (IFCI)	Bilateral	Government of Australia
UN-REDD Programme	Multilateral	UNDP
Multipurpose Funds with a REDD component		
Name	Type	Administrated by
Amazon Fund (AF)	Multilateral	Brazilian Development Bank (BNDES)
Global Climate Change Alliance (GCCA)	Bilateral	European Commission
Special Climate Fund (SCF)	Multilateral	The World Bank

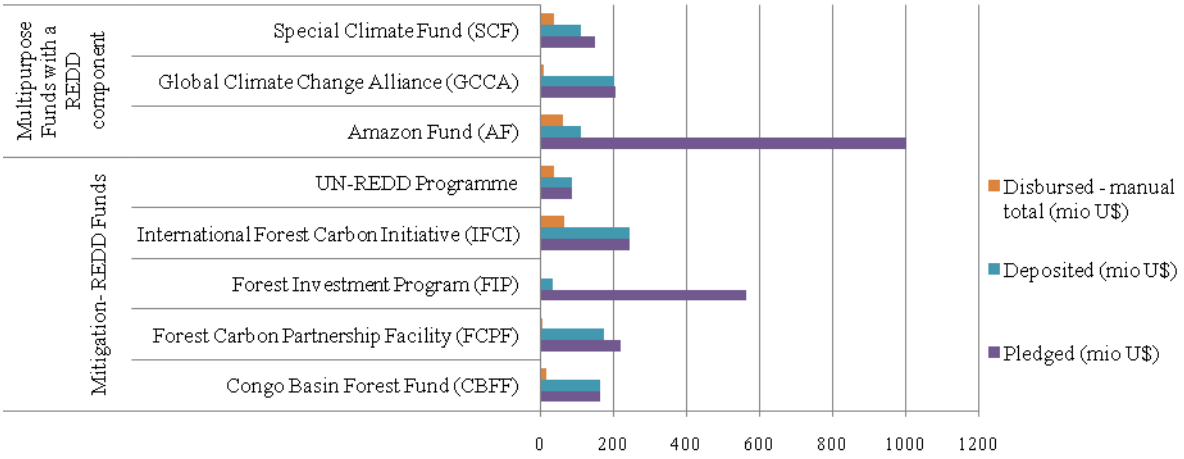
Source: Climate Funds Update

[9] For instance, one week before COP 15, China formally announced its target for the reduction of greenhouse gas emissions. The country said that by 2020, it would reduce carbon dioxide emissions by 40% to 45% compared to 2005 levels.

[10] REDD is term used in the official documents of these funds. It is not clear to which extend these funds consider activities beyond the two first Ds (emission reductions from Deforestation and forest Degradation)

The total volume pledged by October 2010 was USD 2,631 million. By the same date only USD 1,126 million were already deposited (42%) (see Figure 2.1) and pledged volumes deviate significantly from the financial targets of most funds (see Figure 2.1). There is a clear trend, however, in increasing funds for REDD+ activities.

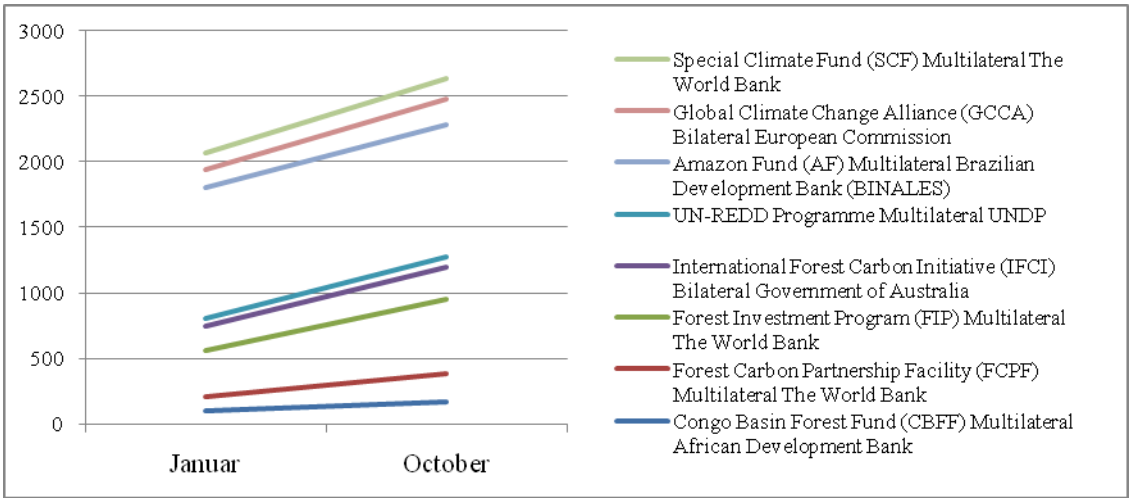
Figure 2.1: Pledged vs. deposited funds



Source: Climate Funds Update

Over 2010, all pledged funds have grown (see Figure 2.2) and deposited funds also increase from 33% to 42% of the total pledged money. Considering the fact that pledged money has also increased, the increment in deposited funds has a far bigger net effect.

Figure 2.2: Evolution of pledged money for REDD+ and other mitigation options



Source: Climate Funds Update

The remainder of this section focuses on the current functioning and possible future evolution of four funding institutions: The Forest Carbon Partnership Facility, The Forest Investment Program, The UN-REDD Programme and the Interim REDD+ Partnership. These funds are all available to ITTO producer consumer members. In section 2.4, this report provides a review of ITTO initiatives with regard to climate change mitigation, especially through the REDDES program.

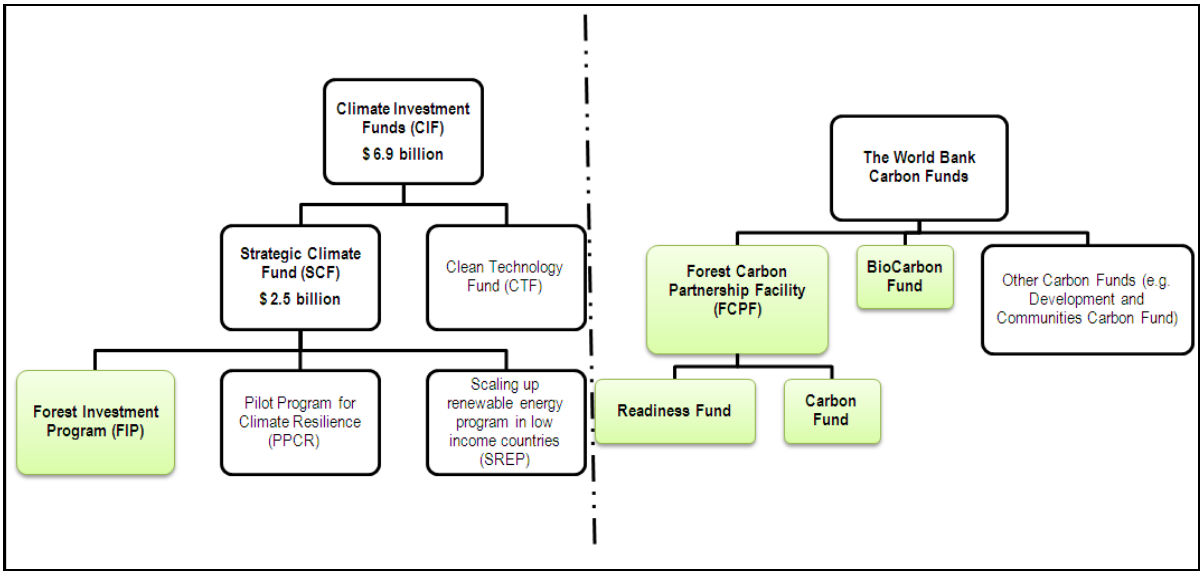
2.3.1 World Bank Fund

2.3.1.1 Forest Carbon Partnership Facility – FCPF

The FCPF (www.carbonfinance.org/fcpf), one of the World Bank's Carbon Funds (see Figure 3 below), was launched at COP-13 in Bali and has been operational since July 2008. It assists developing countries in their efforts to introduce REDD+ as a climate change mitigation option.

The Forest Carbon Partnership Facility looks at improving the environment in developing countries towards creating the minimum conditions necessary for undertaking REDD+ activities and thus preparing countries for future participation in a REDD+ mechanism under the UNFCCC. As such, the FCPF seeks to create an enabling environment by sponsoring knowledge creation and experience exchange to facilitate the development of a larger global program of incentives for REDD+ over the mid-term. The FCPF is not designed to finance the policy and investment programs that will be needed to achieve sustainable emission reductions.

Figure 2.3: Forests and climate change - World Bank managed and co-managed funding instruments



Source: The World Bank and Climate Funds Update, adjusted by the authors
Note: Funds colored with green are those that currently fund REDD+ activities

The FCPF established two mechanisms -- The Readiness Mechanism (known as the Readiness Fund and The Carbon Finance Mechanism (known as the Carbon Fund) -- to assist countries to prepare for REDD+. The World Bank is the Trustee of the FCPF's Readiness Fund and Carbon Fund, and provides secretariat services through a Facility Management Team. The Facility Management Team administers the Funds, makes proposals to the FCPF Participants Committee, and provides country advisory services and REDD+ methodology support. At the end of 2009, the FCPF had a total of 37 country participants in the Readiness Mechanism,[11] 11 Readiness Fund donors,[12] 5 Carbon Fund donors,[13] and 6 observer groups[14] (FCPF 2009).

Readiness Mechanism (Readiness Fund): By using this mechanism, countries will be better prepared to implement REDD+ in a wider context. Readiness activities under the Readiness Fund are narrowed to early planning, analytical work, and system design. The Bank looks for the design and application of a environmental and social due diligence framework as part of the readiness process. By end of October 2010, the Readiness Fund had with USD 115 million. Activities under the Readiness Mechanism follow two phases:

Phase I - Formulation of a Readiness Preparation Proposal: As a starting point, countries prepare a Readiness Preparation Idea Note (R-PIN) for review by the Readiness Fund. This is somewhat of a competitive process in that the quality of the R-PIN determines which countries are selected for participation in the Readiness Mechanism. If the R-PIN is of good quality, the country is awarded financial assistance from the Readiness Fund to design their Readiness Preparation Proposal (R-PP). The formulation of the R-PP[15] includes the

[11] Argentina, Bolivia, Cameroon, Cambodia, Central African Republic, Chile, Colombia, Congo Democratic Republic, Costa Rica, El Salvador, Equatorial Guinea, Ethiopia, Gabon, Ghana, Guatemala, Guyana, Honduras, Indonesia, Kenya, Laos, Liberia, Madagascar, Mexico, Mozambique, Nepal, Nicaragua, Panama, Papua New Guinea, Paraguay, Peru, Suriname, Tanzania, Thailand, Uganda, Vanuatu and Vietnam. Map under http://forestcarbonpartnership.org/fcp/node/203.
[12] Agence Française de Développement (AFD), Governments of Australia, Finland, Denmark, the Netherlands, Norway, Japan, Spain, Switzerland, United Kingdom, and the United States of America.
[13] Germany, Norway, Denmark, EU Commission and The Nature Conservancy.
14 Forest Dependent Indigenous Peoples, Private Sector, International Organizations, NGOs, UNFCCC Secretariat, UN-REDD Programme.
[15] To date, 9 of the 37 countries in the FCPF Readiness Mechanism have submitted their R-PPs: Argentina, Democratic Republic of Congo, Ghana, Guyana, Indonesia, Madagascar, Mexico, Panama and Suriname. Three R-PPs were endorsed at

preparation of an organizational arrangement for REDD, a consultation and participation plan, a diagnostic of causes of deforestation and forest degradation, a terms of reference for undertaking the design of the REDD strategy, a reference scenario, and finally, a monitoring, reporting and validation system.
Phase II - Readiness Preparation (Readiness Package preparation): which includes the fulfilment of the terms of reference prepared in the R-PP with financial support of the Readiness Fund. The Readiness Package represents the final product of the Readiness process. It has to describe i) how the monitoring system is implemented; ii) the reference scenario adopted; and iii) the REDD strategy and the multi-stakeholder process conducted for its preparation (FCPF, 2008).

Carbon Finance Mechanism (Carbon Fund): The FCPF will support a few countries that have successfully participated in the Readiness Mechanism, i.e., their Readiness Package has been accepted, through the Carbon Fund to test and evaluate incentive payments for REDD programs in approximately five developing countries. The Carbon Fund will remunerate the selected countries in accordance with negotiated contracts for verifiably reducing emissions beyond the reference emission levels According to the FCPF, "the Carbon Fund's payments are intended to provide an incentive to the recipient countries and the various stakeholders within each of these countries to achieve long-term sustainability in financing forest conservation and management" (FCPF 2008). In essence, the Carbon Fund will deliver emission reductions that stem from REDD projects activities. These provide evidence that greenhouse gas emission reductions resulting from the REDD activities launched by the participating countries have been realized and verified as per methodologies deemed acceptable by the countries and entities participating in the Facility. Considering the rather reduced funds available now in the Carbon Finance Mechanism it is questionable if this fund can achieve its goal.

2.3.1.2 Forest Investment Program – FIP

Through a collaborative effort among the Multilateral Development Banks (MDBs)[16] and countries[17], a new package of Climate Investment Funds (CIF) was launched in July 2008 to bridge the REDD+ financing and learning gap between now and a post-2012 global climate change agreement (see Figure 2.3). 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). Designed through extensive consultations, the CIFs are governed by balanced representation of donors and recipient countries, with active observers from the UN, GEF, civil society, indigenous peoples, and the private sector. The Forest Investment Program (FIP) is one of three targeted programs of the CIF's Strategic Climate Fund.

The main purpose of the FIP is to support developing countries' REDD efforts, providing up-front, bridge financing for readiness reforms and investments identified through national REDD readiness strategy building efforts. This is done while taking into account opportunities to help countries adapt to the impacts of climate change on forests and to contribute to multiple benefits such as biodiversity conservation and rural livelihoods enhancements. The FIP will finance efforts to address the underlying causes of deforestation and forest degradation and to overcome barriers that have hindered past efforts to do so. Other multilateral REDD programs, such as the FCPF and UN-REDD, are not designed to cover transformational investments necessary to achieve emission reductions.

The FIP is designed to achieve four specific objectives (as stated in the Third Design Document, May 2009):

1. To initiate and facilitate steps towards transformational change in developing countries forest related policies and practices;
2. To pilot replicable models to generate understanding and learning of the links between the implementation of forest-related investments, policies and measures and long-term emission reductions and conservation, sustainable management of forests and the enhancement of forest carbon stocks in developing countries;

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the 3rd participants meeting held in June 2009 (Guyana, Indonesia, Panama). Due diligence continues with the view to entering Readiness Grant Agreements to access up to USD 3.6 million for Readiness Preparation.

[16] African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IDB).

[17] By the end of 2009, Australia, Canada, Denmark, France, Germany, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom and United States pledged totally USD 6,313 million.
http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CIF%20pledges%20as%20of%20Dec%2031%202009.pdf.

3. To facilitate the leveraging of additional financial resources for REDD, including through a possible UNFCCC forest mechanism, leading to an effective and sustained reduction of deforestation and forest degradation, thereby enhancing the sustainable management of forests; and
4. To provide valuable experience and feedback in the context of the UNFCCC deliberations on REDD.

The FIP is in its infancy and should become operational in the near future. It is being established with a view to mobilizing significantly increased funds (in the order of magnitude of USD 500-800 million). As of October 2010, pledges totalling USD 562.1 million were received by the FIP from Australia, Denmark, Japan, Norway, United Kingdom and the United States. FIP pilot countries will be selected in February 2010 (Climate Funds Update, as reviewed at 01.10.2010).

According the Third Design Document (FIP, May 2009), the FIP is aimed at supporting three main activities: i) institutional capacity, forest governance and information; ii) investments in forest mitigation measures including forest ecosystem services; and iii) investments outside the forest sector which are necessary to reduce the pressure on forests.

The principles set out in the Governance Framework of the Strategic Climate Fund apply to the FIP. In addition, the following principles should be followed:

- National ownership and national strategies
- Contribution to sustainable development
- Promotion of measurable outcomes and result-based support
- Coordination with other REDD efforts
- Cooperation with other actors and processes
- Early, integrated and consistent learning efforts

With corresponding criteria for selecting pilot countries[18], and based on proposals prepared by the countries, the Sub-Committee approved the following countries to become pilots under FIP: Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Mexico, Laos and Peru. Additional pilots were also included in the recommendation. Currently the FIP is finalizing the pre-programming phase and should soon start the programming phase in all pilot countries.

2.3.2 UN-REDD

The UN-REDD Programme is a Multi-Donor Trust Fund (MDTF). UNDP is the appointed Administrative Agent for the MDTF. Launched in September 2008, the UN-REDD programme (http://www.un-redd.org/) is a collaborative effort jointly implemented by FAO, UNDP and UNEP. The programme established its Secretariat in July 2009 and aims to:

- Assist developing countries to 'get ready' to participate in a future REDD+ mechanism. By doing so, it is build confidence in the establishment of such a mechanism.
- Support the national REDD+ Readiness process and contribute to the development of one national REDD+ strategy.
- Promote REDD+ financing as an opportunity for countries to develop low carbon growth, energy access, and adaptation strategies – and to place these themes at the heart of their national development plans.
- Apply the principles of Paris and Accra declarations on country ownership and leadership in order to build confidence in the establishment of a REDD+ mechanism.
- Be at the forefront of UN Agency joint programming, in terms of delivering truly coordinated and harmonized National Programmes that limit transaction costs for recipient countries and maximize delivery benefits. Efforts will be in accordance with the approaches developed and agreed by the UN Development Group (UNDG).

The collaborative UN Programme has two components: 1) assisting developing countries to prepare and implement national REDD strategies and mechanisms; and 2) supporting the development of normative solutions and standardized approaches for REDD. Specific country actions under the UN-REDD are defining the scope and alliance building; improving capacities regarding monitoring and assessment of changes of carbon

[18] This set of criteria include: (a) Climate change mitigation potential, (b) Demonstration potential at scale, (c) Cost-effectiveness, (d) Implementation potential,(e) Integrating sustainable development (co-benefits) and (f) Safeguards.

stocks over time; promoting stakeholders dialogue for REDD; promoting a national REDD strategy; providing support for implementing REDD measurements and crating appropriate schemes for payment distribution.

In its initial phase, the programme will assist nine developing countries[19] in establishing systems to monitor, assess and report forest cover. Funding volume for countries varies from 2.5 – to 7.4 million USD. As of September 2010, a total of USD 106.5 million has been pledged (see Table 2.2).

Table 2.2: UN-REDD program funding sources

Donor country	Pledges (USD million)	Deposits pre-admin fee (USD million)	Net deposits (less 1% admin fee) (USD million)
Norway	84.4	84.4	83.6
Denmark	1.9	1.9	1.8
Spain	20.2		
Sub-Total	**106.5**	**86.3**	**85.4**
Interest rates		0.8	0.8
Total		**87.1**	**86.2**

Source: Climate Funds Update as per October 2010

2.3.3 REDD+ Partnership

In March 2010, countries attending the International Conference on the Major Forest Basins (hosted by the Government of France) agreed on the need to create a strong international REDD+ partnership. The partnership was launched during the Oslo Climate and Forest Conference (hosted by Norway) in May 2010 where heads of state and government, ministers, and other representatives from 50 countries signed an agreement on reducing greenhouse gas emissions from deforestation. Around USD 4.0 billion were pledged for the period 2010–2012 for measures to reduce greenhouse gas emissions from deforestation and forest degradation in developing countries. According to the REDD+ Partnership document,*"the core objective of the Partnership is to contribute to the global battle against climate change by serving as an interim platform for the Partners to scale up REDD+ actions and finance, and to that end to take immediate action, including improving the effectiveness, efficiency, transparency and coordination of REDD+ initiatives and financial instruments, to facilitate among other things knowledge transfer, capacity enhancement, mitigation actions and technology development and transfer."*

The Partnership is considered as **interim** as it will be expected to be replaced by, or folded into a UNFCCC mechanism that includes REDD+ once it is established and agreed upon by the Parties. To date, 68 countries are engaged in the Partnership[20].

In its core document, the members of the Partnership agreed on nine principles.

1. Be focused on support for developing country partners' capacity building and performance based REDD+ efforts, based on individual national circumstances.
2. Be consistent with Decisions 2.CP13 and 4.CP15 and any future COP decision on this matter, as well as be guided by the ongoing work of the AWG-LCA on REDD+.
3. Be inclusive of all committed countries as well as representatives of relevant stakeholders, including indigenous peoples, local communities, civil society and the private sector.
4. Provide transparency around REDD+ financing, actions and results.

[19] Bolivia, Panama, Paraguay, Democratic Republic of Congo, Tanzania, Zambia, Indonesia, Papua New Guinea and Vietnam.

[20] Angola, Argentina, Australia, Belgium, Brazil, Burundi, Cambodia, Cameroon, Canada, Central African Republic, Chad, China, Colombia, Costa Rica, Democratic Republic of Congo, Denmark, Dominica, Dominican Republic, Ecuador, Equatorial Guinea, Fiji Islands, Finland, France, Gabon, Germany, Ghana, Guatemala, Guyana, Honduras, India, Indonesia, Italy, Japan, Kenya, Laos, Madagascar, Malaysia, Mali, Mexico, Nepal, the Netherlands, Nigeria, Norway, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Republic of Congo, Rwanda, Sao Tomé and Principe, Sierra Leone, Singapore, Slovenia, Solomon Islands, South Africa, South Korea, Spain, Suriname, Sweden, Switzerland, Thailand, Togo, Uganda, United Kingdom, United States of America, Vanuatu and Vietnam.

5. Focus on coordinated delivery of scaled up REDD+ financing, including coordination of international support at the country level, to seek to close gaps, avoid overlaps and maximize effective delivery of actions and support.
6. Consider information on financing presented in the context of the ongoing UNFCCC negotiations, as well as in the Advisory Group on Finance.
7. Exchange lessons learned and transfer knowledge through discussion and presentation of our REDD+ initiatives.
8. Seek to ensure the economic, social and environmental sustainability and integrity of our REDD+ efforts and to enhance social and environmental benefits.
9. Promote and support the safeguards provided by the AWG-LCA's draft decision text on REDD+, adjusted by any UNFCCC COP Decision on this matter, as well as existing programmatic safeguards, where relevant.

In annex II, the members of the partnership agreed on different operational measures that were to be initiated immediately. To date, however, no update has been furnished to report on the progress of activities.

During the last meeting of the interim Partnership on REDD, which took place in Tianjin during the meeting of the AWG-LCA, the Partners could not get through any of the agenda items. Partners from developing and developed countries were in a controversy over payments of the pledged funds, while NGOs were very concerned about civil society participation in the mechanism. The meeting ended without a clear outcome. However, a draft work program is currently open for comments and will be discussed during the next Ministerial Meeting of the REDD+ Partnership, which is planned for October 2010 in Nagoya.

2.3.4 Overlapping and coordination in REDD+ funding

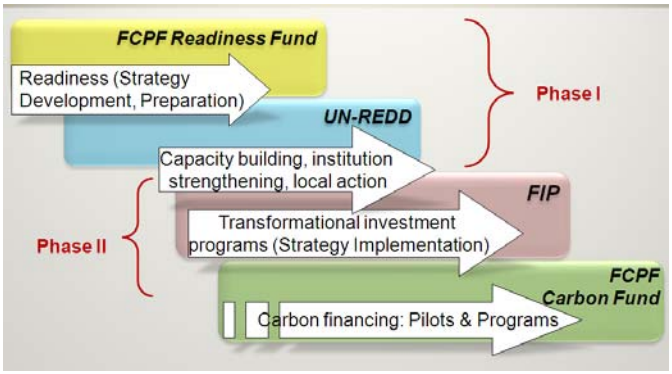
As part of this report, we undertook an analysis of the potential synergies, redundancies and dysfunctions among the funding institutions, especially the operative institutions (FCPF, the FIP and the UN-REDD programme) have been analyzed. The analysis concludes that there are **four different areas of overlap** related to the following categories: i) phases of REDD+; ii) consideration of the key issues for REDD+; iii) geographic allocation of activities; and iv) lack of cooperation. These are described in more detail below. There may also be gaps in all these areas that not covered by any of the funding institutions.

2.3.4.1 Phases - from preparation to implementation

Looking at the overlapping of activities with regard to the phased approach, it is clear that the majority of resources were used by the FCPF Readiness Fund and the UN-REDD Programme for the readiness phase (see Figure 2.4). This will likely change once implementation of activities under the FIP are in progress (towards the second and third phases of REDD+).

Even if both funds are focused on the readiness phase, the FCPF-Readiness fund's focus is on the development of a REDD-strategy and UN-REDD's focus is more on practical aspects such as capacity building and methodology. This shows that the two have the potential to complement each other

Figure 2.4: Funding vs. REDD+ phases (1)



Source: World Bank, adjusted by the authors

2.3.4.2 Thematic key issues

Activities funded by the FCPF-Readiness Fund, UN-REDD, and FIP focus strongly on reducing deforestation and to a lesser extent on degradation. In constrast, there is little to no focus on the enhancement of carbon stocks through forest restoration. Further integration of forest conservation and sustainable forest management has not yet been done. That is a result of a) the lack of definitions of these terms and b) the new methodological challenges that some of these activities imply.
Consideration on the sub-national approach (e.g., through regional projects) have only been minimally integrated into the majority of the early REDD+ activities. This creates a constrain at the operative level, especially in those countries where the management of the forest resources has been decentralized.

All three funding institutions address governance issues albeit to different extents. International non-governmental organizations (NGOs) are advocating to have a more active role and would like to see a more transparent selection process of non-governmental stakeholders participating in discussions and decisions. This is particularly the case with regard to the activities implemented by the FCPF.

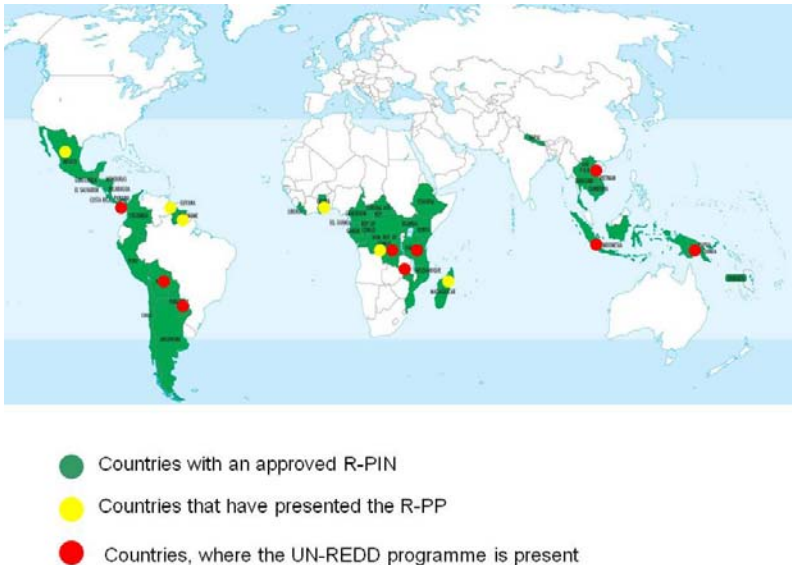
This section on thematic overlapping is a result on an independent evolution of each fund and priorities flagged by participant (donor) countries.

2.3.4.3 Geographic overlap

There is considerable geographic overlapping in the ongoing activities by the FCPF Readiness Fund and the UN-REDD Programme (see Figure 2.5). This could be seen as an opportunity for an "economy of scale," where the investments of the two funds in one country multiplies the benefits to the country (assuming strong coordination between funds). Such an economy of scale could accelerate the process towards becoming ready for REDD+ implementation activities.

Besides the mandatory need for close cooperation, geographic overlapping demonstrates a relative concentration of the funds' investments. This is endorsed under the criteria for an economy of scale, if action on different issues is well coordinated, and if redundancies and contradictions are avoided. Further, geographically unbalanced efforts for REDD support might undermine the objective of minimizing international leakage. This is an aspect has yet to be addressed by any of the funding institutions.

Figure 2.5: Geographic overlapping between FCPF and UN-REDD activities



Source: World Bank, adjusted by the authors

2.3.4.4 Lack of cooperation

A concern regarding both FCPF and UN-REDD initiatives is their overlap/redundancy, which could be partially reduced with close cooperation between programmes and certainly through collaboration with other multilateral institutions that have operative experience in tropical countries. This will certainly help to reduce administrative costs and allow take full advantage of existing synergies between projects and institutions.

The initial analysis of the overlapping between the three funds shows a great promise for synergies among the major funds and also with institutions with operative experience in tropical forestry.

2.4 ITTO Experience

There are several areas where ITTO's experience is relevant to REDD discussions under the UNFCCC. Especially meaningful are the collected experience on how to reduce deforestation and forest degradation through the different projects implemented in the Committee on Forest Management, the experience on the A/R CDM since 1999 as well as the newer REDDES Program

The ITTO Thematic Programme on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services (REDDES) started operation activities in 2009. Today the total pledges received so far is US$ 4,438,958 or 24.66% of the total budget envisaged (US$ 18,000,000) for the REDDES pilot phase. A progress report of the Programme has been prepared by the Secretariat as per 31 August 2010[21]. According to this report the programme has received a very positive feedback from the ITTO member countries, which is clearly reflected in the number of proposals received under the two calls for proposals launched so far (Spring Cycle 2009: 12 proposals; Autumn Cycle 2009: 22 proposals) seeking a total of US$ 14,445,698. Ten of these proposals have been approved for funding in 2009. In parallel, the ITTO Secretariat has continued to improve project management and monitoring. A REDDES Monitoring Protocol has been developed to guide program monitoring and evaluation. The Online Monitoring System (OLMS) has been further developed as an interactive and web-based tool for more efficient monitoring and evaluation and more effective overall project management at the level of Project Coordinator at the Executing Agency and ITTO Project Manager.

The project approved under the Spring Cycle 2009 on 'Building a Voluntary Carbon Marketing Scheme to Promote Sustainable Forest Management (RED-A 004/09 Rev.1 (F)) has made substantial progress and a report is expected to be presented during the 46 the ITTC in December 2010. The nine proposals approved under the Autumn Cycle 2009 are currently getting underway, with the first projects implemented during the second quarter 2010. Annex 2 attempts to associate activities carried out under the approved projects to the Outputs defined in the REDDES Monitoring Protocol. At this early stage of implementation, such association is not possible at the Output Indicator level. Subsequent reports to be submitted once more activities are underway will allow for a more accurate and detailed information on the progress made in association with the Output Indicators defined in the REDDES MP.

Even with the limited funding pledged so far for the pilot phase, the implementation activities have been undertaken in a constructive manner, addressing a substantial spectrum of REDDES Outputs, albeit partially, as defined in the Thematic Programme Document. Nevertheless, new funding is needed to more comprehensively address the defined Outputs in pursuit of achieving the REDDES programmatic objectives, in particular to increase the number of communities and countries involved.

A very important element regarding the REDDES program needs to be highlighted here. The program has a far wider scope that only looking at mitigation impacts of forestry activities. It allows to get operational experience on the linkages between key issues for REDD as e.g. impacts on biodiversity or, in general, on environmental services. This experience needs to be systematized and knowledge gained through the program should be speared to the UNFCCC mechanisms in REDD+

3 Developments regarding Afforestation and Reforestation in the Clean Development Mechanism (A/R CDM)

Activities in afforestation and reforestation are to date the only forestry activities included in the Clean Development Mechanisms (A/R CDM). Detailed analysis of the opportunities and challenges of the A/R CDM have been analyzed in previous reports to the ITTC (Robledo 2004, Robledo and Masera 2007). In this report we focus on the two newest developments in the CDM and their potential impacts on tropical forestry.

3.1 Programmatic CDM (CDM Programs of Activities)

Experiences in the past years have shown that the CDM's "project-by-project" approach has many shortfalls. It limits the mechanism with regard to scalability of activities and potential co-benefits with micro-projects,

[21] The following paragraphs are based on the findings of this report.

particularly in rural regions. Sectoral approaches allowing for unlimited up-scaling of activities are seen as a way to address these issues and thus allow for a wider range of mitigation activities.

The Regulatory Framework

Recognizing the role of policy standards, the Conference of the Parties serving as the Meeting of the Paries to the Kyoto Protocol at its first session in 2005 (CMP1) decided that

> *a local/regional/national policy or standard cannot be considered as a clean development mechanism project activity, but that project activities under a programme of activities can be registered as a single clean development mechanism project activity [...]*[22]

Current guidance on programmes of activities is provided by the version 4.1 of the *Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities*[23] issued by the Executive Board in July 2010. It specifies in para 4 and 5 that

> *A programme of activities (PoA) is a voluntary coordinated action by a private or public entity which coordinates and implements any policy/measure or stated goal (i.e. incentive schemes and voluntary programmes), [...], via an unlimited number of CDM programme activities (CPAs)*
>
> *A CPA is a single, or a set of interrelated measure(s), to reduce GHG emissions or result in net anthropogenic greenhouse gas removals by sinks*

This allows CPAs (and thus PoAs) to apply more than one approved CDM methodology[24], without any sectoral or geographical limitation (a PoA can even cover multiple countries). Once a PoA is registered, an unlimited number of CPAs can be added subsequently without undertaking validation process afresh.

PoA Opportunities:

- As PoAs are scalable and do not follow the CDM "project-by-project" approach, they have significantly lower transaction costs for individual CPAs. This allows micro-activities to be addressed (access to rural areas and reduction of poverty).
- The combination of multiple methodologies allows for holistic approaches (e.g., the combination of A/R and bioenergy, or the combination of water heating, insulation and solar energy).
- PoAs opens up a new field of investment. The additional flexibility with the timing of project implementation (duration of 28 years and 60 years for A/R) allows carbon investors to better manage time-bound risks (e.g. market risks, policy risks, etc.) and makes CERs bankable.
- With its programmatic approach, PoAs can be seen as a first step towards National Appropriate Mitigation Actions (NAMAs) and sectoral CDM (using sectoral benchmarks / standardized baselines), which are under discussion for a post-2012 regime.

The concept of PoA has the opportunity to maximize development impacts while maximizing profitability of the mechanism. It has high potential, but until now it has not delivered.

PoA Challenges

Challenge I: The liability issue

The main challenge with regard to PoAa is the liability in relation to CPAs, which can be erroneously added to a PoA.[25] In the case where a CPA does not meet the eligibility criteria specified for the PoA, the Designated Operational Entity (DOE) that validates the project shares the liability. Thus far, this so-called "liability issue" has been the main barrier for the development of PoAs.

This barrier can be addressed, and potentially removed, by either one of the two options noted below. These options pertain to what DOEs can do to prevent the liability issue.

- Undertake an in-depth assessment of each CPA added; or

[22] **FCCC/KP/CMP/2005/8/Add.1 (http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=97)**
[23] **EB 55, Annex 38 (http://cdm.unfccc.int/Reference/Procedures/PoA_proc01.pdf)**
[24] **EB 47, Annex 31 (http://cdm.unfccc.int/Reference/Procedures/PoA_proc03.pdf)**
[25] **EB 55, Annex 37 (http://cdm.unfccc.int/Reference/Procedures/PoA_proc02.pdf)**

- Transfer the contractual assignment of the liability to the project owner. Taking this responsibility, however, imposes high risks and requires significant financial capacity of the owner.

Challenge II: Standardized baselines and additionality

Another challenge is the demonstration of additionality, which has to be done for PoAs and for each CPA. The latest AWG-KP text states the option that

> *in order to enhance the environmental integrity, efficiency and regional distribution of the clean development mechanism, standardized baselines shall be used on a national or subnational level for specific project activity types in the determination of additionality and the calculation of emission reductions and removals*[26]

Standardized baselines (SBLs) are currently under discussion by SBSTA.[27] Countries will submit their positions for SBSTA deliberations at COP 16 (Cancun, December 2010)[28]. The discussion will include issues such as extensive use of conservative default factors, sectoral greenhouse gas emission benchmarks and/or performance standards, which would significantly ease the development of CDM methodologies, and CPAs.

SBLs are supported by major Annex-I parties such as the US, EU and Japan, but opposed by countries such as Brazil (and most likely China and India) because SBLs can be interpreted as a first step towards emission caps for Non-Annex I countries.

Development of CDM methodologies using benchmarks for baseline emissions calculations is particularly difficult for small and dispersed emission sources where reliable data on business-as-usual performance is missing. This is not the case for large single emission sources (such as energy industry for example).

Challenge III: Coordinating entity

A coordinating entity (CE) is required for the management of a PoA, i.e., for designing and managing the program. The role of the CE is to engage CPA developers and track CPAs. In other words, the CE seeks to add developers to the program and keep track of project implementation. In this role, the CE has to provide incentives CPA developers and sufficiently train them optimize CPA potential.

The CE operates as an interface between various entities such as CPA developers, CDM consultants, financial partners, DOE, DNA and UNFCCC entities. This requires an entity which has strong organisational skills and a trustful relationships with CPA developers.

PoA and Forestry

Currently, only 5 CDM PoAs are registered. Not one of them is an afforestation/reforestation project. The current modalities and procedures in the A/R CDM strongly favours large scale-plantations and thus can neither mobilize large amount of mitigation potential nor the co-benefits potential of A/R CDM projects. The programmatic approach, however, would allow for forestry and agricultural projects in rural areas, which would improve environmental conditions and livelihoods of people. It would also allow rural areas with limited mitigation potential in energy sector to participate and benefit from climate change mitigation mechanisms.

There are other barriers in addition to those addressed related to CDM PoAs that are hindering the development of large distributed and decentralized reforestation programmes. These barriers are directly related to the A/R CDM mechanism. In addition, CDM PoA outlooks for A/R activities could be interpreted as REDD+ (see section on A/R CDM). In this case methodological burdens, especially the clarification of leakage in the for a PoA could become redundant. If so making a A/R PoA instead of a REDD+ program could appear less interesting.

3.2 Simplification of the modalities and procedures in the A/R CDM

History

As said before, for the first commitment period of the Kyoto Protocol CDM activities in the Land Use, Land-Use Change and Forestry Sector (LULUCF, management of terrestrial carbon stocks) are limited to Afforestation and Reforestation (A/R). LULUCF was discussed controversially and faced strong opposition

[26] **FCCC/KP/AWG/2010/CRP.2 (http://unfccc.int/resource/docs/2010/awg13/eng/crp02.pdf#page=41)**
[27] **FCCC/SBSTA/2010/L.10 (http://unfccc.int/resource/docs/2010/sbsta/eng/l10.pdf)**
[28] **http://unfccc.int/resource/docs/2010/sbsta/eng/misc13.pdf**.

since A/R was seen as a cheap way to mitigate climate change without addressing the core problem: the emission of fossil CO_2. Thus, the overall use of A/R CDM for meeting Annex-I parties emission targets was limited to one per cent of a country's base year emissions.

Another critical issue with A/R CDM projects is the question of permanency. While it is assumed that reductions in fossil fuel consumption is permanent, i.e., that this fuel will not be used now and in future, carbon sequestered in A/R projects is considered to be non-permanent. Once sequestered, carbon can be released into the atmosphere again (e.g., pests, forest fires, etc.) nullifying the effects. Two special types of temporary carbon credits were thus introduced:

- tCERs, only valuable for the duration of a commitment period and to be replaced afterwards
- lCERs, valuable for the entire crediting period of the project and to be replaced afterward

Because of the issue of permanency, the EU excluded A/R CDM credits from the EU Emission Trading Scheme (EU-ETS) -- today's largest market for CDM credits. The obligation to replace credits in general was not received well by the market and lowered prices significantly. Adding to the well-known investment barriers and risks inherent to the forestry sector in developing countries (e.g., delay between investment and return, governance risks), these barriers of the CDM A/R mechanism have significantly limited mitigation activities in the forestry sector thus far.

Today only 17 out of the total 2403 registered CDM projects are A/R projects, many of which are demonstration projects financed by governments and/or multilateral agencies. This inspite of the huge potential for A/R quantified as approximately one billion ha degraded land available for forest restoration world-wide. Preliminary analysis shows that by 2030, forest landscape restoration could make the same contribution to greenhouse gas reduction as avoided deforestation and perhaps as much as twice that amount[29]. Further, A/R offers many co-benefits such as food security, reduced desertification, soil fertility, disaster risk reduction, etc.

Recently, voluntary standards for forestry projects such as the Voluntary Carbon Standard (VCS) or the Climate, Community and Biodiversity Standard (CCBS) have gained attention from A/R project developers and buyers. VCS addresses the permanence issue by creation of a credit buffer, with individual projects contributing to this buffer, depending on their risk for loosing carbon stocks. CCBS certifies social and environmental co-benefits of A/R projects and thus helps to achieve higher prices for A/R credits on the voluntary market.

... and Outlook

Discussions on the continuation of the CDM and of A/R CDM in particular are takin place on the margins of current negotiations on a post-2012 mitigation scheme. In principle, the CDM has been designed as a long-term mechanism that continues from one period to the next and is thus not tied to specific commitment periods. Based on these prospects, significant investments were made and a new market developed with a volume of more than 6 billion USD in 2008[30] with new business opportunities such as project developers, financial service providers, designated operational entities, regulatory bodies, etc.

However, as a mitigation mechanism of the Kyoto Protocol, the CDM depends on the continuation of the Kyoto-Protocol and thus the agreement of post-2012 emission targets. While the majority of the nations might want the Protocol to continue, negotiation of responsibilities and binding emission targets seems to be a hurdle for a post-2012 agreement required for the continuation of the Protocol.

Continuation of the Kyoto Protocol and thus adoption of A/R CDM for post-2012 is discussed in the AWG-KP[31]. Draft texts for negotiation suggest the continuation of the mechanism without major changes for a second commitment period. The main changes proposed for A/R CDM are

> *Activities additional to afforestation and reforestation will be eligible if agreed by any future decision of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.*

[29] **WRI, 2010 (http://www.wri.org/event/2010/03/making-forest-landscape-restoration-force-change).**
[30] **State and Trends of the Carbon Market 2010. (http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/State_and_Trends_of_the_Carbon_Market_2010_low_res.pdf).**
[31] **FCCC/KP/AWG/2010/CRP.2 Chapter II (http://unfccc.int/resource/docs/2010/awg13/eng/crp02.pdf).**

Alternative approaches to addressing the risk of non-permanence may apply in accordance with any future decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol[32]

As it stands, the text will not allow for any decisions on these issues to be made but rather open options and forward decisions to future CMPs. This seems appropriate looking at the various tracks currently dealing with forestry issues under the UNFCCC.

The implications for afforestation and reforestation in Non-Annex I countries are not limited to the Kyoto Protocol and the A/R CDM mechanism and should be integrated into a wider array of forestry mitigation options discussed in the AWG-LCA agenda on REDD+ and NAMAs to form a holistic and concerted approach to greenhouse gas emission redction and enhancement of sequestration in forest carbon stocks. Promoting A/R can be part of a national strategy for sustainable management of forests and a measure for reducing pressure on forests.

How A/R, and particularly A/R CDM, will be integrated in a future framework is still unresolved. Whether A/R will be included in a future REDD+ mechanism through "enhancement of forest carbon stocks", or if A/R activities will be bound to a CDM project approach, while REDD+ activities follows a national approach are still open questions.

Another issue discussed under AWG-LCA are nationally appropriate mitigation actions (NAMAs) by developing country parties. Many of the 41 developing countries associating with the Copenhagen Accord mention A/R activities in their NAMAs submitted for the Accord. This shows the importance given to A/R programmes by non-Annex I Parties for climate change mitigation and sustainable development. With the exception of a few countries that had quantitative targets (Brazil, China, Ethiopia, Gabon, Mauritania, Morocco, Sierre Leone, Togo and Tunisia), the NAMAs related to forestry were generally descriptive.

4 Use of forestry in the Nationally Appropriated Mitigation Actions – NAMAs –

The Bali Action Plan (BAP) recognized the need for developing country Parties to participate in mitigation efforts in order to reach global emission reduction goals. Such efforts shall respect the principle of common but differentiated responsibility. The BAP introduced the idea of Nationally Appropriate Mitigation Actions (NAMAs) to recognize mitigation efforts undertaken by developing countries and to create a platform that supports these actions with measurable, reportable and verifiable assistance from Annex I countries, when necessary.

On the way towards Copenhagen there were talks on three categories of NAMAs, those considering autonomous action by developing countries without outside support; those considering action undertaken with support from developed country Parties; and those considering action that could be partially or fully credited for sale in the global carbon markets. This differentiation was not taken into consideration during the COP 16 deliberations. Parties were simply asked to list their proposals for NAMAs as requested under the Copenhagen Agreement.

Developing country Parties were requested to submit NAMA proposals to the UNFCCC by February 2010. Forty-one developing country Parties submitted proposals, of which 54% included forest activities. The range of forest activities was wide and deserves a careful analysis. The proposals included reducing emissions from deforestation, reducing emissions from degradation, conservation of carbon stocks, sustainable management of forest, and enhancements of carbon stocks (including afforestation and reforestation). Some countries stated quantitative goals either in terms of hectares (e.g., Sierra Leone) or in terms of increments in forest cover (e.g., Tunisia) and countries were not consistent in their use of years to express their goals (2015, 2020 or 2030).

There was a mix of countries that excluded forestry activities in their NAMAs or did not submit a NAMA proposal. Many countries with a quite significant REDD+ potential did not include forestry in their NAMAs (e.g., Brazil, Mexico or Papua New Guinea) and countries that played a key role in the current negotiations of REDD+ and A/R CDM did not include any forestry activity (e.g. Costa Rica nor Mexico). Still other countries with an important REDD+ and A/R CDM potential did not submit a NAMAs proposal (e.g., Malaysia or Colombia) at all. These observations clarify that making a proper analysis of the potential role of (tropical) forestry in the NAMAs is not realistic. This is an issue of concern.

[32] **FCCC/KP/AWG/2010/CRP.2 (http://unfccc.int/resource/docs/2010/awg13/eng/crp02.pdf#page=33).**

Additional work is required to create more consistency in the process for funding, implementing, and reporting on forestry activities in country NAMAs.

5 Recommendations to the ITTO Council

There are still many open questions regarding the role of tropical forest in a post 2012 mitigation agreement. These questions include the scope of activities, methodological and governance issues, and funding mechanisms. This is the case for REDD+ as well as for A/R CDM and the use of forestry in the NAMAs. The next COP of the UNFCCC will take place before the 46th meeting of the ITTC, and therefore, a key negotiation peace for that meeting cannot be included in this current report. However, even if the Parties achieve an agreement in Cancun there many questions will remain open and further negotiation of detailed modalities and procedures will follow at subsequent COPS.

Given the considerable experience of ITTO in promoting sustainable forest management in the tropics and the importance of REDD+ negotiations in UNFCCC in tropical forests, the following recommendations are identified to the ITTC for consideration:

- ITTO has significant, relevant experience in guiding and implementing activities in sustainable management of forests at different levels, from policy guidance to concrete field work at the forest management units. Worldwide there are not many institutions with this profile, and even less if considering the specialization of ITTO on tropical forests, where the forest mitigation potential is very high. **Promoting partnerships with institutions aimed at funding forest mitigation activities is therefore a win – win strategy** and such partnerships can enhance synergy and coordination of REDD+ activities.

- Climate change considerations with regard to tropical forest should not be seen as an independent topic. Both climate strategies – mitigation and adaptation - are related to a broader understanding on how to manage forest resources in a sustainable manner. This needs to consider means for ensuring long-term timber production as well as other forest products and services. For this reason, it is important for the Council **to consider the integration of climate change mitigation when developing policy papers manuals and guidelines**. A good step in this direction was made with the consideration of climate change in topics in the new ITTO Guidelines for the Sustainable Management of Natural Tropical Forests (in preparation).

- REDD+ capacity building has been become important to establish sufficient confidence in the establishment of robust national forest monitoring systems or sub-national systems as part of national monitoring systems. In line with decision of decision 4/CP15 of UNFCCC, **ITTO can contribute directly to REDD+ capacity building through organizing regional/national training workshops** on the most recent guidelines from IPCC for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes.

- Continue **to monitor the development in the international arena** in respect to tropical forests and climate change and **continue presenting the ITTO relevant experience in the UNFCCC** and report back to the 47th session of the Council. Additionally more **specific studies** should be taken into consideration, for instance one study clarifying the specificities of quantifying mitigation effects from reducing tropical deforestation and a second study investigating the potential of forest restoration in key ITTO producing members (at least one per region)

- The approach used with the REDDES program is both innovative and relevant. Its holistic approach allows for an understanding of the important linkages between forest management activities and a wide scope of impacts on the capacity of forest to mitigate and adapt to climate change. **Securing funding sources for further implementation of this thematic program** is relevant for the majority of the ITTC members.

Abbreviations

AFOLU	Agriculture, Forestry and Other Land Use
Annex I	Annex to the Convention listing industrialised and transitional countries
Annex II	Annex to the UNFCCC, listing mostly OECD countries, with additional commitments to assist developing countries with funding and technology transfer
AR4	IPCC Fourth Assessment Report
A/R	Afforestation and reforestation
ARWG	Afforestation/Reforestation Working Group
ARD	Afforestation, reforestation, deforestation (as a requirement for Annex I countries in the KP)
AWG-KP	Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol
AWG-LCA	Ad Hoc Working Group on Long-term Cooperative Action under the Convention
BAP	Bali Action Plan
CDM	Clean Development Mechanism
A/R CDM	Afforestation and Reforestation project activities under the CDM
CER	Certified emission reductions
tCER	temporary CER
lCER	long-term CER
CFRT	Community Forest Retention Trust Account
CH4	Methane
CO2	Carbon dioxide
COP	Conference of the Parties
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (also known as COP/MOP)
CPF	Collaborative Partnership on Forests; The 14 members of the CPF are the Center for International Forestry Research (CIFOR), UN Food and Agriculture Organization (FAO), International Tropical Timber Organization (ITTO), International Union of Forestry Research Organizations (IUFRO), CBD Secretariat, Secretariat of the Global Environment Facility (GEF), UNCCD Secretariat, UNFCCC Secretariat, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), World Agroforestry Centre (ICRAF), World Bank, and World Conservation Union (IUCN). The UNFF Secretariat supports the work of the CPF.
DD	Deforestation and forest degradation
EB	Executive Board of the CDM
ENCOFOR	Environment and Community-based Framework for Designing Afforestation, Reforestation and Revegetation Projects in the CDM
EU ETS	European Union Emission Trading System
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
GEF	Global Environment Facility
GFP	Global Forest Partnership
GHG	Greenhouse gas
GPG	Good Practice Guidance
Ha	Hectare
HFC	Hydrofluorocarbons
HWP	Harvested wood products
IFRT	International Forest Retention Fund
IPCC	Intergovernmental Panel on Climate Change
ITTA	International Tropical Timber Agreement
ITTC	International Tropical Timber Council
ITTO	International Tropical Timber Organization
JI	Joint Implementation
KP	Kyoto Protocol
LCA	Life Cycle Analysis
LULUCF	Land Use, Land Use Change and Forestry
MAI	Mean annual increment
MRV	Measureable, reportable and verifiable

NAMA	Nationally Appropriate Mitigation Actions
N_2O	Nitrous Oxide
NAI	Non-Annex I Parties (see above), mostly developing countries
NFP	National Forest Program
NLBI	Non-legally binding instruments
NTFP	Non-timber forest products
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PES	Payment for Environmental Services
PDD	Project Design Document
PFC	Perfluorocarbons
REDD	Reducing Emissions from Deforestation and Forest Degradation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SFM	Sustainable Forest Management
TARAM	Tool for Afforestation and Reforestation Approved Methodologies
UNDP	United Nations Development Program
UNEP	United National Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	UN Forum on Forests
WG I	Working Group I (of the IPCC, see above), assesses the literature on the physical science basis of climate change
WG II	Working Group II (of the IPCC, see above), assesses the literature on the impacts, vulnerability and adaptation to climate change
WG III	Working Group III (of the IPCC, see above), assesses the literature on the mitigation of climate change, i.e. reducing GHG emissions
WMO	World Meteorological Organization

6 Glossary

Mitigation

This section presents the definitions regarding mitigation as these are given in the decisions of the UNFCCC.

Actual net greenhouse gas removals by sinks is the sum of the verifiable changes in carbon stocks in the carbon pools within the project boundary, minus the increase in emissions of the greenhouse gases measured in CO2 equivalents by the sources that are increased as a result of the implementation of the afforestation or reforestation project activity, while avoiding double counting, within the project boundary, attributable to the afforestation or reforestation project activity under the CDM.

Afforestation is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.

Baseline net greenhouse gas removals by sinks is the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the afforestation or reforestation project activity under the clean development mechanism (CDM).

Carbon pools are those carbon pools referred to in paragraph 21 of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*) and are: above-ground biomass, below-ground biomass, litter, dead wood and soil organic carbon.

Cropland management is the system of practices on land on which agricultural crops are grown and on land that is set aside or temporarily not being used for crop production.

Deforestation is the direct human-induced conversion of forested land to nonforested land.

Forest is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 metres at maturity *in situ*. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 metres are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest.

Forest management is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner.

Grazing land management is the system of practices on land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced.

Leakage is the increase in greenhouse gas emissions by sources, which occurs outside the boundary of an afforestation or reforestation project activity under the CDM that is measurable and attributable to the afforestation or reforestation project activity.

Long-term CER or "lCER" is a CER issued for an afforestation or reforestation project activity under the CDM which, subject to the provisions in section K below, expires at the end of the crediting period of the afforestation or reforestation project activity under the CDM for which it was issued.

Net anthropogenic greenhouse gas removals by sinks is the actual net greenhouse gas removals by sinks minus the baseline net greenhouse gas removals by sinks minus leakage.

Project boundary geographically delineates the afforestation or reforestation project activity under the control of the project participants. The project activity may contain more than one discrete area of land.

Reforestation is the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been

converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989.

Revegetation is a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation contained here.

Small-scale afforestation and reforestation project activities under the CDM are those that are expected to result in net anthropogenic greenhouse gas removals by sinks of less than 8 kilotonnes of CO2 per year and are developed or implemented by low-income communities and individuals as determined by the host Party. If a small-scale afforestation or reforestation project activity under the CDM results in net anthropogenic greenhouse gas removals by sinks greater than 8 kilotonnes of CO2 per year, the excess removals will not be eligible for the issuance of tCERs or lCERs.

Temporary CER or "tCER" is a CER issued for an afforestation or reforestation project activity under the CDM which, subject to the provisions of section K below, expires at the end of the commitment period following the one during which it was issued.

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8 Annexes

8.1 Forest activities in the Nationally Appropriated Mitigation Actions of the Copenhagen Accords (NAMAs)

As specified in the communications submitted for the Copenhagen Accord in February 2010

Country	Reducing emissions from deforestation	Reducing emissions from degradation	Conservation of forest carbon stocks	Sustainable management of forest	Enhancement of forest carbon stocks (incl A/R)
Afghanistan					
Antigua Barbuda					
Argentina		Rules for land use		Rational and sustainable management of native forest	Investment in new forest enterprises and enlargement of existing forests
Armenia	Incl.				Restoration of degraded forests; afforestation
Benin				Sustainable management of natural forests	Development of plantation forests
Bhutan					
Botswana	Incl.				Planting forests
Brazil	Reduction of deforestation in Amazon (est. 564 MtCO2) and Cerrado (est 104 MtCO2)				Restoration of grazing land
Cameroon					
Central African Republic	Incl.	Incl.		Sustainable management and certification of production forests; Promotion of silviculture, non-timber forest products	Promotion of community and private plantations
China					Increase forest cover by 40M hectares and increase forest stock volume by 1.3B m3 (by 2020 from 2005 level)
Congo	Incl.	Incl.		Sustainable management and certification of production forests	Silviculture in degraded and dense forests; development of private and village plantations
Costa Rica					
Cote d'Ivoire				Improve sustainable management of state forests	
Eritrea				Incl.	
Ethiopia	Reducing deforestation and degradation in appr. 60M ha natural forest / national parks		Appr. 20M ha maintained as buffer against desertification	Appr 5M ha wetlands managed sustainably	Appr. 5M ha regeneration of forests in exhaustion; 22M ha restoration of degraded lands
Gabon				12M ha of SFM certified forest	Reforestation and aforestation

				in 2020	
Georgia					
Ghana				Incl.	Rehabilitation of degraded wetlands
India					
Indonesia	Incl.	Incl.			Carbon sequestration
Israel					
Jordan			Grow Nature Reserves areas.		
Republic of Korea					
Macedonia		Prevention of illegal logging and forest fires			Forestation and reforestation
Madagascar			Improve management of protected areas		Reforestation
Maldives					
Marshall Islands					
Mauritania					Reforestation to increase forest cover from 3.2% in 209 to 9% in 2050
Mexico					
Moldova					
Mongolia	Incl.	Incl.		Improved forest management	Reforestation, plantation forestry, agro-forestry
Morocco		Prevention of forest fires			Reforestation of 50’000 ha/yr by 2013 and 1M by 2030
Papua New Guinea					
Peru					
San Marino					
Sierra Leone	Improvement of governance to maintain forest cover to at least 3.4M ha by 2015		Establishment of protected area network	Sustainable management of reserves	Restoration of vulnerable ecosystems in the Western Area
Singapore					
South Africa					
Togo					Reforestation to increase forest cover from 7% in 2005 to 30% in 2030
Tunisia			Increase in protected forest area from 17% in 2009 to 20% in 2024		Increase of forest cover from 12.8% in 2009 to 16% in 2020 (250’000 ha)

(Source: http://unfccc.int/home/items/5265.php, compiled by La Viña 2010 and adapted by the authors)

8.2 Definitions of forest and forest degradation in different international processes

Forest	
ITTO	ITTO defines various related termini: **Permanent forest estate (PFE):** Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfill a combination of these functions. **Planted forest:** A forest stand that has been established by planting or seeding. **Primary forest:** Forest which has never been subject to human disturbance, or has been so little affected by hunting, gathering and tree cutting that its natural structure, functions and dynamics have not undergone any changes that exceed the elastic capacity of the ecosystem. **Production PFE:** That part of the PFE assigned to the production of timber and/or other extractive uses. **Protected area:** An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources, and managed through legal or other effective means. **Protection PFE:** That part of the PFE in which the production of timber (or other extractive uses) is prohibited.
UNFCCC/KP	Forests are defined in the Marrakech Accords as follows: **Forest** is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 meters at maturity *in situ*. A forest may consist either of closed forest formations where trees of various heights and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 meters are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest. Note: According to the modalities and procedures for afforestation and reforestation within the CDM, each non-Annex I country had to submit their definition on forest for the first commitment period within the ranges established in the Marrakech Accords (Decision 19/CP.9).
IPCC	**Forest land:** This category includes all land with woody vegetation, consistent with thresholds used to define forest land in the national GHG inventory, sub-divided at the national level into managed and unmanaged, and also by ecosystem type as specified in the *IPCC Guidelines* (since forest management has a particular meaning under the Marrakech Accords, a subdivision of managed forests as described in Chapter 4 of the IPCC Good Practice Guidance for LULUCF may be required). The category also includes systems with vegetation that currently fall below, but are expected to exceed, the threshold of the forestland category. Further, in the Good Practice Guidelines for LULUCF the IPCC uses the definition of forest agreed as part of the Marrakech Accords.
FAO for FRA 2005	? [Forest?] Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*. It does not include land that is predominantly under agricultural or urban land use. Explanatory notes: 1. Forest is determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 meters *in situ*. Areas under reforestation that have not yet reached but are expected to reach a canopy cover of 10 percent and a tree height of 5 meters are included, as are temporarily unstocked areas, resulting from human intervention or natural causes, which are expected to regenerate. 2. Includes areas with bamboo and palms provided that height and canopy cover criteria are met. 3. Includes forest roads, firebreaks and other small open areas, forest in national parks, nature reserves and other protected areas such as those of specific scientific, historical, cultural or spiritual interest. 4. Includes windbreaks, shelterbelts and corridors of trees with an area of more than 0.5 hectares and width of more than 20 meters. 5. Includes plantations primarily used for forestry or protection purposes, such as rubberwood plantations and cork oak stands. 6. Excludes tree stands in agricultural production systems, for example in fruit plantations and agroforestry systems. The term also excludes trees in urban parks and gardens.
Forest Degradation	
ITTO	The reduction of the capacity of a forest to produce goods and services. 'Capacity' includes the maintenance of ecosystem structure and functions.
UNFCCC/KP	None available yet.
IPCC	a) A direct human-induced loss of forest values (particularly carbon). Likely to be characterised by a reduction of the tree crown cover. Routine management from which crown cover will recover within the normal cycle of forest management operation is not included. b) Changes within the forest that negatively affect the structure or function of the stand and site, and

	thereby lower the capacity to supply products and/or services. c) Direct human-induced activity that leads to a long-term reduction in forest carbon stocks.
FAO	FAO 2000: A reduction of the canopy cover or stocking within the forest through logging, fire, windfelling or other events, provided that the canopy cover stays above 10%. In a more general sense, forest degradation is a long-term reduction of the overall potential supply of benefits from the forest, which includes wood, biodiversity and any other product or service. FRA 2005: [?] Changes within the forest, which negatively affect the structure or function of the stand or site, and thereby lower the capacity to supply products and/or services.
UNEP/CBD/SBSTTA 2001	A degraded forest is a secondary forests that has lost, through human activities, the structure, function, species composition of productivity normally associated with a natural forest type expected on that site.
Deforestation	
ITTO	n.a.
UNFCCC/KP	Deforestation is the direct human-induced conversion of forested land to non-forested land.
IPCC	Deforestation is the direct human-induced conversion of forested land to non-forested land (considered in IPCC 2003 as in the Marrakech Accords for the Kyoto Protocol).
FAO for FRA 2005	The conversion of forest to another land use or the long-term reduction of the tree canopy cover below the minimum 10 percent threshold. Explanatory notes: 1. Deforestation implies the long-term or permanent loss of forest cover and implies transformation into another land use. Such a loss can only be caused and maintained by a continued human-induced or natural perturbation. 2. Deforestation includes areas of forest converted to agriculture, pasture, water reservoirs and urban areas. 3. The term specifically excludes areas where the trees have been removed as a result of harvesting or logging, and where the forest is expected to regenerate naturally or with the aid of silvicultural measures. Unless logging is followed by the clearing of the remaining logged-over forest for the introduction of alternative land uses, or the maintenance of the clearings through continued disturbance, forests commonly regenerate, although often to a different, secondary condition. In areas of shifting agriculture, forest, forest fallow and agricultural lands appear in a dynamic pattern where deforestation and the return of forest occur frequently in small patches. [To simplify reporting of such areas, the net change over a larger area is typically used.] 4. Deforestation also includes areas where, for example, the impact of disturbance, overutilization or changing environmental conditions affects the forest to an extent that it cannot sustain a tree cover above the 10 percent threshold.