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منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
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Organización  
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Unidas  
para la  
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## LATIN AMERICAN AND CARIBBEAN FORESTRY COMMISSION

### Item 5.3 of the Provisional Agenda

### TWENTY-FOURTH SESSION

Santo Domingo, Dominican Republic, 26 - 30 June 2006

### INFORMATION ITEMS: Climate change issues

### Secretariat Note

#### Introduction

1. As more scientific information on global warming accumulates, climate change is emerging as one of the greatest environmental challenges of the Twenty-first century. Latin America's contribution of greenhouse gases is rather small, amounting to eight percent of global emissions in 2000, but with a large relative share of emissions due to land-use changes, including deforestation. Forecasts state that climate change will affect several regions and sectors of Latin America particularly negatively.

2. Projected increases of 3-4 ° C of mean annual temperatures in parts of Central America will decrease precipitation by between 35 to 40 percent, whereas rainfall might increase in other areas, e.g., in certain provinces of Brazil. Accelerated rates of deforestation in the Amazon basin will negatively affect the future balance and supply of water for much of South America. More El Niño-like conditions will likely lead to aggravated disturbances in the precipitation and temperature regime. As a negative impact, climate change can affect forest composition, decrease decline biodiversity and increase forest fires.

#### International climate change agreements and forestry

3. Both the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (ratified in 2005) contain general obligations incumbent on all member countries regarding forests. Countries should:

- manage forests sustainably, and conserve and enhance forests as reservoirs of carbon;
- promote afforestation and reforestation as well as renewable energy; and
- include forests in national inventories of greenhouse gas emissions and removals, in technology transfer, and in national programmes of adaptation to climate change.

4. More specifically, there is a mandate to prepare for adaptation to the impacts of climate change.

### **Clean Development Mechanism**

5. In the Clean Development Mechanism (CDM), afforestation and reforestation (A&R) are the only sink activities allowed in the land use sector. As of March 2006, two methodologies for A&R projects under the CDM had been approved. Of those projects recently proposed and submitted to UNFCCC, seven out of ten came from Latin America. However, to date not a single project has been registered. An appendix to this document summarizes the most important facts for foresters.

### **Opportunities and challenges for Latin America and the Caribbean**

6. The UNFCCC obliges developing countries to periodically submit national inventories of greenhouse gas emissions by source and removals by sinks as part of their National Communications. These assessments are financed by means of funds established and managed by the Global Environment Facility (GEF). For many countries in Latin America, forests and land use change constitute a major source of emissions. However, their national forest assessments, the sole source of reporting on forests to the UNFCCC, provide limited information due to capacity limitations for collecting data. FAO has increased its support for national forest assessments in a number of Latin American countries.

7. Under UNFCCC Art. 4.1 (e), countries have agreed to “cooperate in preparing for adaptation to the impacts of climate change; develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas.” Countries can receive support for vulnerability and adaptation assessments, capacity building and technology needs assessments.

### **How could countries prepare for the second commitment period?**

8. While the first commitment period is set for 2008 - 2012, the informal negotiations for the second commitment period of the Kyoto Protocol have already started. Among other issues, the aim is to identify approaches for reducing emissions by avoiding deforestation.

9. Latin American experts on land use, land use change and forestry (LULUCF) organised, together with FAO, two seminars to elaborate regional submissions to UNFCCC on this issue. Forestry sector representatives should follow this issue during forthcoming meetings, and the sector should also prepare itself for methodological questions regarding avoided deforestation (baseline setting, monitoring, and crediting of avoided deforestation).

10. It should be noted that the current agreements on forestry projects under the CDM are only valid for the first commitment period of the Kyoto protocol, so possible changes might be expected in coming negotiations.

11. Recently FAO increased its efforts to support capacity building in the region in order to strengthen linkages between forests and climate change and help foresters better understand the complexity of the climate change agreements as well as the opportunities they provide. Several seminars and courses were held to help strengthen national capacity to deal with CDM forestry projects and adaptation, as well as participation in the emergent carbon market. If funding can be secured, FAO and other international partners, such as Swiss Intercooperation, *Centro Agronómico Tropical de Investigación y Enseñanza* (CATIE), International Tropical Timber Organization (ITTO) and *L'office National des forêts (France)* (ONF) could continue their work with Latin American experts on climate change and forests.

### **Possible actions for consideration by countries**

12. Among the actions that countries might consider taking are the following:

- establish contacts with national climate change focal points, who can be found on the website of the UNFCCC (<http://maindb.unfccc.int/public/nfp.pl>).

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- review the national framework for the CDM (see also the appendix) and decide on suitable activities.
  - integrate the opportunities offered for forestry by the Kyoto Protocol into national forest programmes.
  - use the attached “Fact Sheet” (appendix) to raise awareness, including to identify partner organization(s) that could facilitate projects nationally or regionally.
  - use bilateral relations with investor countries or industries to raise interest.
  - include forests in adaptation plans and funding applications, since they are eligible for full or partial funding through GEF.
  - check also for GEF funding which could support a national forest inventory (UNFCCC reporting obligations are another reason to update capacity for forest assessments)
  - link National Correspondents for Forest Resources Assessments (FRA) ([www.fao.org/forestry/site/fra-nc](http://www.fao.org/forestry/site/fra-nc)) and National Focal Points for UNFCCC (<http://maindb.unfccc.int/public/nfp.pl>) to cooperate on reporting and avoid duplication; and
  - ensure that forestry concerns are represented in national strategies and that forestry expertise is available and used in future international negotiations.

*Appendix***FACT SHEET*****Afforestation and Reforestation Projects  
under the Clean Development Mechanism of the Kyoto Protocol***

The Clean Development Mechanism (CDM) of the Kyoto Protocol (KP) allows industrialized member countries to meet a part of their greenhouse gas reduction obligations through offset projects in developing countries. CDM-projects must also promote sustainable development in host countries through investment, as well as through knowledge- and technology transfer<sup>1</sup>.

The CDM is a market-based mechanism, driven by demand for credits - certified emission reductions - from private or public entities in developed countries, and by supply from offset projects in host countries. CDM projects which *reduce* emissions from sources can be carried out in many sectors, particularly energy, including wood energy. However, only afforestation and reforestation (A&R) qualify as CDM projects which *remove* carbon from the atmosphere. Carbon sequestration in agricultural crops and soils is not eligible under the CDM in the first commitment period 2008-2012 according to the Kyoto agreements. Special small-scale A&R projects with simplified rules meet the needs of low-income communities and individuals, by waiving some of the prerequisites, requirements and fees that apply to other projects.

**Prerequisites**

**Host country:** Countries must have ratified the Protocol and have established a Designated National Authority - a national institution overseeing CDM.

**Prior land use:** Proof must be given that the land being utilized was not forested for at least 50 years ("afforestation") or was converted to other uses before 31.12.1989 ("reforestation").

**Definitions:** Under the CDM, "forests" consist of trees with at least a height of between 2-5 m, crown density between 10-30%, and area between 0.05-1 ha. Countries must choose values for these parameters and determine a minimum width of a "forest". Since the Protocol does not define "tree"<sup>2</sup>; fruit trees, rubber trees, bamboos, and palms may qualify. A&R can consist of assisted natural succession to trees, productive and protective plantations, agroforestry, and urban forests. For purposes of CDM, trees in a landscape may or may not reach the chosen threshold for crown density of a "forest", depending on crown cover and project boundaries. Enrichment planting in degraded forests or forest rehabilitation does not qualify as "reforestation".

**Additionality:** Carbon sequestration via A&R must be additional to what would have occurred without the project. The Executive Board, a supervisory body for the CDM, applies a stringent additionality test to project proposals. A project is not additional, if it is the most financially attractive among feasible options. It may be additional if it overcomes barriers related to investments, technology or prevailing practice.

**Rules and modalities**

**Baseline:** A baseline for the A&R project is calculated based on the changes in carbon stocks in above-and below ground biomass, litter, soils, and deadwood that would have reasonably occurred without the project. To define a baseline, project proponents must use an approved methodology or propose a new one to which the Executive Board must agree.

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<sup>1</sup> Unilateral CDM projects in the host country and subsequent sale of credits are also feasible.

<sup>2</sup> Tree according to FAO-GFRA 2000: A woody perennial with a single main stem, or in the case of coppice with several stems, having a more or less definite crown". "Woody" is used although some monocotyledons do not contain "wood".

**Leakage:** Any increase in greenhouse gas emissions which occurs outside the project area and is measurable and attributable to the project must be minimized, monitored and subtracted from project carbon sequestration.

**Credits:** Two types of credits consider the possibility that forests may eventually release carbon:

- *Temporary credits* expire at the end of the 5-year *commitment period* following that in which they were issued, and must be replaced by the holder to ensure continuing carbon storage. For example, credits from an afforestation project issued at the end of the first commitment period 2008-2012, would have to be replaced at the latest with new credits by 2017. This type of credit commands a relatively low price but the producer does not pay back if carbon is lost as a result of calamities or harvest.
- *Long-term credits* expire at the end of the project's *crediting period*, a time span of up to 60 years. Prices tend to be higher and the holder must replace any that have been lost due to premature carbon release.

**Contribution to sustainable development:** The host country decides if a proposed project contributes to sustainable development.

**Environmental impacts:** Project participants must submit an analysis of expected environmental impacts to the Designated Operational Entity, a private-sector, accredited certifying organization. If participants or the host country consider impacts to be significant, an environmental impact assessment is required and remedial measures carried out. Host country regulations apply.

**Use of Official Development Assistance:** When public funding from a developed country is used, the source must be revealed and the country must affirm that it is not diverting regular development assistance.

### **Stages of an A&R project**

All project participants including local stakeholders must be involved in the project design. To assist with this task, a template for the project design document is available on the UNFCCC website. Public comments on the document are solicited. The Designated National Authority confirms that the host country is participating voluntarily and that the project will contribute to sustainable development. The Designated Operational Entity checks that the project conforms to prerequisites and rules, requests approval of the baseline and monitoring methods and seeks project registration. If the Executive Board approves, the project is implemented and monitored. A second Entity verifies and certifies sequestration and requests issuance of credits.

### **Quantifying the offset**

Credits are calculated in terms of *net greenhouse gas removal* in tons carbon, i.e., *actual net greenhouse gas removal* minus *baseline net greenhouse gas removal*<sup>3</sup>, minus leakage. Credits may be transferred to the investor or sold via emission trading<sup>4</sup>.

### **Contact**

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<sup>3</sup> *Actual net greenhouse gas removal* is the change in carbon stocks within the project boundaries, minus any emissions of other greenhouse gases due to the project.

*Baseline net greenhouse gas removal* is the sum of changes in carbon stocks within the project boundary that would have occurred without the A&R project.

<sup>4</sup> Approximate price for carbon credits: US \$15-40 per ton of carbon. Prices for temporary or long-term credits have not yet been established. While private installations in the EU covered by the Emission Trading Directive may currently not use credits from A&R projects, governments may acquire them. A review of the EU Directive concerning sink credits is scheduled.