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Snapshot

This special issue of the *Tropical Timber Market Report* provides an overview of carbon markets and reducing emissions from deforestation and degradation (REDD) initiatives ahead of the upcoming UN Framework Convention on Climate Change (UNFCCC) meeting in Accra, Ghana, and the UNFCCC 14th Conference of the Parties (COP) in Poznan, Poland. The report provides readers with an updated status of compliance and voluntary market-related mechanisms and discusses how forest-related activities could potentially be included in a post-2012 Kyoto Protocol regime. The accompanying news reports and analyses in the country headings are also climate-related, to inform our readers of current climate change stories in the news in ITTO producer and consumer countries.

Recent news stories have already highlighted the growing interest in the role of forests to mitigate climate change, especially given current policy debates in the UNFCCC and on REDD activities. This briefing on the subjects of carbon markets and REDD, which was compiled with the research assistance of EnviroMarket Ltd., serves only as an informational update on these subjects. It does not reflect any ITTO policy position on the subject matter.

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Emerging issues in carbon markets and forests

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Current policy and scientific debates on climate change have recognized the increasing importance of forests in the reduction of climate change emissions. Currently, it is estimated that about 20% of human-induced emissions are from tropical deforestation alone.[1] Most of our readers are already aware of the benefits of forests to storing carbon and providing critical sustenance for the living environment; we will not further discuss the biological and scientific aspects of forests and climate change here. Instead, this overview will discuss the potential contribution of the carbon market to offsetting carbon emissions and the possible involvement of forest activities in such market mechanisms.

The inclusion of forests in international climate change market mechanisms as a means to offset industrial emissions has been a contentious issue, particularly in the policy realm. Historically, some negotiators and stakeholders in the climate debate believed that Annex I countries under the Kyoto Protocol and UNFCCC should be primarily responsible for offsetting emissions through industrial means only and that the inclusion of forest offsets would weaken the strength of the Kyoto accord. Eventually, negotiators decided that Annex I countries would account for afforestation, reforestation and deforestation activities in their inventories under the Kyoto Protocol, while developing countries could engage in forest-related activities via the Clean Development Mechanism (CDM).

The scope of eligible CDM project activities from the land-use and land-use change in forestry (LULUCF) sector was debated at the outset of CDM discussions. There was significant interest in including the concept of 'avoided deforestation' in project activities, but concerns over methodological limitations led to the inclusion of only afforestation and reforestation (A/R) in the CDM. At Milan in December 2003, mechanisms were adopted for temporary crediting for A/R activities, with two types of certified emissions reductions (CERs) to be issued against verified plantation growth. Temporary CERs (or tCER) are valid for five years, and long-term, temporary CERs (or lCER) up to 60 years. These A/R project activities were eligible for credits under Decision 5 (CMP.1) of the Kyoto Protocol, under the Clean Development Mechanism (CDM), but very few projects have been registered, and tCER and lCER are not eligible within the EU-Emissions Trading Scheme (EU-ETS) and other domestic systems.

There is now interest in expanding the scope of other LULUCF activities under a post-2012 Kyoto regime, an issue which will continue to be discussed in the run up to negotiations at COP-15 in Copenhagen during 2009. Will forest activities be expanded under a post-2012 climate agreement? Does an appropriate methodology exist to measure forest emissions at the national and sub-national levels? If so, how would carbon offsets from forests be linked to carbon markets or other investment mechanisms?

The following discussion provides an overview of carbon markets and how they could grow under a post-2012 regime. In particular, it investigates how new initiatives such as reducing emissions from deforestation and degradation (REDD) might be involved in any potential market mechanism.

Carbon markets

The benefits of forest-based environmental services in the form of carbon offsets have yet to be fully explored. By offsetting carbon, countries can generate carbon credits to sell in the Kyoto-compliant or international voluntary market. Carbon credits are a mechanism by which tropical forests could potentially play a role in international compliance and voluntary carbon markets in a post-2012 climate agreement.

The global carbon market is a patchwork of semi-connected markets, some driven by the need to comply with legislation, others on voluntary measures by emitters anxious to demonstrate corporate or personal responsibility to the environment. Compliance markets set an absolute cap on the emissions of organizations for a set period of time, the limit being reduced across successive periods of the scheme. The overall cap is divided up into individual allowances and allocated according to a pre-agreed formula. Organizations have to retire sufficient allowances at the end of each period to cover their emissions. If their emissions go up they may need to buy extra allowances, while if they go down they may have spare allowances to sell. Compliance markets enable this exchange and also allow third party organizations without their own emissions to become involved.

Table 1 below illustrates the relative difference in size and recent growth of compliance and voluntary carbon markets.

Market	Volume (MtCO2e)		Value (US$ million)	
	2006	2007	2006	2007
Voluntary (inc. CCX)	24.6	65.0	96.7	330.8
Compliance	1,667	2,983	31,148	64,028

Table 1: Relative size and value of voluntary and compliance carbon markets[2]

In general, carbon credits are designed for use in compliance markets, such as Kyoto-compliant Certified Emission Reductions (CERs). However, voluntary markets (e.g. EU-ETS) can also be set up around a legally binding cap.[3] Most of the activity in this section of the carbon

[1] UN Intergovernmental Panel on Climate Change (2007) *Fourth Assessment Report*, Geneva: Switzerland.

[2] Adapted from Hamilton, K. et al (2008) 'Forging a Frontier: State of the Voluntary Carbon Market', Ecosystem Marketplace & New Carbon Finance.

[3] Members of the Chicago Climate Exchange (CCX), the biggest voluntary market in the US, voluntarily enter a legally binding agreement to reduce their emissions. The

market involves individual emitters offsetting their emissions by purchasing and retiring carbon 'credits' generated outside their organization.[4]

To be in a position to generate credits, an operator must first be planning to undertake an activity that is (a) likely to reduce emissions and (b) unlikely to happen anyway in the normal course of business (unless required by law). If seeking to generate credits to a recognized third party standard, the developer must get the project validated and registered with a relevant party, to ensure the credits subsequently generated are valid. Once the emission reductions achieved by the project have been externally verified, credits are issued. While it is possible to sell credits on a forward basis – i.e. before they have been generated – this generally entails the seller taking a heavy discount to the immediate delivery 'spot' price.

The inclusion of forestry projects in the international compliance market has been dogged by political and technical delays. Concerns have centered on the potential for 'leakage' (e.g. protection of forest in one area leading to a corresponding increase in destruction elsewhere) and 'permanence' (e.g. the likelihood/probability of carbon sequestered in trees being released at a later stage). Additionally, many developing countries believe any future climate change accord should focus on the reduction of industrial emissions and not involve offsetting from forest activities. These concerns still exist for all forest-related activities within any future global climate change policy.

Credits generated from compliance-based markets are considered to have the highest degree of environmental integrity and tend to attract a high price. However, 2007 saw a raft of new standards and initiatives that support the environmental integrity of the voluntary market. Some of these have direct relevance to the forestry sector and include guidelines established by the World Resources Institute and the Climate Community and Biodiversity Alliance (CCBA).

Demand for t/lCER in the carbon market is fairly limited, although interest in forestry is expected to grow significantly over the next few years. Although forestry projects are currently excluded from the EU-ETS, it seems increasingly likely that any future US federal cap and trade scheme will allow use of international offsets, unlocking demand for as many as USD300 million CERs a year.[5] The main buyer of tCERs, the World Bank Biocarbon Fund, has Emission Reduction Purchase Agreements in place with a total of 15 forestry projects, including a deal for 462,014 tons of carbon dioxide equivalent (tCO_2e) from the Guangxi Watershed Management reforestation project in China (the only A/R project so far registered with the CDM Executive Board[6]). Private interest is largely from investment groups and hedge funds; price expectations remain difficult to gauge in such an illiquid market but range from an absolute USD3 / tCO2e to a floating 50% of CER prices.[7]

The above mechanisms are the ways that countries and private entities have recently been operating in the market and during first commitment period of the Kyoto Protocol, 2008-2012. Nevertheless, the potential involvement of forestry-related activities in these mechanisms until 2012 is limited. Due to the growing interest in the linkage between forests and climate change and recent scientific evidence provided by the Intergovernmental Panel on Climate Change (IPCC) about the contribution of deforestation and degradation to carbon emissions, policymakers are searching for ways to better recognize the conservation and utilization of forests in a post-2012 regime. The most popular and widely discussed of these initiatives are those related to reducing emissions from deforestation and degradation in developing countries, or REDD.

Reducing emissions from deforestation and degradation in developing countries[8]

At COP-11 held in Montreal (2005), Costa Rica and Papua New Guinea on behalf the Coalition of Rainforest Nations proposed that the UNFCCC address emissions from deforestation and create incentives to reward developing countries for bringing these emissions under control and reducing them. To the surprise of many at the conference, the proposal, referred to as Reducing Emissions from Deforestation and Degradation (REDD), won widespread support. Montreal sparked a raft of research into scientific, technical and methodological issues, policy approaches and positive incentives related to REDD.[9]

The focal point for much of this effort was COP-13 in Bali, a meeting which offered the first real opportunity to secure the inclusion of REDD in a post-2012 compliance

'capping' authority defines the eligible rules for offsets and other compliance options.

[4] Although less popular, some voluntary transactions have involved purchasing and retiring allowances in compliance schemes, in particular the EU-ETS.

[5] The most advanced legislation currently under discussion, the bipartisan Lieberman-Warner Bill (the Climate Security Act), calls for a 20% cut in emissions by 2020 and 70% by 2050. In its current form the bill allows US emitters to meet 5% of their cap through by buying foreign offsets that meet UN standards.

[6] Projects must be registered in order for the CDM Executive Board to issue tCERs against verified reductions.

[7] From a presentation given by Anna Lehmann of 3C Consulting on 'Private sector requirements for land-based carbon credits', presented at COP-13/MOP-3 - Bali Forest Day, 8 December 2007.

[8] Although REDD debates have been championed by developing countries and may help them take leadership on mitigation measures under a future post-2012 regime, it should be noted that reporting and accounting for forestry, agriculture and land-use change activities – including deforestation and degradation – are already required for Annex I Parties under the Kyoto Protocol.

[9] --- (2006) 'Rainforest credits', *Carbon Finance*, Dec/Jan 2006.

market and open the way for immediate investment in initial projects. In the end, negotiators at the conference encouraged further work on REDD in the lead up to COP-15 (Copenhagen, 2009), but committed only to voluntary measures on REDD in the short-term.

The carbon credit generating potential of REDD is huge. For instance, an average patch of tropical natural forest may store between 500 and 750 tCO_2 per hectare and estimates suggest deforestation is occurring at a rate of 13 million hectares a year, mainly in the tropics.[10] However, as credits are generated on the basis of reductions in deforestation, it is those countries with high deforestation rates that have the highest basic revenue generating potential. Table 2 illustrates some potential variations on income based on existing deforestation rates. Unsurprisingly, tropical countries that currently have low deforestation rates, whether through effective management or internal conflict, have questioned an approach that appears to 'reward the bad boys'. They argue for recognition of past efforts, and this is one key aspect of REDD implementation that remains subject to debate.

Country	Carbon price = €5 tCO_2e		
	10% reduction	20% reduction	30% reduction
Bolivia	45.33	90.67	226.67
Brazil	541.08	1,082.15	2,705.38
D.R. Congo	95.17	190.34	475.84
Gabon	1.26	2.51	6.28
Indonesia	233.55	467.09	1,167.73
Mexico	15.79	31.58	78.94
PNG	7.40	14.79	36.98
Peru	21.13	42.26	105.65
Sudan	6.48	12.97	32.42
Thailand	2.84	5.69	14.22

Table 2: Variation in potential income from REDD at EUR5 / tCO2e[11]

In the run up to the Copenhagen COP-15 meeting in December 2009, a number of UNFCCC meetings on methodological and policy issues are being held to advance negotiations on how forestry and agriculture will be included in any post-2012 Kyoto accord. Under a decision taken at COP-13 in Bali on 'Reducing Emissions from Deforestation in Developing Countries', Parties to the Convention decided to, *inter alia*, encourage capacity building and demonstration projects to prepare for REDD activities in developing countries. It also requested the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA), at its session in June 2008, to address methodological issues related to policy approaches and positive incentives for REDD activities.

To further advance the discussions, Parties also agreed to hold a technical workshop on these same issues. At the workshop (Tokyo, June 2008), country-level experts provided an overview of how IPCC guidance for estimating GHG emissions and removals from forestry and agriculture activities could be applied at the national or sub-national levels (e.g. see various presentations on http://unfccc.int/methods_and_science/lulucf/items/4289.php).[12] Some presenters illustrated it was possible to move past Tier 1 approaches (IPCC default values) to develop more accurate and precise forest carbon stock estimates with modest additional investments. In general, experts at the meeting felt they had come a long way from initial methodological discussions on estimating REDD.

Policy issues still have yet to be discussed, including the issue of whether to adopt approaches at both national and sub-national levels. Nevertheless, experts mentioned continued concerns over the issue of leakage and permanence in measuring emissions reductions. Even under CDM guidelines, provisions have not yet been made to include efforts to reduce emissions from deforestation and degradation (and as mentioned above, only A/R is currently eligible under the CDM). There is potential to include REDD in a post-2012 agreement, but few efforts in that direction have been made so far. Moreover, developing countries in particular take issue with the fact that forests might be a part of market mechanisms that could fail even if they were outright designed to protect the forests.

This is because many see that 'market failure' would be caused by forest clearing, since demand for REDD credits may not be sufficient to overcome the opportunity costs of REDD. Beside the intrinsic value of forests, many have argued that placing a value on natural tropical forests is necessary to show the comparative benefits of retaining standing forests. Many countries have also noted that establishing an appropriate baseline (reference emissions levels) would be key to ensuring that forests are not cleared outright, but that REDD approaches should be 'flexible and adaptive' in accordance with national circumstances. Others noted that utilization and SFM of tropical forests are integral to any REDD scheme, to capture a realistic and comprehensive picture of carbon offsets. These issues will continue to be discussed in upcoming policy meetings on the subject of REDD.

With access to the international compliance market at least three years away, the immediate opportunity for early REDD projects to market credit is relatively small, but rapidly growing in voluntary carbon markets. Despite the current limitations of the methodologies, many organizations are experimenting and preparing to monitor REDD activities in developing countries. Accuracy of

[10] FAO (2005) *Global Forest Resources Assessment*, Rome: Italy.

[11] Adapted from Ebling, J. (2006) 'Tropical deforestation and climate change: towards an international mitigation strategy', MSc Thesis University of Oxford.

[12] For instance, IPCC 2003 and 2006 guidelines use the concept of 'managed land' as a proxy for anthropogenic emissions. In other words, if there is human activity in a given area it is considered 'managed land' and the emissions or removals on that land area are assumed to be anthropogenic.

information and methods to obtain necessary information from forested areas will continue to be a challenge, and thus capacity building initiatives will be a major area of focus for enabling countries to participate in any future mechanism that links forests and climate change policy. To address issues of capacity, a number of multilateral institutions are already starting 'readiness' initiatives to prepare developing countries to monitor forest change cover with the hope that in the future it will be the basis of forming emissions estimates and reductions in the future.

In June 2008, the World Bank launched its REDD initiative under the Forest Carbon Partnership Facility (FCPF). The FCPF consists of two separate mechanisms, each with its own trust fund, for which the World Bank will act as Trustee. The first, a USD100 million Readiness Mechanism will assist approximately 20 countries in preparing themselves to participate in a future, large-scale system of positive incentives for REDD. The second, a USD200 million Carbon Finance Mechanism, will enable an initial group of these countries that will have successfully participated in the Readiness Mechanism to pilot incentive payments for REDD. To date, nine developed countries and an NGO have already made financial commitments to the FCPF, totaling USD160 million.

Others have been addressing matters on a bilateral basis. In September 2007, the Australian government announced a USD30 million investment in the Kalimantan Forest and Climate Partnership as part of its Global Initiative on Forests and Climate.[13] The Partnership aims to preserve 70,000 hectares of peat land forests in Indonesia's Kalimantan region, re-flood 200,000 hectares of dried peat land and plant up to 100 million new trees on rehabilitated peat land for conservation purposes.[14] The Partnership, which has also secured funding from founding partner BHP Billiton, aims to raise USD100 million in funding over four years by working with other countries, international NGOs and the private sector.

Norway has also committed USD500 million a year for five years to reducing deforestation. In June 2008, the country announced a USD210 million initiative with the UK government to finance advanced satellite technology and the development of community-based conservation projects in the Congo Basin.[15] In April 2008, it announced a USD100 million donation to fund to protect carbon-absorbing forests in Tanzania.[16]

How much money in total is needed to implement REDD activities? The answer to this question is not yet clear. The upcoming Eliasch Report, named after the UK's Special Representative on deforestation and clean energy, Johan Eliasch, hopes to estimate the total costs associated with implementing REDD activities. The report will be published in September 2008 and discuss how forests could be included in a carbon market. The report will also investigate ways to prevent leakage and non-permanence and the role of a closed compliance market for forest carbon credits.

Decisions on REDD have become inherently political when deciding on emissions targets and how they can be met. Negotiators will continue to discuss the extent to which natural forests, plantation forests, grasslands, and wood waste and agriculture might all be included in a policy instrument. Other policy information on definitional choices such as those for 'degradation' will also have implications for measuring and reporting GHG emissions, especially since no IPCC default methodology for 'degraded' forests exists. Experts at the June 2008 UNFCCC workshop recognized the difficulty with pinpointing the cause and process of degradation in countries, but recognized it would be a starting point to estimate carbon loss. This was illustrated through the presentation of satellite imagery data, in which human induced change was difficult to ascertain. Moreover, some parties at the Tokyo workshop noted that reduced or selective logging had not been adequately addressed.

Others mentioned that indigenous people (IP) could be marginalized as a result of REDD activities, given concerns over land tenure and migratory issues due to climate change. During the Bank's recent consultation on REDD, forest-dependent indigenous stakeholders noted skepticism over the REDD initiative, wondering how it would be different from other Bank programmes that 'eroded' IPs and other forest dwellers' livelihoods, lands and rights. The acceptance and equitable inclusion of indigenous and local people (including from small island developing states) has yet to be fully addressed by the UNFCCC, the World Bank and other participants in REDD pilot schemes.

Additionally, problems with good governance will need to be addressed in countries eligible for REDD activities. It was noted that REDD-related initiatives face similar challenges to CDM-type activities in previous years, when the finance flowed directly into countries where there was evidence of good governance. In countries where there is not evidence of good governance, countries would have to undergo capacity building initiatives to strengthen their governance capacity.

As discussed above, a variety of technical and political issues have yet to be discussed in the policy realm. However, is it realistic to include forests in a future climate change policy after 2012? The final section of this report examines the current involvement of forest activities in carbon markets and potential risk management

[13] --- (2007) 'Global Initiative on Forests and Climate' AusAID press release, 7 November 2007

[14] Kalimantan contains one of the world's largest intact areas of forest and six per cent of global land-based biodiversity. It also contains a large proportion of Indonesia's peat lands, which store at least six times as much carbon per hectare than forests on mineral soils.

[15] --- 'Britain, Norway commit USD210 million towards Congo rainforest conservation' www.mongabay.com accessed on 24 June 2008

[16] ---- (2008) 'Norway gives Tanzania USD100 million to protect forests' *Bloomberg*, 22 April 2008

techniques that could be used by participating entities in forest carbon trading.

Can a compliance market include tropical forest offsets?

To date, tropical forestry and land-use projects have faired considerably better in voluntary markets than they have in compliance markets. In 2007, forestry and land use accounted for less than 1% of the global compliance market, [17] while the figure for was closer to 15% in voluntary markets. The lack of liquidity in compliance markets for forest carbon makes price difficult to track accurately, but as an indication, the BioCarbon Fund sets a target acquisition price of between USD3 and USD4 for tCERs.[18] By contrast, the average price in the voluntary market ranges from USD4.8 for avoided deforestation to USD8.2 for afforestation projects. Interestingly, about 29% of those who bought voluntary carbon credits in 2007 did so in anticipation of being able to sell them for compliance purposes at a later stage.[19]

Up to 50% of voluntary market transactions are currently verified to a third party standard. One of the most significant recent developments in the voluntary carbon market has been the emergence of new standards, providing carbon credit buyers and project investors with independent assurance of the quality and value of different offset options. Forestry projects have faced particularly strong media and NGO scrutiny regarding the environmental integrity of forestry credits as well as the overall impact that projects have at the local level. In November 2007, the Voluntary Carbon Standard, which sets out a minimum standard for voluntary credits, released a comprehensive guidance document for agriculture, forestry and other land use[20] covering REDD, afforestation and reforestation, agricultural land management and improved forest management to counter such criticisms.

Additionally, the Climate Community and Biodiversity Alliance (CCBA) was created by a group of leading NGOs [21] in 2003 to leverage policies and markets specifically to foster the development of forestry activity with significant climate, local community and biodiversity benefits. The use of CCBA standards, designed in conjunction with community and environmental groups, companies, academics, project developers, is growing rapidly. Several buyers have declared their intention to give a preference to, give a premium to, or exclusively purchase land-based carbon offsets derived from CCBA projects.[22] By the end of 2007, a total of nine projects were undergoing validation and a further 80 entities had indicated their intent to use the standards.

The biggest challenge that prospective developers face, along with their investors and customers, is how to manage the considerable risks associated with these projects. While potential rewards are clearly high, developers face uncertain demand and production levels, unclear or conflicting claims of forest ownership or use rights, poor governance and patchy law enforcement.

Major carbon credit buyers and investors are able to reduce their own exposure by favoring projects undertaken by powerful, well capitalized and well known developers. Unfortunately, it is already known that a high proportion of 'in country' economic benefits that tropical forests generate flows through small and medium-sized forest enterprises. Taken together, the activity of these groups has a profound impact on forests worldwide.

For forest carbon markets to be equitable and efficient, they should be widely accessible. Achieving this requires new approaches to risk management and financing that bridge the gap between the long term benefits of sustainable management and the inability of developers at the smaller end of the spectrum to take on high levels of risk.

One potential way forward is 'eco-securitization', an approach which involves making better use of increasing well understood sustainability 'value' as collateral which in turn can unlock improved lending terms for sustainable forestry business. This could be anything from a contract for the supply of certified timber products or forest carbon, to a legal commitment for the protection of biodiversity. EnviroMarket Ltd, the London group pioneering eco-securitization, has also worked with capital market investors including the International Finance Corporation to gauge market appetite for a tropical forest-backed bond, in order to capitalize future sustainable lending plans.[23]

Debates over methodologies and policy will certainly continue in the run up to COP-15 in Copenhagen. Despite current risks and political concerns surrounding the involvement of forests in a future climate change accord, many tropical countries are taking early action to reduce carbon offsets and generate carbon credits that could potentially be used in compliance or voluntary markets. As you will see from the articles below, some countries have already demonstrated their interest and ability to

[17] Capoor, K. and Ambrosi, P. (2008) 'State and Trends in the Carbon Market', World Bank, Washington.
[18] --- (2008) 'How will the BioCarbon Fund Operate' accessed from http://carbonfinance.org, on 14 July 08.
[19] Hamilton, K. et al (2008) 'Forging a Frontier: State of the Voluntary Carbon Market', Ecosystem Marketplace & New Carbon Finance.
[20] --- (2008) 'Voluntary Carbon Standard Guidance for Agriculture, Forestry and Other Land Use Projects', from www.v-c-s.org, accessed on 8 July 2008.
[21] CCBA membership now include six companies—BP, Intel, SC Johnson, Sustainable Forestry Management, Weyerhaeuser and GFA (Germany)—and seven NGOs—Conservation International, CARE International, the Hamburg Institute of International Economics, Pelangi Indonesia, Rainforest Alliance, The Nature Conservancy and the Wildlife Conservation Society.

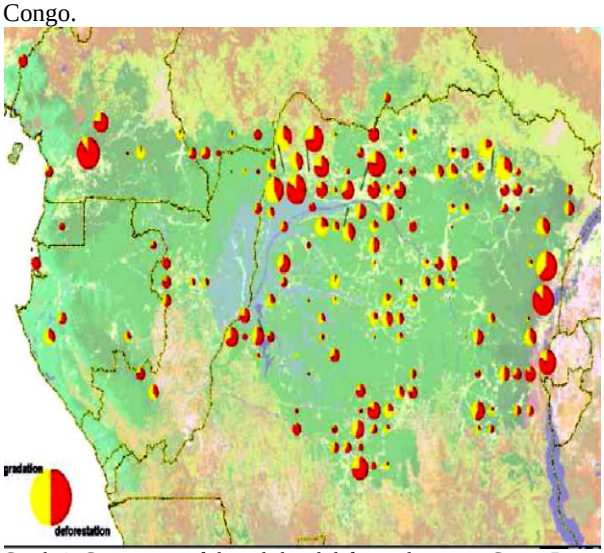
[22] From www.climatestandards.org accessed on 10 July 2008.
[23] From www.ecosecuritisation.com accessed on 7 July 2008.

participate in a voluntary and compliance market while others are less prepared to participate. As the policy debates emerge over the next year and a half on the contribution of forest activities to a future 2012-regime, ITTO looks forward to working with producer countries to build on their experiences with sustainable forest management (SFM) and helping them prepare to adapt to and mitigate the potential effects of climate change.

Report from Central/West Africa

Congo Basin sees progress on REDD preparations

As discussed at the UNFCCC workshop on methodologies to reduce emissions from deforestation and degradation (REDD), representatives from Gabon presented on the progress in Congo Basin to prepare for REDD initiatives. Central African Forests Commission (COMIFAC) and The Observatory for Central African Forests (OFAC), with the technical assistance of the EU, have begun to make preliminary estimates of land-use change using satellite data. The illustration and quantitative chart below show the areas and amount of deforestation in Congo Basin countries, with the highest rate of gross and net deforestation occurring in the Democratic Republic of the Congo.



Graph 1: Comparison of degraded and deforested areas in Congo Basin countries, 2008 (Source: COMIFAC, OFAC, EU JRC data)

	Cameroon *	CAR	D.R. Congo	Equat. Guinea	Congo	Gabon *	Central Africa
Gross Deforestation	-0,28%	-0,15%	-0,33%	-	-0,12%	-0,16%	-0,27%
Net Deforestation	-0,19%	-0,07%	-0,26%	-	-0,03%	-0,12%	-0,19%
Net Degradation	-0,02%	-0,02%	-0,15%	-	-0,01%	-0,09%	-0,10%
FAO Deforestation	-0,90%	-0,10%	-0,40%	-0,60%	-0,10%	0,05%	-0,36%

* indicates where samples are unreliable (due to cloud cover)

Table 1: National estimates of deforestation and degradation in Congo Basin countries, 2008 (Source: COMIFAC, OFAC, EU JRC data)

Congo Basin representatives at the Tokyo UNFCCC workshop expressed interest in estimating the carbon value of standing forests, with one expert valuing carbon forests from standing forests in the Congo Basin at USD1.25 trillion. Methodologies will be updated to help provide relevant estimates of land-use change for inventory and accounting activities. The Central African Republic, the Democratic Republic of the Congo and Gabon have already expressed interested in participating in the World Bank's REDD capacity building initiatives.

Report from Ghana

Ghana initiates CDM PIN and REDD R-PINs

Ghana ratified the UN Framework Convention on Climate Change (UNFCC) in 1995 and the Kyoto Protocol in May 2003. Since that time, Ghana has held a number of workshops on CDM-related activities and set up a designated national authority (DNA) on CDM within Ghana's Environmental Protection Agency in September 2005. The DNA has helped design three CDM project idea notes (PINs) on the following: rubber outgrowing and carbon sequestration in Ghana; afforestation of catchment areas in the Brimsu Reservoir; and afforestation of the catchment area of Lake Volta. Nevertheless, a number of challenges still exist for Ghana's participation in the CDM, which include obtaining project financing, designing project monitoring approaches, high transaction costs associated with projects and establishing a CDM project baseline.

Ghana was also one of 10 countries in Africa that expressed interest in participating in the World Bank's REDD initiative. Ghana has submitted a readiness project idea note (R-PIN) to participate in the scheme, which is designed to assess the country's readiness to reduce emissions from deforestation and degradation. The objective of the initial capacity building stage is to help Ghana establish a mechanism to generate carbon credits for a Carbon Fund that will provide payment for emissions reductions.

Capacity building funds will be available to Ghana under the Bank's REDD mechanism to help design inventories, monitoring approaches and a national carbon accounting system. Ghana acknowledges that under both CDM and REDD schemes, training is important for extension officers, to facilitate private sector involvement in carbon projects and create awareness.

Report from Malaysia

Malaysia shows high CER potential

The Star reported on Malaysia's potential to register 18 million Certified Emissions Reductions (CERs) in 2010, with a potential to register up to 100 million tons of CO_2 during the period 2006-2012. The CERs are generated mostly from biomass plants under Clean Development Mechanism (CDM) projects. In total, Malaysia has 22 registered CDM projects.

Based on estimates from the PTM Secretariat in Malaysia, which helps establish CDM projects in the country, Malaysia has the potential to generate revenue from CERs in the range of RMB1.14 to 3.8 billion. Bilateral and multilateral financing could help leverage external financing for CDM projects to increase Malaysia's potential revenue from CERs by more than three times this amount. Currently, the Malaysian plantation sector, which is mainly processing oil-seed for biomass, has been the primary beneficiary of CER trading. Application of the concept of CDM in the forest and wood products industry has been slow. Nevertheless, establishing CDM projects could help promote good corporate governance, a cleaner environment and allow companies to benefit from tax exemption on their carbon credit income between 2008 and 2010.

Report from Indonesia

Indonesia REDD initiatives could generate USD3.75 billion per year

Indonesian Environment Minister Rachmat Witoelar said Indonesia could obtain USD3.75 billion per year through the REDD mechanism, reported *Antara News.* Results of recent research reports indicate that 60% of GHG emissions in Indonesia are from land use, land-use change and forestry (LULUCF) activities. However, certain stakeholders have expressed some hesitation on the REDD initiative, since they claim REDD mechanisms could neglect smallholder or village forest owners.

Indonesian government representatives have been active in promoting the REDD mechanism and have said it could help conserve forests in the region and reduce GHGs. They hoped that other Asean countries could take the lead in the REDD process. For instance, Nur Masipatin, the Secretary of the Forest Research and Development Agency of the Ministry of Forestry, recently discussed the benefits of REDD at the Asean Secretariat. She said Asean countries could actively participate in these activities and noted they required strong coordination between different sectors and levels of governance.

Report from Myanmar

Myanmar GHG estimates show country's low contribution to global emissions

Under Article 4.1 of the UNFCCC, Parties to the Convention are required to prepare national inventories on GHG emissions and removals by sinks to mitigate climate change. In response to this requirement, Myanmar joined the Asia Least Cost Abatement Strategy (ALGAS) Project, which was launched in 1996.

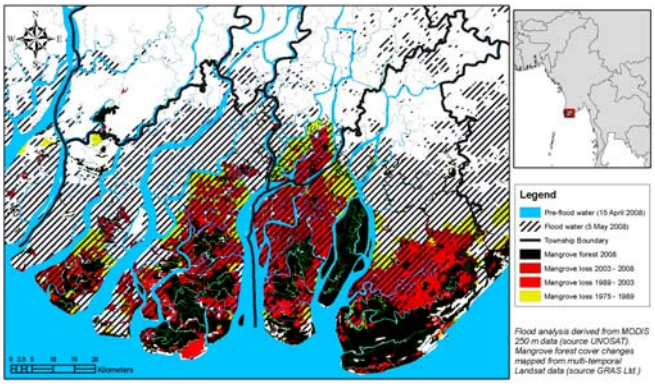
According to information contained in the *Myanmar Forestry Journal*, GHG emissions in Myanmar were about 41,500 Gg CO_2 in 1990, which is fairly small when compared to the emissions of other Asian countries. As a result of the ALGAS project, the agriculture sector was considered the dominant source sector for GHG emissions (94%). It also showed that the energy sector contributes a small amount of CO_2 to total emissions, and that by 2020, the forestry sector will continue to be a sink.

Coastal mangrove loss hampers Myanmar's GHG sinks potential

Forest Resource Environment and Development Association (FREDA) experts in Myanmar note that coastal mangrove forests provide essential ecosystem services, protect coastal erosion and sequester GHGs. However, they are subject to a large amount of overexploitation and conversion to other land uses.

In December 2006, the *Myanmar Forestry Journal* indicated that 274,795 hectares of mangrove forest existed in 2002. The firm Gras Ltd. used this data as well as information from Landsat images to estimate that 148,847 hectares of mangroves existed in 2008. However, after Cyclone Nargis, FAO estimated the total mangrove forest area at only 100,000 hectares. FREDA experts on the ground estimate the total mangrove area to be even lower at 70,000 hectares.

Many experts agree that dense intact coastal vegetation can help offer protection to natural disasters such as storms and tsunamis, although the real benefit of the coastal forest will depend on a range of factors. In cases where natural shields are not present in areas prone to the effects of climate change, experts urged the use of technological engineering solutions such as dykes and seawalls as well as early warning systems to protect such areas from the effect of natural hazards.



Report from Brazil

Brazil's could reap large benefit from carbon markets

The participation of Brazil's forest industry in the carbon credit market has occurred in two ways: the compliance market under the Kyoto Protocol, through the CDM; and the voluntary market through projects in the Chicago Climate Exchange (CCX) and other voluntary offsets of emissions. The current rules for CDM projects pose difficulties for Brazilian forest-related companies to participate. Primarily, this is due to the difficulty in complying with additionality criteria for forest-related projects, since baselines are particularly difficult to establish.

Nevertheless, Brazilian companies have demonstrated favorable conditions under which CDM projects could be established. For example, one CDM project utilizes a methodology which considers the commercial and industrial use of wood from planted forests (methodology

AR-AM5). This method was developed by the Brazilian company PLANTAR based on its national experience with eucalypt plantations. In additional, another methodology developed by the Brazilian company AES Tietê deals with the establishment of forests in protected areas.

As an alternative to the CDM, some forest-related companies have directed their efforts to the CCX market, where the rules allow the generation and commercialization of carbon credits. This is especially attractive to companies not eligible for CDM projects. There are currently nine forest companies in Brazil already trading in the CCX or are preparing to trade – Aracruz, Suzano, Klabin (see story below), Cenibra, Duratex, V&M (Vallourec and Mannesman), Ripasa, Votorantim and CAF Arcelor. In addition to the CCX, the voluntary carbon credit market relies on initiatives related to emissions offsetting through the establishment of and sequestration from forest plantations. These initiatives do not have the same level of transparency of the CDM and may weaken the project's credibility when companies do not develop them properly.

Finally, there are possibilities to expand the scope of activities eligible under the UNFCCC, such as the inclusion of REDD initiatives. Brazil has already begun to track deforestation and degradation to understand how such methods could be used under REDD mechanisms at the global level. At the UNFCCC workshop in Tokyo, for instance, Thelma Krug of the National Institute for Space Research (INPE) of the Ministry of Science of Technology, presented the use of satellite imagery (DETER) to track deforestation rates. In any REDD scheme, the Brazilian expert noted that permanence should be considered as schemes need to be monitored over a long period of time. She also said that early action to track deforestation and degradation also requires law enforcement, where appropriate. However, she said that there is still difficulty in assessing the intermediary and initial stages of forest degradation, especially degradation that is human induced, since this phenomenon not detected with the same efficiency.

Major pulp and paper company negotiates carbon credits

Celulose Online noted that Klabin, a major pulp and paper company in Brazil had sold carbon credits for the second time in the international market and for the first time under the CDM. The company negotiated an 87,000 ton deal with a European energy company at a price of EUR17 per ton.

This is Klabin's first CDM project registered with the UNFCCC as of July 2006. The project has the capacity to reduce the company's fuel emissions by 26%, which could generate about 150,000 tons of carbon credits by 2010. In 2008, Klabin may also trade the remaining 63,000 tons of carbon.

Carbon credit market expands in Brazil

According to *Celulose Online*, Brazil ranks third among countries that could generate the most carbon credits. The carbon market has attracted companies from several segments due to the prospect of gaining attractive profits - for instance, an investment of BRL165,000, including costs of registration and the credit certification, can generate revenues around BRL7,850,000. The Clean Development Mechanism (CDM) offers an attractive investment possibility for companies.

According to Ecoidea Environmental Solutions, there are some criteria that must be assessed when planning a CDM project. These include environmental sustainability, the development of labor conditions and job generation, equitable income distribution, technological capability and company development, and contributions to regional integration and linkages to other sectors. Furthermore, companies that hold environmental certifications such as ISO 9000 and ISO 14000 are looked upon more favorably in the CDM project approval process.

Carbon credit trading has been an opportunity for the pulp and paper industry, one of the most active in this market. Data on CO_2 inventory published by the Environmental Sanitation Technology Company of São Paulo State (CETESB) and the Brazilian Association of Pulp and Paper (BRACELPA) stated that Brazilian pulp and paper companies capture three times more CO_2 than they emit.

Brazilian Committee sets measures to combat climate change

On 18 June 2008, a Special Committee on Climate Change, which was set up by the Brazilian Congress, approved a report with 51 recommendations to halt and revert global warming. Among these recommendations noted *Ambiente Brasil*, were the creation of a global fund to finance environmental conservation, the implementation of jointly managed initiatives by Amazonian countries and measures for deforestation control. The report emphasized the need for changing consumption patterns that represent an enhanced awareness of the environment. Additionally, it suggested that investment be encouraged in new technologies such as hydrogen vehicles (e.g. as in Japan) and compressed air vehicles (e.g. in France). The report was approved after 13 months of intense debate and pointed out that developed countries are primarily responsible for controlling carbon emissions. However, it also suggested possible emissions reductions targets for Brazil, China, all of Africa and other developing countries.

Brazil's Congress generally supports the idea to reduce the country's deforestation rate by 30%. Although this target is not explicitly stated in the Committee report, the government is expected to take necessary actions to reduce the deforestation rate, recognizing this will be a difficult endeavor. Initial action taken as a result of the report includes: the establishment of a climate change forum in cities with over 100,000 people, the preparation of vulnerability area maps, the creation of a global and a Mercosur fund to promote environmental conservation and auctions for clean energy (e.g. wind energy and use of sugar-cane bagasse as energy residues). Moreover, the report suggested Brazil lead a global conference on the environment, to be named Rio+20, which would be expected to take place in 2012.

Report from Peru

CEDS promote planting of 28 million trees

To help combat the effects of climate change, the Community Economic Development Strategy (CEDS), which has a new headquarters in the Manantay district in Ucayali, will plant 28 millions trees (one tree per each Peruvian). The CEDS already has international support. Personnel involved in CEDS have started raising funds in Peru and abroad to allow the project to finish within a year. The first tree will be planted during the first week of August 2008.

EU-Latin America summit considers effects of climate change on Andean nations

At the recent EU-Latin America Summit in Lima this June 2008, leaders discussed issues such as biofuels and climate change. Ahead of the meeting, the Andean Community produced a report for the Summit's consideration on the effects of climate change on Andean Community nations. The report said that fast-melting glaciers could deprive 40 million people of water for consumption, hydroelectric power and agriculture by 2020. It also notes that temperature increases (nearly 70% higher than other areas of the world) and the effects of deforestation threaten the ecological collapse of Amazon rainforests.

Report from Mexico

Voluntary carbon market programme launched in Mexico

As part of a climate change strategy established by the Federal Government, the Secretary of Environment and Natural Resources (SEMARNAT), Ing. Juan Rafael Elvira Quesada launched Mexico's Voluntary Carbon Market Programme. Through this mechanism, he noted the government, private sector, civil organizations and society as a whole have joined an alliance to carry out concrete actions to reduce and mitigate GHG emissions generated daily energy consuming activities. He also said that the programme is not only a remedy to mitigate the effects of climate change, but would also help the country reduce GHGs by 1% per annum.

As of 2004, CONAFOR initiated the strengthening of approaches similar to those of the international voluntary carbon capture market, by means of using environmental services payments and the ProTree programme, which have benefited forest activities and the wider environment. The programme is expected to form characteristics and obligations similar to other voluntary markets, with which companies and other entities participating in the market will need to comply.

Carbon financing support available for public and private sectors

A new government project aims to build capacity in the public and private sectors of the country to allow the development of carbon transactions and fortify existing associations and strategies for carbon financing. It will help support the participation of entities in the carbon market such as SEMARNAT, the Mexico's Ministry of Energy (SENER), Mexico's state-owned petroleum company (PEMEX) and the Federal Electricity Commission (CFE), as well as others in the cement, chemicals and waste sectors. The main activities of the project include: the identification and development of proposals for carbon financing projects; the preparation of methodologies and guidance for monitoring GHG emissions and the modification of existing methodologies according to policies of the World Bank; the development of capacity to forge agreements between parties; and the development of legal and administrative frameworks that enable the participation of parties to participate in bilateral agreements on carbon capture.

Mexican Carbon Fund established

Mexico participates in UNFCCC activities under the Kyoto Protocol, including by promoting the development of projects under the CDM. These projects may help Mexico generate CERs that can be traded in the carbon market and help project developers obtain additional income. The Mexican Carbon Fund (FOMECAR) was created as a result of the joint efforts of Mexican institutions in order to provide national companies and public entities with technical and financial support to implement CDM projects, which present a variety of opportunities for sustainable development in the country.

Report from Guyana

Guyana prepares to engage in REDD schemes

Guyana has expressed its commitment to take action on climate change through conservation and sustainable management of its forests. As part of its efforts to implement SFM, Guyana has in place a National Forest Plan, developed a Code of Practice for forest producers based on the principles of Reduced Impact Logging (RIL) and enhanced its efforts in promoting value-adding. Additionally, it has been working to strengthen the legality of forest products through various schemes including certification and legal verification.

Many of these initiatives have been supported by the ITTO, including training in RIL, enhancing legality of the timber trade and improving added value capability of the forest industry. Presently, Guyana's legislative framework in the forestry sector is being revised and updated with new laws to promote greater efficiency, accountability and good environmental stewardship.

Guyana is among those countries with high forest cover and historically lower emissions from deforestation. The GFC believes future emissions will be higher unless forest protection receives adequate REDD incentives and levels of international support are increased. At the same time Guyana makes a high per capita contribution to global carbon storage through the preservation of a high portion of its forests. Its high forest cover and lower than average historical deforestation rates is a result of deliberate policies to promote conservation and strategically manage forest utilization.

Guyana is currently working on initiatives with local and international agencies to carry out a carbon stock inventory and assessment. These initiatives are expected to enable Guyana to take advantage of market-based mechanisms such as carbon trading schemes. Guyana has

mentioned in international forums that it supports market-based mechanisms to provide positive incentives for forest management and conservation. Guyana views the maintenance of its standing forests as a direct mitigation intervention to reduce carbon emissions as well as an improvement in biodiversity values, ecosystem services, sustainable development and livelihoods for local communities and indigenous populations.

Report from Japan

G8 ministers cautious on climate change commitments

The International Herald Tribune and *The Japan Times* reported on the outcome of the recent G8 meeting in Hokkaido, Japan, saying that ministers were unable to agree to firm commitments to halve the world's GHG emissions by 2050. While the G8 statement pledges to help increase aid to developing countries to reduce their vulnerability to climate risk, the statement contains very few concrete goals to help GHG emissions from growing. Only Indonesia, South Korea and Australia expressed support for a long-term goal.

Nevertheless, world leaders such as Tony Blair and IPCC Chairman Rajendra Pachauri noted that numerical goals should not be the sole focus of the G8 talks. It was hoped that leaders would inject support for the recently negotiated Bali roadmap (December 2007), which aims to develop a post-2012 Kyoto accord by the end of 2009. Some experts have added that the lack of agreement on climate change targets at the G8 summit should not be considered a negative sign, since the inability to agree on targets at this juncture could actually lead to a more constructive, implementable post-2012 regime in the long-term, as governments can take time to investigate what climate change commitments might actually work in practice.

Sony group signs biomass deal with timber distribution group

Sony has been introducing renewable energy to its operations to offset its GHGs, including through its recent deal with Tounou Cypress Distribution Co-op. The *Japan Lumber Reports* said a biomass power generation plan run by Tounou will supply one million kilowatt hours a year to Sony's nearby plant, EMCS Mino Kamo Tech. The supply of power will be equivalent to 4% of annual power consumption in the EMCS plant.

Report from China

China's historical approach to climate change focuses on CDM

China formally signed the UNFCCC in 1992 and ratified the Kyoto Protocol in August 2002. As the second largest GHG emitter, China has been facing heavy pressures from the international community, although it has no special obligation to reduce its emissions as a non-Annex I country.

As early as 1990, China set up the National Coordination Committee on Climate Change to coordinate policies and actions related to climate change. CDM projects began in China in 2002 and a national CDM projects board was established to approve CDM projects. A fund for China's CDM projects was also formally started in March 2007. The Fund is managed by the Ministry of Finance and provides financial support for activities related to the mitigation of climate change.

The Chinese government issued China's National Climate Change Programme in June 2007, with forestry measures making up part of the programme. The plan was integrated with the country's 11th Five-Year Plan (2006-2010). China pledges to reduce carbon dioxide emissions or equivalent by 1.5 billion tons by 2010 while maintaining its economic growth.

At the end of 2003, the State Forestry Administration (SFA) set up a management office on CDM forest projects in its Afforestation Department. In an effort to mitigate GHG emissions while encouraging development of the carbon credit trading, the SFA officially launched the China Green Carbon Foundation in July 2007, in part due to donations of RMB300 million yuan from the China National Petroleum Corporation (CNPC) for forest planting and carbon sequestration. It is estimated that 5-10 million CO_2 will be sequestrated in the next ten years.

China takes proactive role in carbon markets

According to the China National Climate Change Programme, 5.11 million tons of CO_2 equivalent have been sequestered in China's forests during 1980 to 2005. Of the total, 3.06 billion tons CO_2 was absorbed by afforestation activities, 1.62 million tons CO_2 was absorbed by forest management, and 430 million tons of CO_2 from avoided deforestation. Five hundred million tons of forest carbon have been accumulated in China in 2004 alone, equivalent to 8% of the national total of industrial CO_2 emissions in 2004.

According to the *Measures for the Operation and Management of CDM Projects in China*, three priority areas were identified for CDM project development: energy efficiency improvement, development and utilization of new and renewable energy and methane recovery and utilization. There are only two CDM forest carbon projects in China.

The first project was established through the World Bank Biocarbon Fund and implemented in Guangxi Zhuang Autonomous Region. Approximately USD22.7 million was invested to plant 4,000 hectares of multi-functional forests. The World Bank Biocarbon Fund will be the buyer of 77,000 tons of CO_2 equivalent (tCO_2e) CERs which are expected to be created during 2006 to 2035. The second project was funded by Italy, which donated USD1.35 million to plant 3,000 ha of forests on sand-covered areas in Inner Mongolia Autonomous Region. Italy will be the buyer of 240,000 tCO_2e CERs by 2012.

In addition, China has initiated forest carbon pilot projects in Yunnan, Sichuan, Liaoning and Hebei Provinces under the guidance of SFA's Afforestation Department. In Yunnan and Sichuan Provinces, China cooperates with Conservation International (CI) and The Nature

Conservancy (TNC) to implement forest carbon demonstration projects that involve plant recovery and biodiversity protection. In Liaoning Province, China and Japan are searching for ways to prevent desertification and establish CDM forest carbon projects. In Hebei, China is working with a Netherlands-based CDM consulting company to initiate a forest carbon project. Other private forestry enterprises and individuals are becoming involved in CDM forest carbon projects.

At present, China has 28 million hectares of non-forested areas on which afforestation and reforestation will be conducted. According to data from SFA, one hectare can absorb 150.47 tons of carbon dioxide. Thus, China has the potential to generate emissions reductions of 4.2 billion tCO_2e. China has identified southern and northwestern Yunnan Province, southern and northwestern Sichuan Province, the southern Chongqing Municipality, the northern Guizhou Province, the northwestern Guangxi Province and southern Hainan as priority areas to develop forest carbon projects. The annual growth of China's forest expected to double to 1 billion m^3, which will double the overall carbon sequestration potential of China within 30 to 50 years. The annual carbon storage potential from national afforestation and reforestation activities is estimated at 26 million tons by 2010, 124 million tons by 2030 and 191 million tons by 2050.

Currently, China is the second largest GHG emitter. To adapt to and mitigate climate change, China has been making great efforts to reduce GHGs, although it has no specific obligation to cut GHG emissions. China has been regarded as largest potential market for generating carbon credits. Statistics from the United Nations Development Programme (UNDP) show that carbon credits from China make up one-third of the global total and are expected to comprise 41% of total global carbon credits by 2012. It is believed that China's carbon trading initiatives will receive a further boost once the Beijing-based carbon trading exchange is operational.

Report from Europe and the UK

REDD seen as risky approach for EU ETS

The EU Emissions Trading Scheme (ETS) is the largest multi-national, greenhouse gas emissions trading scheme in the world. According to the European Commission, the ETS accounts for 67% of GHG by volume and 81% in terms of value of the global carbon market. It has been operational since January 2005 and encompasses all EU member states. However the impact of the ETS on the forest sector has been limited to date, the EC having decided that the science on carbon sequestration from forests and systems of measurement are not yet sufficiently well developed to allow trade in forestry-related credits.

The ETS operates by capping the amount of CO_2 that can be emitted from large installations, such as power plants and carbon intensive factories and covers almost half of the EU's CO_2 emissions. If companies miss their target, they are forced to buy permits from companies that have undershot their allowances, or they face financial sanctions. Companies may also buy validated credits from the developing world through Kyoto's CDM. In 2006, around USD8 billion of the total USD32 billion of carbon credits traded by the EU ETS were generated through the CDM.

The first phase of the ETS (2005 - 2007) was heavily criticized due to oversupply of allowances and the distribution method of allowances (i.e. by government negotiation rather than by auctioning). As a result carbon prices remained too low to drive any significant reduction in carbon emissions. However, these issues are being progressively resolved and there are high hopes for the second phase of the ETS which runs from 2008 until 2012. The EC has been tough on European countries' plans for emission reductions during this period. The number of permits to be allocated has been cut by around 9% between 2008 and 2012. The EC is now proposing to toughen the scheme further by increasing the proportion of permits companies will have to buy, rather than giving them for free. Compliance with the scheme is already improving and confidence is rising alongside increases in carbon prices.

The EC has great ambitions for the ETS, with evolving plans to link the system with similar schemes in other regions of the world after 2012 to lay the foundation for a global carbon market. Unfortunately, greater linkage with the evolving debate over credits for REDD is unlikely in the immediate future. Only weeks after the UNFCCC Bali Agreement in December 2007 effectively gave the go-ahead for far-reaching international REDD programs, the EC was proposing to exclude forestry credits from the ETS until 2020.

According to an article in the March 2008 edition of *Nature*, the EC made this decision based on concerns that 'easy' REDD credits would undermine efforts to reduce its own industrial emissions. It feared that credits for deforestation, which annually accounts for roughly 5-6 Gigaton or 20% of world carbon dioxide emissions, would swamp the nascent ETS carbon market. As the *Nature* article puts it, 'an endless stream of deforestation credits will simply allow companies in the developed world to pay a little extra and pass costs on to consumers without otherwise changing their policies.' 'We want to see real emissions reductions in Europe,' said Artur Runge-Metzger, Head of Climate, Ozone and Energy at the EC.

In line with this view, the EC proposal for a European Directive 'to improve and extend' the ETS scheme issued in January is quite explicit is stating that emissions from forestry and agriculture should not be included in the ETS. The proposal notes that the ETS trading system 'should only be extended to emissions which are capable of being monitored, reported and verified with the same level of accuracy as applies under the monitoring, reporting and verification requirements currently applicable under the Directive. This is ….not the case for emissions from agriculture or forestry, although the EU ETS considers the combustion of biomass to be emission-neutral'. The

proposed Directive does allow that the ETS may support REDD projects indirectly, noting that 'The European Parliament and the Council have endorsed the use of proceeds from auctioning of allowances within the EU ETS to be used for reducing emissions, in particular by avoiding deforestation'. However companies will not be able to benefit under the ETS from credits derived from REDD projects.

This does not mean there will be no trade in REDD credits in the European market. Consumers wishing to purchase forestry-related carbon offsets can do so through the small voluntary market for carbon credits. This is demand that is not forced through government regulation but is instead generated by environmentally concerned companies and individuals. Compared to the ETS the voluntary market is tiny, currently valued globally in the region of USD100 million. The prices paid for carbon credits on voluntary markets are also low compared to regulated markets. For example credits on voluntary markets like the Chicago Climate Exchange (CCX) currently trade at an 80-90 percent discount compared to EU allowances (EUA). On the other hand, forestry off-set projects have been particularly popular in voluntary markets as they are amongst the most visible of offset types and are therefore attractive to buyers. They are believed to account for about a third of voluntary offsets. New voluntary deals are being announced regularly. For example, earlier this year the Indonesian province of Aceh signed a deal to protect the forests of Ulu Massen in exchange for 100 million tons of carbon credits in the voluntary market.

Former BP Exec sees future in SFM

According to recent article in the UK's Guardian newspaper, the former chief executive of British Petroleum (BP) John Browne has 'underlined the growing commercial value of tropical forests at a time of global warming by joining a business that claims to mix ethical conservation with selling carbon credits'.

Browne, who had wanted to take BP 'beyond petroleum' and was responsible for a series of green initiatives during is time at the giant oil company, has been appointed as Chief Executive of Sustainable Forestry Management. SFM is a private group of companies formed in 1999 interested in all aspects of forestry including harvesting sustainable products, biomass, carbon sequestration and eco-tourism. It is building a global portfolio of forestry land assets 'with the goal of becoming a leading supplier of carbon and other environmental credits and offsets to industrial, commercial and financial participants in the world's emissions and environmental trading schemes.'

Since leaving BP last May Browne has made a number of speeches saying big money in future would be made in trading carbon as much as oil. SFM said it was 'honored' to have Browne join the company because he was a pioneer in finding market-based responses to global warming and, reputedly, one of the first to recognize the importance of forests to stabilize the atmosphere.

IIED proposes new Global Forest Partnership

An emerging initiative could pave the way for fundamental change in the way forests are managed, boosting efforts to fight both poverty and climate change, says research published by the International Institute for Environment and Development (IIED) in early July 2008.

The World Bank-nurtured idea is of a global forest partnership that links local and global processes and promotes decision-making on the international stage that reflects the view and needs of local stakeholders such as forest dwellers. But the study's authors warn that the World Bank will have to heed the advice of hundreds of experts they consulted if it is to make a real breakthrough in tackling the problems of past decades and the weaknesses of typical international forest programmes.

IIED consulted widely on the bank's idea. More than 600 forest experts responded to IIED's survey or participated in focus groups in Brazil, China, Ghana, Guyana, India, Russia and Mozambique, as well as at international meetings.

A majority agreed a new partnership was needed to protect forests and forest-based livelihoods, but pointed out ways it should diverge from the bank's initial idea if it is to really serve local needs on an equitable basis with the rapidly changing global forestry agenda. IIED also reviewed more than 50 existing initiatives to identify the proposed alliance's potential partners and the gaps it could fill.

The consultation identified key features that would make a global partnership a unique and truly progressive way for international forestry to work. It should focus on empowering primary stakeholders such as forest dwellers so that their rights, knowledge and needs are centre-stage. It should greatly improve flows of finance to activities that support local needs alongside global public goods such as carbon storage. And it should interact effectively with other sectors such as water and agriculture, where the underlying causes of forest problems – and the seeds of sustainable solutions – are often lodged.

According to Steven Bass of IIED and one of the authors of the report, the proposed partnership 'has potential to harness an enormous groundswell of energy to manage forests so they can help address local poverty and global climate change', adds Bass. 'Right now, Western governments are planning large climate and forest funds – the partnership could identify the best ways to invest those funds for long-term good'.

IIED suggest that the Bank must 'avoid trying to drive the partnership from the top-down. Instead it must act as the facilitator, providing financial and other support in a hands-off way to enable an independent alliance to be built from the bottom up, bringing together local and regional partners with global organizations'.

The report urges the formation of a 'development group' of forest, environment and development leaders, mainly from the South and credible to government, civil society and the private sector, who can come together and contribute to the development of the initiative. They would be supported by a small group of progressive international institutions in their efforts to forge a new kind of local-global partnership.

Other Climate News

New US study investigates forest management techniques for carbon sequestration

As international policy has focused more and more on the role of forests in climate change, debate is intensifying over the best way to manage forests for purposes of carbon sequestration. This debate has become particularly heated in North America. Advocates of forest certification systems operating in the region have been urging the organizers of emerging GHG trading frameworks – such as the CCX – to offer credits for certified forests managed for sustainable timber production. This move has been resisted by many environmental groups who argue that such credits should only be offered for forests which are set aside for long term preservation. Both sides of the debate have looked to the scientific community to provide data in support of their arguments. The results of a variety of studies generated by this controversy may offer lessons for carbon offset projects in other parts of the world including the tropics.

The case for preservation rather than timber production is made in a study by the Oregon State University on the '*Effects on Carbon Storage of Conversion of Old-Growth Forests to Young Forests*'. Based on simulations of carbon storage in forest stands in Oregon in the Western United States, this study suggests that conversion of old-growth forests to young fast-growing plantations for timber production is not an effective way of decreasing atmospheric carbon dioxide. During simulated timber harvest, on-site carbon storage is reduced considerably and does not approach old-growth storage capacity for at least 200 years. This study also showed that even when sequestration of carbon in wooden buildings is included in the models, timber harvest results in a net flux of CO_2 to the atmosphere. The study suggests that to offset this effect, the production of lumber and other long-term wood products, as well as the life-span of buildings, would have to increase markedly.

The results of this study contrasts with another undertaken by Perez-Garcia et al in 2005 entitled 'An assessment of carbon pools, storage, and wood products market substitution using life-cycle analysis results'. Drawing on data relating to softwoods in the eastern US, the study shows that a strategy of forest preservation is superior to one of sustainable timber production if only the carbon stored in forests is considered. However, if the additional carbon stored in timber following harvest, together with the benefits of substituting wood for more energy intensive products are included, then the carbon storage benefits of regular timber harvesting are greatly increased. In fact, the long-term carbon storage effects of regular harvesting and efficient use of the timber in construction now outweigh the forest preservation strategy.

There are several reasons for these apparently contradictory results. First, the Oregon study was based on an area where old growth natural forests are particularly well suited to carbon storage. In fact the potential for carbon storage in the forests of the Pacific Northwest is among the highest in the world because the major dominant tree species (Douglas-fir) is very long-lived and maintains high growth rates for a very long time compared to other regions. Therefore in this region protecting the remaining old growth forests, creating additional protected areas, and using longer rotations may well be more effective for increasing carbon storage on land than in other forest regions.

It should also be noted that the Oregon team assumed a particularly destructive form of forest management involving the complete removal of natural forests and replacement with short-rotation forest plantations. Assuming other forms of low intensity selection harvesting systems may well have produced different results.

Another important difference between the studies is that while the Oregon University team only considered the relatively small volumes of carbon stored in the wood products, Perez-Garcia made a point of adding in the carbon-saving benefits of substituting wood for more energy intensive products such as steel and aluminum.

Overall these studies suggest that it would be wrong to assume that either preservation or sustainable timber production is necessarily the best strategy for long term carbon storage. The optimum solution will vary from place to place depending on such factors as forest type and local demand for forest products and other forest services. Comprehensive and regionally specific research is required considering the impact of different management strategies on carbon storage both in forests and forest products and also encompassing the substitution effects of timber use in construction.

There are also lessons for the tropical forest sector. It is likely that in many tropical regions, a strong case may be made that management of natural forests for timber production is a better carbon sequestration strategy than forest protection and preservation. Sustainable tropical timber production combines low impact selection harvesting with supply of a durable and long lasting product that can directly substitute for highly energy intensive products like steel and aluminum. But there is an urgent need for scientific life cycle data to back this up.

TIMBER PRICES

WEST AFRICA

West Africa Log Prices

West Africa logs, FOB	€ per m³		
Asian market	LM	B	BC/C
Acajou/ Khaya/N'Gollon	221	191	137
Ayous/Obéché/Wawa	206	206	168
Azobe & Ekki	168	168	122
Belli	168	168	-
Bibolo/Dibétou	168	168	114
Bubinga	533	457	381
Iroko	289	274	259
Okoume (60% CI, 40% CE, 20% CS)	135	-	-
Moabi	259	289	267
Movingui	191	191	137
Niove	129	129	-
Okan	152	152	122
Padouk	259	259	229
Sapele	251	251	191
Sipo/Utile	305	305	228
Tali	152	152	114
Okoume (40% CI, 40% CE, 20% CS), FAS- China	142	-	-

West Africa Sawnwood Prices

West Africa sawnwood, FOB		€ per m³
Ayous	FAS GMS	335
	Fixed sizes	396
Okoumé	FAS GMS	300
	Sel. & Bet. GMS Italy	250
	Sel. & Bet. fixed sizes	-
Sipo	FAS GMS	585
	FAS fixed sizes	-
	FAS scantlings	585
Padouk	FAS GMS	585
	FAS scantlings	585
	Strips	425
Sapele	FAS Spanish sizes	520
	FAS scantlings	520
Iroko	FAS GMS	458
	Scantlings	519
	Strips	304
Khaya	FAS GMS	396
	FAS fixed	427
Moabi	FAS GMS	580
	Scantlings	580
Movingui	FAS GMS	420

GHANA

Ghana Log Prices

Ghana logs, domestic	US$ per m³	
	Up to 80cm	80cm+
Wawa	95-115	120-145
Odum Grade A	160-170	175-185
Ceiba	90-100	105-120
Chenchen	60-88	90-112
Khaya/Mahogany (Veneer Qual.)	70-90	95-120
Sapele Grade A	130-150	155-175
Makore (Veneer Qual.) Grade A	125-135	140-166

Ghana Sawnwood Prices

Ghana Sawnwood, FOB	€ per m³	
FAS 25-100mm x 150mm up x 2.4m up	Air-dried	Kiln-dried
Afrormosia	855	-
Asanfina	480	560
Ceiba	205	260
Dahoma	330	390
Edinam (mixed redwood)	400	470
Emeri	425	490
African mahogany (Ivorensis)	580	670
Makore	510	600
Niangon	550	-
Odum	670	750
Sapele	540	600
Wawa 1C & Select	255	285

Ghana sawnwood, domestic		US$ per m³
Wawa	25x300x4.2m	255⬆
Emeri	25x300x4.2m	350
Ceiba	25x300x4.2m	204
Dahoma	50x150x4.2m	310⬆
Redwood	50x75x4.2m	270
Ofram	25x225x4.2m	330

Ghana Veneer Prices

Rotary Veneer, FOB	€ per m³	
	CORE (1-1.9mm)	FACE (<2mm)
Bombax	325	350
Kyere, Ofram, Ogea & Otie	325	360
Chenchen	315	360
Ceiba	360	315
Mahogany	425	460

The above prices are for full sized panels, smaller sizes minus 15%. Thickness below 1mm would attract a 5% premium.

Rotary Veneer, FOB Core Grade 2mm & up	€ per m³
Ceiba	245
Chenchen, Ogea & Essa	295
Ofram	305

Sliced Veneer, FOB	€ per m²	
	Face	Backing
Afrormosia	1.80	1.00
Asanfina	2.00	0.92
Avodire	1.12	0.80
Chenchen	0.78	0.55
Mahogany	1.50	0.79
Makore	1.40	0.92
Odum	1.54	1.10

Ghana Plywood Prices

Plywood, FOB	€ per m³			
B/BB, Thickness	Redwoods		Light Woods	
	WBP	MR	WBP	MR
4mm	560	465	500	375
6mm	380	315	335	285
9mm	388	305	290	280
12mm	340	285	300	280
15mm	350	290	300	280
18mm	300	290	285	260

Grade AB/BB would attract a premium of 5%. BB/BB would be 5% less, C/CC 10% less and CC/CC 15% less.

Ghana Added Value Product Prices

Parquet flooring 1st	FOB € per m²		
	10x60x300mm	10x65-75mm	14x70mm
Apa	12.00	14.47	17.00
Odum	7.10	10.18	11.00
Hyedua	13.67	18.22	17.82
Afrormosia	13.25	15.70	17.82

Grade 2 less 5%, Grade 3 less 10%.

MALAYSIA

Malaysia Log Prices

Sarawak log, FOB	US$ per m^3
Meranti SQ up	296-318
Small	277-298⬆
Super small	275-273⬆
Keruing SQ up	274-284⬆
Small	242-274⬆
Super small	235-240⬆
Kapur SQ up	250-268
Selangan Batu SQ up	272-294

Pen. Malaysia logs, domestic (SQ)	US$ per m^3
DR Meranti	356-399
Balau	300-340⬆
Merbau	416-438
Rubberwood	259-278⬆
Keruing	290-305⬆

Peninsular Malaysian meranti logs are top grade and are used for scantlings for the EU. Their prices are higher than Sarawak's.

Malaysia Sawnwood Prices

Malaysia Sawnwood, FOB	US$ per m^3
White Meranti A & up	435-458⬆
Seraya Scantlings (75x125 KD)	702-741⬇
Sepetir Boards	340-351⬆
Sesendok 25,50mm	448-478⬆
Kembang Semangkok	429-450⬆

Malaysian Sawnwood, domestic		US$ per m^3
Balau (25&50mm,100mm+)		351-371⬆
Merbau		558-581⬇
Kempas 50mmx(75,100 & 125mm)		303-319⬆
Rubberwood	25x75x660mm up	294-324⬆
	50-75mm Sq.	318-342⬆
	>75mm Sq.	330-362⬆

Malaysia Plywood Prices

Malaysia ply MR BB/CC, FOB	US$ per m^3
2.7mm	483-511⬆
3mm	463-489⬆
9mm & up	424-447⬆

Meranti ply BB/CC, domestic	US$ per m^3
3mm	461-471⬆
12-18mm	404-412⬆

Other Malaysia Panel Prices

Malaysia, Other Panels, FOB		US$ per m^3
Particleboard	Export 12mm & up	247-264⬆
	Domestic 12mm & up	237-251⬆
MDF	Export 15-19mm	310-333⬆
	Domestic 12-18mm	287-307⬆

Malaysia Added Value Product Prices

Malaysia, Mouldings, FOB	US$ per m^3
Selagan Batu Decking	679-696⬇
Red Meranti Mouldings 11x68/92mm x 7ft up	
Grade A	714-734⬇
Grade B	633-652⬇

Malaysia Furniture and Parts Prices

Malaysia, Rubberwood, FOB		US$ per piece
Semi-finished dining table		
solid laminated top 2.5'x4', extension leaf		61-77
As above, Oak Veneer		68-82
Windsor Chair		60-62⬆
Colonial Chair		57-63⬆
Queen Anne Chair (soft seat)	without arm	57-66⬆
	with arm	58-67⬆
Chair Seat 27x430x500mm		46-51⬆

Rubberwood Tabletop	US$ per m^3
22x760x1220mm sanded & edge profiled	
Top Grade	635-645
Standard	603-620

INDONESIA

Indonesia Log Prices (domestic)

Indonesia logs, domestic prices	US$ per m^3
Plywood logs	
Face Logs	237-277
Core logs	200-220⬆
Sawlogs (Meranti)	234-273
Falcata logs	192-207⬆
Rubberwood	217-241
Pine	209-232
Mahoni (plantation mahogany)	601-647⬇

Indonesia Sawnwood Prices

Indonesia, construction material, domestic		US$ per m^3
Kampar (Ex-mill)	AD 3x12-15x400cm	251-259
	KD	330-345
	AD 3x20x400cm	351-372
	KD	375-385
Keruing (Ex-mill)	AD 3x12-15x400cm	285-294
	AD 2x20x400cm	273-282
	AD 3x30x400cm	278-287

Indonesia Plywood Prices

Indonesia ply MR BB/CC, FOB	US$ per m^3
2.7mm	478-508
3mm	420-479
6mm	398-421

MR Plywood (Jakarta), domestic	US$ per m^3
9mm	332-345
12mm	308-329
15mm	306-335

Other Indonesia Panel Prices

Indonesia, Other Panels, FOB			US$ per m^3
Particleboard	Export 9-18mm		242-252
	Domestic 9mm		206-223
		12-15mm	199-211⬆
		18mm	197-200⬆
MDF	Export 12-18mm		316-329
	Domestic 12-18mm		256-276

Indonesia Added Value Product Prices

Indonesia, Mouldings, FOB	US$ per m^3
Laminated Boards Falcata wood	384-404
Red Meranti Mouldings 11x68/92mm x 7ft up	
Grade A	671-696⬇
Grade B	601-641⬇

MYANMAR

Myanmar Log Prices (natural forests)

Teak Logs, FOB	€ Avg per Hoppus Ton (traded volume)		
Veneer Quality	Jun	Jul	6 mo. Avg
2nd Quality	5,377 (5 tons)	5,817 (6 tons)	5,412
3rd Quality	4,437 (12 tons)	4,443 (12 tons)	4,722
4th Quality	3,462 (37 tons)	3,397 (45 tons)	3,888
Sawing Quality	Jun	Jun	
Grade 1 (SG-1)	2,707 (236 tons)	2,640 (156 tons)	2,689
Grade 2 (SG-2)	2,066 (610 tons)	2,034 (448 tons)	2,079
Grade 3 (SG-3)	1,641 (55 tons)	1,589 (63 tons)	1,615
Grade 4 (SG-4)	1,794 (362 tons)	2,001 (582 tons)	1,869
Grade 5 (SG-5) Assorted	1,245 (323 tons)	1,469 (522 tons)	1,580
Grade 6 (SG-6) Domestic	761 (404 tons)	1100 (574 tons)	1,176
Grade 7 (ER-1)	622 (329 tons)	904 (97 tons)	838
Grade 8 (ER-2)	569 (126 tons)	-	622

Hoppus ton=1.8m^3; All grades, except SG-3/5/6, are length 8' x girth 5' &up. SG-3/4/6 are girth 4' &up. SG-3 grade is higher than SG-4 but with lower girth and price.

Logs, FOB	€ Avg per Hoppus Ton (traded volume)
Pyinkado (export)	371 (282 tons)
Gurjan (keruing-exp)	240 (74 tons)
Tamalan	--
Taungthayet	--

Prices differ due to quality or girth at the time of the transaction.

BRAZIL

Brazil Log Prices (domestic)

Brazilian logs, mill yard, domestic	US$ per m^3
Ipê	157⬆
Jatoba	112⬆
Guariuba	75⬆
Mescla (white virola)	83⬆

Brazil Sawnwood Prices

Sawnwood, Belem/Paranagua Ports, FOB		US$ per m^3
Jatoba Green (dressed)		845
Cambara KD		465
Asian Market (green)	Guariuba	265
	Angelim pedra	594
	Mandioqueira	234
Pine (AD)		200

Brazil sawnwood, domestic (Green)		US$ per m^3
Northern Mills (ex-mill)	Ipé	739⬆
	Jatoba	568⬆
Southern Mills (ex-mill)	Eucalyptus (AD)	217⬆
	Pine (KD) 1st grade	286⬆

Brazil Veneer Prices

Veneer, FOB (Belem/Paranagua Ports)	US$ per m^3
White Virola Face 2.5mm	295
Pine Veneer (C/D)	210

Rotary cut Veneer, domestic	US$ per m^3	
(ex-mill Northern Mill)	Face	Core
White Virola	284⬆	238⬆

Brazil Plywood Prices

Plywood, FOB	US$ per m^3
White Virola (US Market)	
5.2mm OV2 (MR)	460
15mm BB/CC (MR)	398
White Virola (Caribbean market)	
4mm BB/CC (MR)	507
12mm BB/CC (MR)	407

Pine Plywood EU market, FOB	US$ per m^3
9mm C/CC (WBP)	307
15mm C/CC (WBP)	276
18mm C/CC (WBP)	278

Plywood, domestic (ex-mill Southern mill)		US$ per m^3
Grade MR (B/BB)	White Virola 4mm	972⬆
	White Virola 15mm	710⬆

Domestic prices include taxes and may be subject to discounts.

Other Brazil Panel Prices

Belem/Paranagua Ports, FOB	US$ per m^3
Blockboard Pine 18mm 5 ply (B/C)	315
Domestic Prices, Ex-mill Southern Region	
Blockboard White Virola faced 15mm	633⬆
Particleboard 15mm	399⬆

Brazil Added Value Products

FOB Belem/Paranagua Ports		US$ per m^3
Edge Glued Pine Panel		
Korean market (1st Grade)		640
US Market		513
Decking Boards	Cambara	609
	Ipê	1680

PERU

Peru Sawnwood Prices

Peru Sawnwood, FOB Callao Port		US$ per m^3
Mahogany S&B KD 16%, 1-2" random lengths (US market)		1847-1875
Spanish Cedar KD select		
North American market		934-972
Mexican market		943-974
Pumaquiro 25-50mm AD	Mexican market	490-525

*Cheaper and small-dimension sawnwood for this market.

Peru Sawnwood, FOB Callao Port (cont.)	US$ per m^3
Virola 1-2" thick, length 6'-8' KD	
Grade 1, Mexican market	330-378
Grade 2, Mexican market	298-322
Cumaru 4" thick, 6'-11' length KD	
Central American market	798-828
Asian market	729-772
Ishpingo (oak) 2" thick, 6'-8' length	
Spanish market	550-585
Dominican Republic	565-575
Marupa (simarouba) 1", 6-11 length Asian market	395-420

Peru Sawnwood, FOB Iquitos	US$ per m^3
Spanish Cedar AD Select Mexican market	935-954
Virola 1-2" thick, length 6'-13' KD	
Grade 1, Mexican market	332-358
Grade 2, Mexican market	302-314
Grade 3, Mexican market	181-194
Marupa (simarouba) 1", 6-13 length KD	
Grade 1, Mexican market	250-263

Peru sawnwood, domestic	US$ per m^3
Mahogany	1279-1325⬇
Virola	80-94⬇
Spanish Cedar	430-446⬇
Marupa (simarouba)	130-136

Peru Veneer Prices

Veneer FOB	US$ per m^3
Lupuna 3/Btr 2.5mm	220-228
Lupuna 2/Btr 4.2mm	220-250
Lupuna 3/Btr 1.5mm	245-255

Peru Plywood Prices

Peru plywood, FOB (Mexican Market)		US$ per m^3
Copaiba, 2 faces sanded, B/C, 15x4x8mm		368-385
Virola, 2 faces sanded, B/C, 5.2x4x8mm		424-432
Cedar fissilis, 2 faces sanded 4x8x5.5mm		755-765
Lupuna, treated, 2 faces sanded, 5.2x4x8mm		379-392⬆
Lupuna plywood	B/C 15x4x8mm	357-366⬆
	B/C 9x4x8mm	347-355⬆
	B/C 12x4x8mm	352-365⬆
	B/C 8x4x15mm	420-430
	C/C 4x8x4mm	380-388
Lupuna plywood B/C 8x4x4mm Central Am.		385-395

Lupuna Plywood BB/CC, domestic	US$ per m^3
(Iquitos mills)	
122 x 244 x 4mm	426
122 x 244 x 6mm	397
122 x 244 x 8mm	403
122 x 244 x 12mm	398
(Pucallpa mills)	
122 x 244 x 4mm	450
122 x 244 x 6mm	439
122 x 244 x 8mm	427
122 x 244 x 12mm	419

Other Peru Panel Prices

Peru, Domestic Particleboard	US$ per m^3
1.83m x 2.44m x 4mm	277
1.83m x 2.44m x 6mm	230
1.83m x 2.44m x 12mm	198

Peru Added Value Product Prices

Peru, strips for parquet		US$ per m^3
Cabreuva/estoraque KD12% S4S, Asian market		1448-1500
Cumaru KD, S4S	Swedish market	672-718
	Asian market	935-964
Cumaru decking, AD, S4S E4S, US market		962-1102
Pumaquiro KD # 1, C&B, Mexican market		492-534
Quinilla KD, S4S 2x10x62cm, Asian market		590-620
2x13x75cm, Asian market		700-730

GUYANA

Guyana Log Prices

Logs, FOB Georgetown	SQ - $ Avg unit value per m^3		
	Std	Fair	Small
Greenheart	140⬇	130-160⬆	120-140⬆
Purpleheart	170-180⬇	170⬇	-
Mora	-	120⬇	110-150⬆

*Small SQ is used for piling in the USA and EU. Price depends on length.

Guyana Sawnwood Prices

Sawnwood, FOB Georgetown		$ Avg unit val. per m^3	
EU and US markets		Undressed	Dressed
Greenheart	Prime	-	-
	Select/Standard	466-730⬆	424-700⬇
Purpleheart	Prime	660	-
	Select/Standard	475⬇	551-1,150⬆
Mora	Select	424	-

Guyana Plywood Prices

Plywood, FOB Georgetown Port			$ Avg unit val. per m^3
Baromalli	BB/CC	5.5mm	-
		12mm	410-430
	Utility	5.5mm	-
		12mm	390-490

JAPAN

Log and Sawnwood Prices in Japan

Logs for Ply Manufacture, CIF	Yen per Koku (Koku=0.278 m^3)
Meranti (Hill, Sarawak)	
Medium Mixed	8,000
Standard Mixed	8,100
Small Log (SM60%, SSM40%)	7,000
Taun, Calophyllum, others (PNG)	7,200
Mixed light hardwood, G3/4 grade (PNG)	-
Keruing MQ & up (Sarawak)	10,200
Kapur MQ & up (Sarawak)	9,800

Logs for Sawmilling, CIF	Yen per Koku
Melapi (Sarawak) High Select	11,000
Agathis (Sarawak) High Select	-

Lumber, FOB	Yen per m^3
White Seraya (Sabah) 24x150mm, 4m, Grade 1	145,000
Mixed Seraya, Sangi 24x48mm, 1.8-4m, S2S	53,000

Wholesale Prices (Tokyo)

Indonesian & Malaysian Plywood	Size (mm)	June (¥ per sheet)	July (¥ per sheet)
2.4mm (thin plywood, F 4star, type 2)	920 X 1830	370	400 ⬆
3.7mm (med. Thickness, F 4star, type1)	910 X 1820	560	570 ⬆
5.2mm (med. Thickness, F 4star, type 1)	910 X 1820	670	680 ⬆
11.5mm for sheathing (F 4star, type 2)	910 X 1820	943	1020 ⬆
12mm for foundation (F 4star, special)	910 X 1820	1010	1020 ⬆
12mm concrete-form ply (JAS)	900 X 1800	930	1000 ⬆
12m coated concrete-form ply (JAS)	900 X 1800	1090	1120 ⬆
11.5mm flooring board	945 X 1840	1270	1380 ⬆
3.6mm baseboard for overlays (OVL)	1230 X 2440	850	870 ⬆
OSB (North American)			
12mm foundation of roof (JAS)	910 X 1820	1000	1000
9mm foundation for 2 by 4 (JAS)	910 X 2440	1050	1050
9mm conventional foundation (JAS)	910 X 2730	1250	1250
9mm conventional foundation (JAS)	910 X 3030	1350	1350

CHINA

Guangzhou City Imported Timber Market

Logs	Yuan per m^3
Radiata 6m, 30cm diam.	1300
Lauan	1900-2400
Kapur	1900-2450
Merbau 6m, 60cm diam.	4000-5000
Keruing 60cm+ diam.	1900-2350
Beech 6m,30cm veneer Qual.	3300-3600
Sawnwood	
Teak sawn grade A	8500-9500
US Maple 2" KD	8800-12500
US Cherry 2"	14700-15000
US Walnut 2"	12500-14500
SE Asian Sawn 4m+, KD	3600-4000
*Plywood*note, dimensions have changed*	Yuan per sheet
4x8x5mm	87
4x8x15mm	219-223

Shanghai Furen Wholesale Market

Sawnwood	Yuan per m^3
Beech KD Grade AB	2500-3200
US Cherry, 25mm	9500-10500
US Red Oak, 50mm	9800-10500
Sapele 50mm FAS (Congo)	
KD (2", FAS)	9200-9500
KD (2",grade A)	7500-9000

Shandong De Zhou Timber market

Logs		Yuan per m^3
Larch	6m, 24-28cm diam.	1370
White Pine	6m, 24-28cm diam.	1350
Korean Pine	4m, 30cm diam.	1600
	6m, 30cm diam.	1650

Hebei Shijiangzhuang Wholesale Market

Logs		Yuan per m^3
Korean Pine 4m, 38cm+ diam		1700
Mongolian Scots Pine	4m, 30cm diam.	1320
	6m, 30cm+ diam.	1400
Sawnwood		
Mongolian Scots Pine	4m, 5-6cm thick	1500
	4m,10cm thick	1500

Tian Jin City Huan Bo Hai timber Market

Logs	Yuan per m^3
Okoume 80cm+	3000
Sapele 80cm+	5350
Padauk 40cm+	6000
Sawnwood	
US Black Walnut 2.2-4m, 5cm thick	16000
Padauk 2.2-3.2m, 5cm thick	11000
Sapele 2.2-2.6m, 5cm thick	6800
Ash 4m, 5cm thick	4300

For more information on China's forestry see: www.forestry.ac.cn

EUROPE AND THE UK

The Netherlands Sawnwood Prices

FOB (Rotterdam)	USD per m^3
Sapele KD	1186⬆
Iroko KD	1208⬆
Sipo KD	1349⬆
DRM Bukit KD	1186
DRM Seraya KD	1186
DRM Meranti KD Seraya MTCC cert.	1201
Merbau KD	1229
Sapupira (non FSC) KD	904
Sapupira (FSC) KD	1412
Anti-slip decking AD C&F Rotterdam	
Selangan batu	1254

UK Log Prices *note: sources for UK prices have changed

FOB plus commission		€ per m^3
N'Gollon (khaya)	70cm+ LM-C	320-360
Ayous (wawa)	80cm+ LM-C	220-230
Sapele	80cm+ LM-C	330-380
Iroko	80cm+ LM-C	330-350

UK Sawnwood Prices

FOB plus Commission	Pounds per m^3
Framire FAS 25mm	435-470⬇
Sipo FAS 25mm	630-640
Sapele FAS 25mm	550-570⬇
Iroko FAS 25mm	580-600⬇
Wawa No.1 C&S 25mm	255-265
CIF plus Commission	
Tulipwood FAS 25mm	230-240
Meranti Tembaga Sel/Btr (KD 2"boards)	450-475⬇
Balau/Bangkirai Decking	610-630
White Oak	485-500⬇

UK Plywood and MDF Prices

Plywood Panels 8x4", CIF	US$ per m^3
Brazilian WBP BB/CC 6mm	560-575
Malaysian WBP BB/B 6mm	545-555
China (hardwood face, eucalyptus core) 18mm	430-440
China (hard face, poplar core) 18mm	400-420

Internet News

Below are web links to news items published by the press. These items do not necessarily reflect the views and policies of ITTO.

Brazil has increased its benchmark interest rate to 13% from 12.25% in an attempt to stem rising inflation. The rise was larger than expected and it follows increases of half a percentage point by the central bank at its last two meetings. Some analysts now expect the government to raise rates again at its next rate-setting meeting and fear it will miss its year-end inflation target of 4.5%.
http://news.bbc.co.uk/1/hi/business/7522741.stm

Chopping down tropical rainforests already has a bad enough press. But what about the collateral damage to the surrounding forest? Loggers often chop their pathway through to a chosen tree type. And felling the one tree often causes damage to the trees surrounding it. But it doesn't have to be this way, as new research shows.
http://www.radionetherlands.nl/radioprogrammes/earthbeat/treefelling080717

The development of verification systems for ensuring compliance with defined legality standards and chain of custody or control of supply chain requirements will undoubtedly help to further develop the forestry sector in Brunei Darussalam and the Asean region. This was revealed by Pengiran Hajah Mariana Pg Dipa Negara Laila Diaja Pengiran Haji Abdul Momin, Deputy Permanent Secretary at the Ministry of Industry and Primary Resources (MIPR) in her opening remarks during the training workshop on 'Timber Verification of Legality Systems'.
http://www.brunei-online.com/bb/tue/jul22h11.htm

The New Zealand parliament passed the third and final reading of the New Zealand Free-China Trade Agreement Bill. The Bill was passed by 104 votes to 17. The free trade agreement was signed in Beijing in early April. It is the first free trade deal China signed with a developed nation. New Zealand Trade Minister Phil Goff said the passing in Parliament of the New Zealand-China Free Trade Agreement Bill will bring the FTA into force on Oct. 1 and represents an historic advance in New Zealand's trading relationships.
http://news.xinhuanet.com/english/2008-07/24/content_8761661.htm

Paying to save tropical forests could be a way to reduce global carbon emissions. Wealthy nations willing to collectively spend about USD1 billion annually could prevent the emission of roughly half a billion metric tons of carbon dioxide per year for the next 25 years, new research suggests. It would take about that much money to put an end to a tenth of the tropical deforestation in the world, one of the top contributors to greenhouse gas emissions, researchers estimate. If adopted, this type of program could have potential to reduce global carbon emissions by between 2 and 10%.
http://www.physorg.com/news136048985.html

The preservation and conservation of what remains of the forests of the Congo Basin, the Amazon and Southeast Asia concerns the whole of the international community, Cameroonian Forestry and Wildlife Minister Elvis Ngolle Ngolle has said. The minister, who was speaking during a meeting with students of the Institute of International Relations of Cameroon (IRIC), said that it was the duty of everyone to ensure that the vital forest resources are preserved for generations to come.
http://news.xinhuanet.com/english/2008-07/19/content_8574767.htm

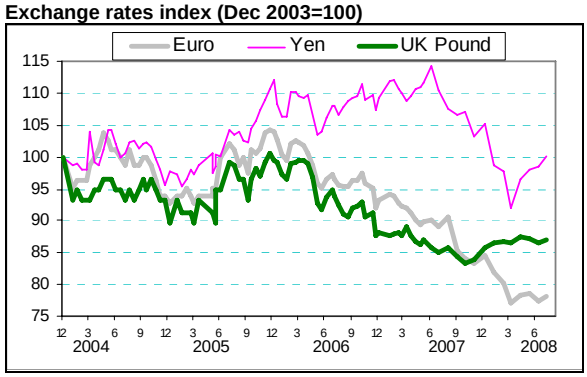
University of Massachusetts Amherst researchers have added a new source of carbon dioxide to the complex climate change puzzle by showing that ancient rocks can release substantial amounts of organic matter into Earth's rivers and oceans, and that this organic matter is easily converted by bacteria to carbon dioxide, which enters the atmosphere and contributes to climate change.
http://www.sciencedaily.com/releases/2008/07/080723200725.htm

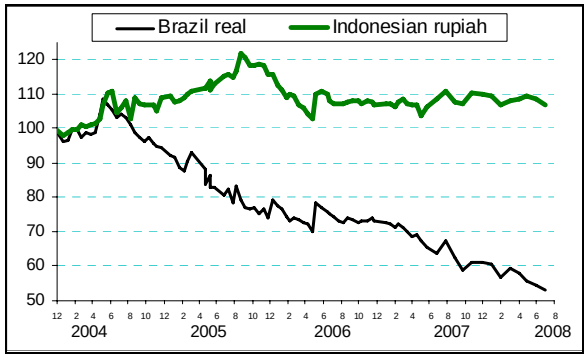
Main US Dollar Exchange Rates

As of 31 July 2008

Brazil	Real	1.5664	⬇
CFA countries	CFA Franc	420.534	⬆
China	Yuan	6.8315	⬇
EU	Euro	0.6411	⬆
Indonesia	Rupiah	9,091.00	⬇
Japan	Yen	107.89	⬆
Malaysia	Ringgit	3.2563	⬇
Peru	New Sol	2.8114	⬇
UK	Pound	0.5040	⬆

Exchange rates index (Dec 2003=100)

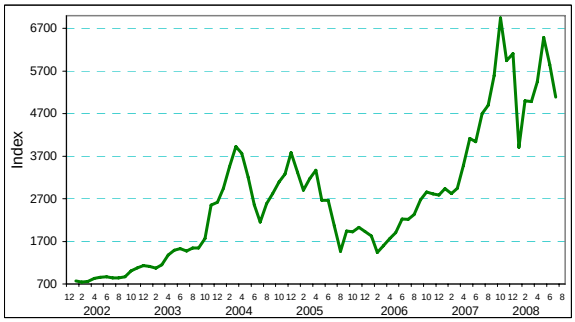




Abbreviations and Equivalences

LM	Loyale Merchant, a grade of log parcel
QS	Qualite Superieure
CI, CE, CS	Choix Industriel, Economique or Supplimentaire
FOB	Free-on-Board
CIF; CNF	Cost, insurance and freight; Cost and freight
KD; AD	Kiln Dry; Air Dry
Boule	A log sawn through and through, the boards from one log are bundled together.
BB/CC, etc.	Log/plywood grades. Letter(s) on the left indicate face veneer(s), on the right backing veneer(s). Grade decreases in order B, BB, C, CC, etc.
BF; MBF	Board Foot; 1000 Board Feet
Hoppus ton	1.8 m^3
Koku	0.278 m^3 or 120 BF
SQ; SSQ	Sawmill Quality; Select Sawmill Quality
FAS	Sawnwood Grade First and Second
GMS	General Market Specifications
GSP	Guiding Selling Price
MR; WBP	Moisture Resistant; Water and Boil Proof
MDF	Medium Density Fibreboard
PHND	Pin hole no defect grade
$; ⬆⬇	US dollar; Price has moved up or down

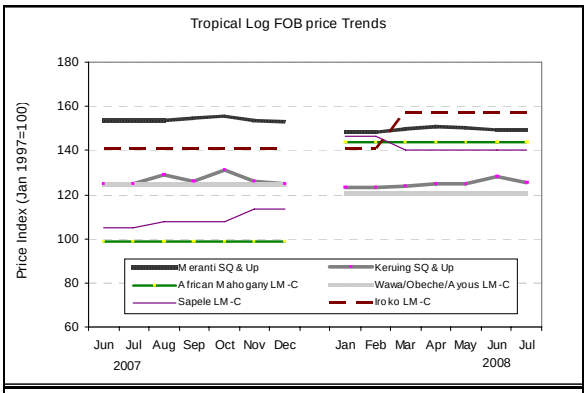
Ocean Freight Index

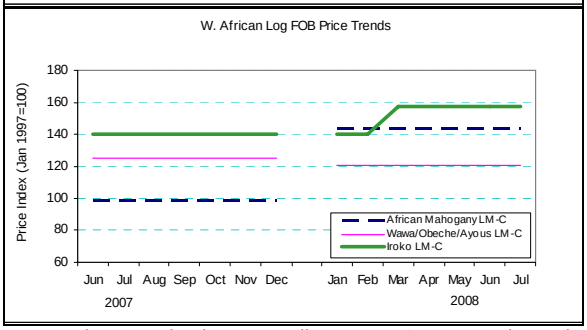


The BSI (Baltic Supramax Index), published by the Baltic Exchange, is the weighted average on 5 major time-charter routes. It is based on a 52,454 mt bulk carrier carrying commodities such as timber.

Appendix. Tropical Timber Price Trends

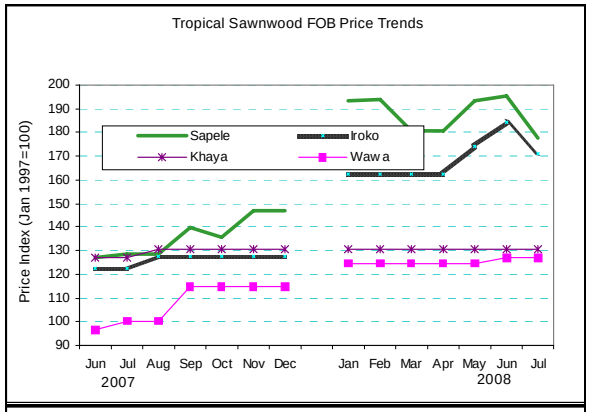
Tropical Log Price Trends

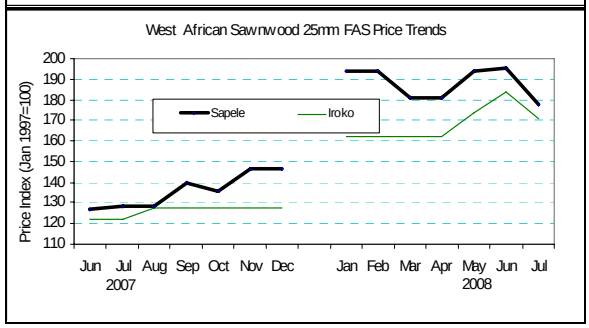




More price trends in Appendix 4, ITTO's Annual Review http://www.itto.or.jp/live/PageDisplayHandler?pageId=199

Tropical Sawnwood Price Trends





**Please note that our price series have changed since January 2008. Prices for selected UK imported species, which are used in log and sawnwood price charts above, are now collected from different suppliers.*

Tropical Plywood Price Trends