

Growing visibility for forests in climate discussions

Good progress was made on forest issues at the climate change meetings held in Copenhagen, Denmark from 7 to 18 December 2009, even though the outcomes were generally disappointing in most other respects.

At the fifteenth session of the Conference of the Parties (COP 15) to the United Nations Framework Convention on Climate Change (UNFCCC), the two ad hoc bodies tasked with delivering a follow-up to the Kyoto Protocol and agreement on further action under the convention – the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) and the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) – were unable to conclude their work, and their terms were extended. The Copenhagen Accord was "noted" but not approved. Parties agreed to notify the UNFCCC Secretariat of their wish to associate with the accord and their mitigation targets or activities by 31 January 2010.

The Copenhagen Accord recognizes the importance of holding the increase in global temperature to 2°C. However, no aggregate emission reduction commitments were agreed. Countries pledged funding of US\$30 billion for the 2010–2012 period and up to US\$100 billion a year from 2020. The accord called for the establishment of the Copenhagen Green Climate Fund.

The Copenhagen Accord includes the following text on reducing emissions from deforestation and forest degradation (REDD): "We recognize the crucial role of reducing emissions from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries."

During the meetings, six countries (Australia, France, Japan, Norway, the United Kingdom and the United States of America) collectively agreed to dedicate US\$3.5 billion "as initial public finance towards slowing, halting and eventually reversing deforestation in developing countries".

The COP adopted a decision on methodological guidance for REDD-plus (covering REDD plus conservation, sustainable management of forests and enhancement of forest stocks). The decision, reflecting the outcome of several years of work under UNFCCC's Subsidiary Body for Scientific and Technological Advice (SBSTA), requests Parties to identify drivers of deforestation and forest degradation; to identify REDD-plus actions to take; to use the most recent Intergovernment Panel on Climate Change (IPCC) guidance and guidelines for carbon accounting; to establish national forest monitoring systems; and to engage indigenous people and local communities in monitoring and reporting. It also calls for stronger capacity building and increased coordination of support.

Good progress was made on negotiations on policy approaches

and positive incentives in REDD-plus in the AWG-LCA discussions. The draft text outlines principles, safeguards, scope and a phased approach for implementing REDD-plus actions under a UNFCCC instrument. It requests SBSTA to identify drivers of deforestation and to work on methodologies to estimate emissions and removals and assess mitigation potential, and calls for coordination of REDD-plus activities among those supporting them. Issues still to be resolved include national versus subnational approaches to REDD-plus; measurement, reporting and verification of developed country support; the relationship between REDD-plus and nationally appropriate mitigation actions (NAMAs); and the financing modality (fund versus market-based or mixed).

Negotiations of AWG-KP on land use, land use change and forestry (LULUCF) in industrialized (Annex 1) countries addressed the rules relating to accounting of greenhouse gas emissions and removals. Key issues include accounting for forest management activities and for carbon in harvested wood products. AWG-KP also discussed the proposal to broaden the scope of activities eligible for Clean Development Mechanism (CDM) projects. The draft text calls on SBSTA to begin exploring ways to move towards more comprehensive accounting of greenhouse gas emissions and removals by sinks by LULUCF activities.

Regarding adaptation, the draft AWG-LCA text calls for a Copenhagen adaptation framework or programme, under which action would be initiated by countries. Aspects that remain undecided, however, include institutional structures (new versus existing) and the establishment of an insurance mechanism for climate change—induced losses. Agreement seemed clear on the need for enhanced regional cooperation on adaptation, and the draft AWG-LCA text calls for establishment of regional adaptation "centres" or "platforms".

On 13 December 2009, the Government of Denmark and the Centre for International Forestry Research (CIFOR) with the other members of the Collaborative Partnership on Forests (CPF) co-hosted Forest Day 3, attended by 1 600 participants. It included three subplenary sessions (on mitigation, adaptation and forest degradation) and eight parallel learning events. This Forest Day, as did the previous two, provided an opportunity to extend messages from the forestry community to the UNFCCC discussions.

Though inconclusive, the Copenhagen meetings were significant for the forest sector. Political visibility for forests is at an all-time high. The focus on adaptation and mitigation has become more balanced. It appears likely that REDD-plus funding could increase dramatically in the short term; as a consequence, capacity strengthening for developing countries will take on increased urgency. Proposed changes related to LULUCF accounting and offset rules have the potential to improve forest management and increase forest-based mitigation in developed countries as well.



International Year of Biodiversity

As many as 13 million different living species, including plants, animals and bacteria, share the earth; only 1.75 million of these have been named and recorded. This incredible natural wealth is a priceless treasure forming the ultimate foundation of human well-being.

Safeguarding biodiversity and reducing biodiversity loss are vital for current and future human well-being. To raise global awareness and increase understanding of the crucial role that biodiversity plays in sustaining life on Earth, the United Nations has proclaimed 2010 as the International Year of Biodiversity. At the official launch of the year on 11 January 2010, United Nations Secretary-General Ban Ki-moon proclaimed the need for a new biodiversity vision and called upon every country and every citizen of the planet to engage in a global alliance to protect life on earth.

The celebrations for the International Year of Biodiversity are led by the Secretariat of the Convention on Biological Diversity (CBD), with numerous partners. Throughout the year countless initiatives will be organized to disseminate information, promote the protection of biodiversity and encourage organizations, institutions, companies and individuals to take direct action to reduce the constant loss of biological diversity worldwide.

Under the slogan "Biodiversity is life. Biodiversity is our life", the celebration of the year draws attention to four key messages:

- Humans are part of nature's rich diversity and have the power to protect or destroy it.
- Biodiversity, the variety of life on earth, is essential to sustaining the living networks and systems that provide all people with health, wealth, food, fuel and the vital services that their lives depend on.
- Human activities felling or burning of forests, removal of mangroves, intensive farming, pollution stress, overfishing and the impacts of climate change – are causing the diversity of life on earth to be lost at a greatly accelerated rate. These losses are irreversible, impoverish everyone and damage the life support systems people rely on every day. But they can be prevented.
- The International Year of Biodiversity provides an occasion to reflect on prior achievements to safeguard biodiversity and to focus on the urgency of challenges for the future. The International Year of Biodiversity is a chance to prove the will to stop the losses.

For more information, see: www.cbd.int/2010

Second World Congress of Agroforestry

In tropical countries, agricultural expansion is often a cause of deforestation. But farming and forests do not have to be mutually exclusive. Agroforestry has a key role in addressing the challenges of food security that are inevitable with the world's rapid population growth, while contributing to rural livelihood improvement and

delivering a wide range of benefits including increased soil fertility, absorption of atmospheric carbon and restoration of degraded land.

The science and practice of agroforestry offer useful directions in solving the problem of how to feed a growing population while protecting the environment. Forests and trees in agricultural landscapes are central to sustainable agriculture. The practice of conservation agriculture and increasing tree cover on farms can also offer prospects to smallholder farmers for diversifying livelihoods and incomes via emerging carbon markets.

"Agroforestry, the future of global land use" was the theme of the second World Congress of Agroforestry, cohosted by the World Agroforestry Centre (ICRAF) and the United Nations Environment Programme (UNEP) in Nairobi, Kenya from 23 to 28 August 2009. The congress attracted almost 1 200 researchers, educators, practitioners and policy-makers from around the world, who came to share new research ideas and experiences, explore partnership opportunities and strengthen communities of practice, while strengthening links between science and policy.

The congress had three subthemes: food security and livelihoods; conservation and rehabilitation of natural resources; and policies and institutions.

A clear message that came out of the congress was that over the past 30 years, agroforestry has matured into a robust, science-based discipline, and a land use that can address many of the world's most pressing problems.

The question therefore arises of why, although the number of trees on farms is steadily increasing, agroforestry is not being adopted more widely and rapidly. The congress attributed this in part to the failure of agroforesters to communicate the benefits of agroforestry in a compelling and intelligible way to policy-makers, politicians and the public. The importance of good public relations was highlighted.

In the Congress Declaration, the participants expressed their belief that widespread scaling-up of agroforestry innovations during the next decade could greatly facilitate the success of global commitments and conventions such as the United Nations Millennium Development Goals and the conventions on biological diversity, climate change and combating desertification. The declaration included the following proposals:

- vigorous development of cross-sectoral policy and institutional frameworks that support agroforestry at regional and national levels in the context of development strategies and multilateral environmental agreements;
- enhanced public and private investment in agroforestry initiatives, including research, education and development;
- accelerated development of methodologies for measuring, valuing and monitoring ecosystem services provided by agroforestry;
- enhanced research and development in tree domestication, genetic improvement, use of biotic resources and value adding to agroforestry products at all levels;



- expansion of choices available for women and vulnerable groups to further increase their access to land and tree-based products and services;
- concerted efforts to popularize the deployment of agroforestry through an integrated, interdisciplinary, multi-institutional and multistakeholder approach;
- improved communication about the benefits of agroforestry for social, economic, cultural, ecological and environmental sustainability;
- increased recognition of agroforestry as an important area of investment for land rehabilitation, biodiversity conservation, climate change mitigation and adaptation, and improved food and nutritional security.

Further information is available at: www.worldagroforestry. org/WCA2009

Ambitious mangrove afforestation programme in Oman

Oman has intensified its mangrove afforestation programme over the past several years, in the wake of hard evidence of the vital coastal protection that mangroves provide. The tropical cyclone Gonu devastated large areas on the coast of Oman in June 2007, leaving 70 people dead. It also damaged parts of the mangrove forests around the capital and in the Qurum ("mangrove") area of the city. But the surviving mangrove forests protected the coastal areas against the tidal waves, flooding and inland intrusion of salt water.

Oman has 1 700 km of coastline, which was densely covered by mangroves in ancient times. Human activities – cattle herding, fuelwood collection, building and agriculture – reduced these forests to some isolated areas around lagoons, inlets, tidal channels and islands. The Marine Environmental Conservation Department in the Ministry of Environment started a mangrove conservation programme in 2000 with support from the Japan International Cooperation Agency (JICA). A master plan for mangrove afforestation was drafted in 2002. JICA also helped establish Oman's first permanent, pump-irrigated mangrove nursery in Qurum, and provided the first 11 000 seedlings.

Today there are four nurseries, both pump irrigated and tidal irrigated, and the planting and soil preparation work continues. In connection with the JICA aid, over 250 000 seedling pots were planted. After that, the Omanis continued the work. Between 2000 and spring 2009, over 418 000 transplantable seeds had been raised in the four nurseries. Trees have been planted all along the coast wherever possible. Some of the plantations have now become self-seeding. In the coastal area, there are at present only some 1 000 ha of mangrove forests, but much more can be created. The most common mangrove species in Oman is *Avicennia marina*, which is also the dominant species along the coasts of the Arabian Gulf and the Red Sea.



Strict laws, or royal decrees, now protect the existing forests and suitable areas. The development of tourism, for instance, is not allowed to disturb mangrove forests. Only careful ecotourism such as birdwatching is allowed on a small scale. Any coastal development must be at least 50 m above the highest tide and 150 m from any lagoon.

Education and awareness raising for the population is a very important part of the mangrove afforestation strategy. The importance of mangroves is stressed in newspapers, magazines and posters. Schools provide regular environmental education for children. The Omani Women's Association is very active in this field.

One of the areas identified for immediate transplantation of mangroves is the island of Mahout, located about 400 km south of Muscat, which is the seat of the Sultanate's shrimp fishery centre. The Omanis hope that fishing will generate income in the post-oil years. In recent years, the catches of economically valued species have all declined significantly through overfishing (including fishing by foreign vessels) and reduction in mangroves. Sustainable fisheries, however, have great potential, and the mangrove forests play an important part in efforts to conserve and develop the fish stocks in the country's rich fishing grounds. Mangroves in the Qurum Reserve and Mahout are nursery grounds for juveniles of many commercial fish, including mullet, milkfish, snapper and sea bream.

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Science training workshop seeks to integrate new concepts into Congo Basin forest management

The Congo Basin holds the second largest primary tropical forest in the world. Home to an immense biodiversity, the Congo Basin forest is a source of subsistence for local populations, and of income and wealth to the region through the export of wood and non-wood products. At the regional scale, the Congo Basin forest influences climate through its contribution to the hydrological cycle. At the global scale, this forest basin mitigates climate change by sequestering carbon in its biomass.



At the start of the twenty-first century, the Congo Basin forest is under a double threat. The first, more apparent, comes from the direct pressure of human activities. The second and less apparent threat is linked to climate and global changes and the ensuing perturbations to the ecosystem dynamics of this forest, including the century-long equilibrium with the extensive human use of its resources.

Within this context, the École Nationale des Eaux et Forêts (ENEF, Gabon) and Université Laval organized the subregional science training workshop Linking Ecoagriculture, Ecoforestry, Biodiversity and Climate Change in the Congo Basin, held in Libreville, Gabon from 4 to 8 January 2010, for researchers and teachers involved in forestry training in the Congo Basin subregion at the university and technical levels. Over 50 participants from Canada, Cameroon, the Democratic Republic of the Congo and Gabon, including specialists, researchers, teachers and high-level civil servants, examined the linkages between ecoagriculture, ecoforestry, biodiversity and climate change, as well as issues related to the conservation and ecosystem management of Congo Basin forests. The workshop also covered issues related to the Clean Development Mechanism (CDM) and reducing deforestation and forest degradation (REDD), as well as socio-economic and cultural aspects of sustainable forest management.

As part of its outputs, the workshop produced recommendations

to the Network of Central African Forestry and Environmental Training Institutions (RIFFEAC) for the inclusion of new concepts into the curriculum. Recommendations were also produced for the Central African Forest Commission (COMIFAC) and for national governments for the inclusion of biodiversity and climate change concerns in subregional priorities. Finally, the workshop enabled the establishment of strong scientific collaborations between Canadian and Congo Basin researchers on the practice of ecoforestry and ecoagriculture and on the adaptation to climate change.

This workshop was held as part of the project "Appui à la Formation en Gestion des Ressources Naturelles dans le Bassin du Congo", financed by the Canadian International Development Agency (CIDA). The project has as its objective to increase the number of trained specialists in tropical ecoforestry and ecoagriculture in the subregion in order to help meet the twenty-first century challenges in the management of natural resources in the Congo Basin.

The workshop was also supported by the Center for Forest Research (Canada), Natural Resources Canada and the German Agency for Technical Cooperation (GTZ).

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