

# Joint press releases

An initiative of the Collaborative Partnership on Forests in the  
International Year of Forests 2011



**CPF**  
Collaborative Partnership  
on Forests



## Collaborative Partnership on Forests

The Collaborative Partnership on Forests consists of 14 international organizations, bodies and convention secretariats that have substantial programmes on forests. The mission of the Collaborative Partnership on Forests is to promote sustainable management of all types of forests and to strengthen long-term political commitment to this end. The objectives of the Partnership are to support the work of the United Nations Forum on Forests and its member countries and to enhance cooperation and coordination on forest issues.

The members of the Collaborative Partnership on Forests are:

- Centre for International Forestry Research (CIFOR)
- Food and Agriculture Organization of the United Nations (FAO)
- International Tropical Timber Organization (ITTO)
- International Union of Forest Research Organizations (IUFRO)
- International Union for Conservation of Nature (IUCN)
- Convention on Biological Diversity (CBD) Secretariat
- Global Environment Facility (GEF) Secretariat
- United Nations Convention to Combat Desertification (UNCCD) Secretariat
- United Nations Forum on Forests (UNFF) Secretariat
- United Nations Framework Convention on Climate Change (UNFCCC) Secretariat
- United Nations Development Programme (UNDP)
- United Nations Environment Programme (UNEP)
- World Agroforestry Centre (ICRAF)
- World Bank.

# Foreword

2011 was the International Year of Forests. The Collaborative Partnership on Forests (CPF) – a partnership of 14 international organizations and secretariats – identified the year an opportunity to highlight the relevance of forests to humankind and the well-being of the planet. The CPF and its members believe that the need to conserve, restore and sustainably manage forests can only be met if society is aware of the many services and goods that forests provide.

As part of its contribution to the International Year of Forests 2011, the CPF partners issued a series of press releases on a variety of forest themes, related either to United Nations-designated international days (e.g. World Environmental Day) or large international events. Fourteen themes were canvassed, from biodiversity, to women and gender, to the fight against hunger, providing a 360-degree perspective of the world's forests and the issues that affect them.

This publication presents those press releases on behalf of CPF members as a reminder of the many forest-related issues that require the public's ongoing attention. The CPF is sharing this publication on the occasion of the first International Day of Forests in 2013 as a demonstration of the CPF's fruitful collaboration and its continuing efforts to raise the profile of forests.

The world is celebrating the International Day of Forests in 2013 as a result of a process that started 40 years ago. Prior efforts had been made by FAO to establish a World Forestry Day, but it was only through the joint efforts of FAO, the United Nations Forum on Forests and other CPF members, in conjunction with members of the United Nations Economic and Social Council, that the International Day of Forests was approved by the United Nations General Assembly at its session in December 2012. Now, each year, 21 March will be the International Day of Forests, and the CPF is planning ways to support countries worldwide in marking the event and using it to promote forests and their sustainable management.

I would like to express my gratitude to all of those who contributed to the press releases generated by CPF members during the International Year of Forests 2011, and to those who continue to help spread their messages.

Eduardo Rojas-Briales  
CPF Chair

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# Water security depends on forests and wetlands

**2 February 2011** – In our rapidly urbanizing world, water security is a key issue. Today, as we celebrate World Wetlands Day and inaugurate the International Year of Forests, it is important to recognize the critical links between water, forests, wetlands and people. More than one in six people worldwide still do not have access to safe drinking water. We are witnessing escalating problems with water scarcity and increasing problems with extremes in water availability – such as droughts and floods.

Estimates suggest that, by 2025, 1.8 billion people will be living in regions with absolute water scarcity, with the possibility that two-thirds of the world's population will be experiencing water-stress conditions. Recent assessments suggest that about 80 percent of the global population already live in areas where water is insecure.

Water is tightly linked to forests and wetland ecosystems through the hydrological cycle. Forests and wetlands regulate water availability and serve as natural water purification systems. Forests help route water in a watershed by stabilizing soils, which allows water to enter them, and also regulate soil erosion. This maintains catchments, preventing desertification and salinization. Forests also emit water vapour into the atmosphere, thereby regulating local climate and rainfall. In turn, forests depend on groundwater and soil moisture for their survival and rely on wetlands to replenish this.

There are also crucial economic benefits from the linkages between water, forests and wetlands. For example, forested protected areas provide a significant portion of the drinking-water supply to at least one-third of the world's largest cities.

Forested wetlands, like mangroves, protect human communities from natural catastrophes such as tsunamis, and river floodplains play a key role in protecting downstream communities from floods.

*The Economics of Ecosystems and Biodiversity (TEEB)* study, for example, estimates that water-related services of tropical forests account for more than US\$ 7,000 per hectare each year, which exceeds the value of timber, tourism and carbon storage combined. The TEEB study concluded that there is a compelling cost-benefit case for public investment in ecological infrastructure (especially restoring and conserving forests, mangroves, river basins, wetlands, etc.).

Yet, despite their importance to human well-being, forests and wetlands are among the most threatened ecosystem types. Deforestation is still alarmingly high and poses a major threat to water catchments and the quantity and quality of available fresh water. Concurrently, it is estimated that half of the world's wetlands have been lost since 1900, resulting in adverse effects for many natural cycles and an unprecedented loss of biodiversity. It is now becoming widely recognized that wetland loss is a major contributing factor in increasing flood risk, particularly for cities. There are, however, some positive trends. We are seeing better use of these ecosystems through the conservation of their valuable functions in order to address water security needs.

The management of forests and wetlands are inextricably linked. It is therefore imperative that policy-makers consider ecosystems in their entirety and manage

them more wisely to achieve sustainable and cost-effective solutions to our water-related needs.

Achieving water security is probably our most important environmental challenge. For this reason, the Strategic Plan for

Biodiversity 2011–2020, adopted at the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity in Nagoya, recognizes the cross-cutting nature of water in underpinning the services that we need from ecosystems.



FAO/FO-0617/F. Ohler

# Climate change highlights need for greater role for women in forest management

**1 March 2011** – Women are the main users of forests in developing countries – gathering food and fuelwood – but they continue to be sidelined in how forests are managed despite years of effort to mainstream their involvement, experts said ahead of International Women’s Day on 8 March.

Research shows that greater involvement of women in forest management usually improves the condition and sustainability of the forests. This has taken on new significance as billions of dollars are pledged to protect and enhance the world’s forests because of their role in slowing the rate of climate change.

“It is worrying that despite women’s increasingly recognized contribution to forest management, they are not yet at the forefront of forestry decision-making,” said Esther Mwangi, a scientist at CIFOR, which has its headquarters in Indonesia.

The United Nations has declared 2011 the International Year of Forests, which provides an excellent platform to revisit the challenges of promoting women’s involvement in forestry, she said. “As governments rearrange their policies and create new regulations ahead of the implementation of programs for REDD+, women’s involvement in decision-making in forest management and conservation should be a top priority.”

REDD+ is a global mechanism for reducing emissions from deforestation and forest degradation, as well as the conservation and sustainable management of forests and the enhancement of forest carbon stocks.

Climate change and deforestation have increased the workload of rural women, who are the primary users of forests and use them to obtain natural medicines as well as fuelwood, food and water.

“The first challenge is to recognize women as agents of change. They cannot be seen only as users but as major decision-makers when it comes to conservation and sustainable use of forest,” said Lorena Aguilar, Global Senior Gender Advisor at IUCN. “As the main users of forests, women need to be included in decision-making to ensure they get a fair share of the benefits. This means taking account of gender differences not only when planning projects but also when designing policy interventions that will affect forest communities.”

While significant progress has been made in promoting the role of women in forest management at the national and international policy levels, massive gaps remain in implementing these changes on the ground. Still, there are signs of hope. The participation of women has risen, as seen in Nepal, where the percentage of women and marginalized groups involved in community committees has grown from 27 percent to 45 percent. In many cases, however, participation is limited to attendance and passive involvement, with women sitting in silence while men make the calls on forest management.

Statements on the importance of engaging women in decision-making in the forest sector alone are not enough, said Eve Crowley, Deputy Director of FAO’s Gender, Equity and Rural Employment Division. “You need to have planning, you need to have



resource allocations, you need to have capacities in implementation, and you need to have careful monitoring and evaluation.”

In land tenure, for example, there needs to be an effective gender-sensitive programme with on-the-ground specifics to counter the historical, social and cultural factors that are biased in favour of men’s control. Forest industries should provide women with greater access to employment, taking into consideration their multiple responsibilities to care for their families.

An extensive review of gender and agroforestry in Africa, published by ICRAF in April 2011, found that women farmers in sub-Saharan Africa are still trapped at the production end of the value chain. It recommended that governments, NGOs and the private sector foster women entrepreneurs and strengthen their participation in farmers’ groups.

Women’s knowledge of and capacity to act on their rights must be strengthened. Such capacity is crucial to allow women to organize and be able to make demands for more involvement in decision-making processes in forest management and to ensure that rules and regulations are enforced.

The experts also said that it was important to increase the number of women in decision-making positions from the village level, through to local governments, central governments and forest-related agencies. It is also crucial to build and support networks and alliances among rural women and national and international advocacy groups.



FAO/FO-5994/Shutaoom



# Forests are key for high-quality water supply

Better forest management needed to maximize water-related benefits from forests

**18 March 2011** – By 2025, 1.8 billion people will be living in regions with absolute water scarcity and two-thirds of the world's population may experience water-stress conditions. Forests capture and store water and can play an important role in providing drinking water for millions of people in the world's mega-cities. The members of the Collaborative Partnership on Forests (CPF), international organizations involved in forests, call upon countries to pay more attention to forest protection and management for the provision of clean water.

"Forests are part of the natural infrastructure of any country and are essential to the water cycle", said Eduardo Rojas-Briales, Assistant Director General of the FAO Forestry Department.

"They reduce the effects of floods, prevent soil erosion, regulate the water table and assure a high quality water supply for people, industry and agriculture." He was speaking prior to the United Nations World Water Day, which will be celebrated this year on 22 March.

In most cases forests are an optimal land cover for catchments supplying drinking water. Forest watersheds supply a high proportion of water for domestic, agricultural, industrial and ecological needs.

"The management of water and forests are closely linked and require innovative policy solutions which take into account the cross-cutting nature of these vital resources", said Jan McAlpine, Director of the United Nations Forum on Forests Secretariat. "The International Year of Forests provides a unique platform to raise awareness of

issues such as the water–soil–forests nexus, which directly affect the quality of people's lives, their livelihoods and their food security."

Moreover, forests and trees contribute to the reduction of water-related risks such as landslides, local floods and droughts and help prevent desertification and salinization.

Today, at least one-third of the world's biggest cities, such as New York, Singapore, Jakarta, Rio de Janeiro, Bogotá, Madrid and Cape Town, draw a significant portion of their drinking water from forested areas. If properly managed, forest catchment areas can provide at least a partial solution for municipalities needing more or cleaner water.

## Generating momentum on forests and water

Water use by forests can be influenced and reduced by prudent forest planning and management practices such as the planting of appropriate tree species. Countries are stepping up policy and project activities to increase forest areas for the protection of soil and water.

Eight percent of the world's forests have soil and water conservation as their primary objective. While every hectare of forest contributes to regulating water cycles, around 330 million hectares of the world's forests are designated specifically for soil and water conservation, avalanche control, sand dune stabilization, desertification control or coastal protection. This area increased by 59 million hectares between

1990 and 2010, due largely to large-scale planting in China for protective purposes.

Topics related to forest and water interactions have gained international attention in recent years. Many relevant conferences and events have been organized between 2008 and 2010, each looking at forests and water issues from a different perspective (e.g. integrated water catchment area management and the role of forests in precipitation). Based on the outcomes of these meetings, a set of practical actions on forests and water supply is being developed for policy-makers and technicians.

Work is also continuing at the project level, particularly on transboundary water issues. One prominent example is the “Fouta Djallon Highland Integrated Natural Resources Management Project” in West Africa.

This ten-year project, supported by the Global Environment Facility and jointly implemented by FAO, UNEP and the African Union, involves eight countries – Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal, and Sierra Leone.

The Fouta Djallon Highlands are the point of origin of a number of international water courses, notably the Gambia, Niger and Senegal rivers. Shifting agriculture and tree-felling for charcoal production led to heavy deforestation and depleted water resources in the area. In order to improve local livelihoods and water resources, the project aims to ensure the conservation and sustainable management of natural resources through the restoration of forest cover.



FAO/FO-6868/J. Ball

# Global forestry institutions call for more community-based forest management

**22 April 2011** – The leading international organizations working to protect and manage the world's forests are calling for governments across the globe to increase the role of communities in forest management. Doing so could contribute to lifting close to one billion people out of poverty, as well as improve the health and vitality of forests.

The Collaborative Partnership on Forests is composed of 14 international organizations specializing in the management, conservation and sustainable development of all types of forests. On the occasion of this year's Earth Day, the group has come together to speak as one to send an unequivocal message: if the world is to see the preservation of endangered biodiversity and an end to poverty, communities living in and near forests must be involved in decision-making about forest management.

"People who live in forests and are highly dependent on them for their food, fuel and medicines are most often not those who control the decisions on how these resources are used and managed," said Julia Marton-Lefèvre, Director General of IUCN. "Our work in countries across the world has proven that strengthening community rights over their own forests helps reduce poverty and also benefits forest biodiversity."

An estimated 1.6 billion people depend on forests for their livelihoods. About 1.4 billion of these live in the developing world, and 1 billion live in extreme poverty. Data released recently by IUCN and the Global Partnership for Forest Landscape Restoration show that approximately 1.2 billion hectares of deforested or degraded

areas could be restored through better, locally controlled management.

Guinea is a prime example of a country that could benefit from community forest management, as it has long experienced widespread environmental degradation and loss of forests, due largely to illegal logging, land clearing and poaching by people who rely on the forests to eke out a living.

"We brokered a co-management agreement between the local community and the government and introduced a programme to improve incomes of people living in villages around the forests," said Dennis Garrity, ICRAF Director General. "Incomes dramatically improved, the pressure on forests reduced, water sources flowed again and tree cover is steadily increasing."

The Collaborative Partnership on Forests has seen again and again that by increasing local people's participation in forest management, communities are frequently in a better position to start forest product-based business, from which they can derive better incomes. Such businesses encompass a broad array of activities, from the processing and marketing of shea nuts and butter in West Africa, to community forestry enterprises managing forest concessions in Petén, Guatemala. The ability to build increased household wealth is critical as it often results in improved food security and increased investment in children's education and engagement in community and social improvement activities.

“When local people become equal partners in the benefits and responsibilities of sustainable forest management, many opportunities open up for them,” said Eduardo Rojas-Briales, Assistant Director General of Forestry at FAO. “Reliable access to forest resources means they can increase their cash income and engage in developing sustainable enterprises. What’s more, there is a clear incentive to better manage their lands to ensure the sustainability of the forest resources.”

The current international efforts to develop mechanisms for reducing emissions from deforestation and forest degradation and enhancing forest carbon stocks in developing countries (REDD+) represent new possibilities for local communities to benefit from the sustainable management and conservation of forests.

However, according to a recently published book by IUFRO, “... unless considerable progress is made in securing the rights of local people to access, manage, and benefit from forests ... it is unlikely that deforestation and illegal logging will be curbed”.

ITTO is another member of the Collaborative Partnership on Forests that promotes a holistic approach to involving communities in its various forestry projects throughout the tropics, and sees such involvement as a crucial link to improvements in both livelihoods and sustainable forest management.

At a recent UNFF meeting, ministers stressed the crucial role of local people, including women, and local and indigenous communities in achieving sustainable forest management.

“When you have ministers from around the world recognize that communities are vital for sustainably managing forests, it becomes clear that the time to act is now,” said Jan McAlpine, Director of the UNFF Secretariat. “If we don’t see wide-scale investment in locally controlled forestry we will ultimately fail in some of our most important and venerable goals, including reducing poverty and ensuring sustainable development for all”.

# Forests are a path to sustainable development

**13 May 2011** – As discussions draw to a close at the United Nations Commission on Sustainable Development this week, members of the Collaborative Partnership on Forests, an international mechanism composed of 14-forest related organizations and secretariats, are calling on countries to pay more attention to the crucial contribution of forests to sustainable development.

Members of the Collaborative Partnership on Forests are working to improve the management, conservation and sustainable development of all types of forests. Sustainably managed forests directly reduce poverty by providing poor families with jobs, incomes and consumable goods.

“At a time when we are faced with environmental, social and economic crises that are daunting, the Collaborative Partnership on Forests is working intensively together to further catalyse the positive contributions of forests, including the livelihoods of forest-dependent people, as is being celebrated in 2011, the International Year of Forests,” said Jan McAlpine, Director of the UNFF Secretariat. “Forest services and benefits are multifaceted and wide-ranging, from the environmental contributions to the social and economic. Cross-sectoral and cross-institutional cooperation and a people-relevant approach is vital not only to the management of forests but for advancing sustainable development around the world.”

“Further analysis is needed during the International Year of Forests to emphasize the connection between people and forests and the benefits that can accrue when

forests are managed by local people in sustainable and innovative ways,” said Eduardo Rojas-Briales, Assistant Director-General of the FAO Forestry Department. “Together we must continue to pursue multiple pathways towards sustainable development using forests at all levels.”

Rojas called attention to the 2011 edition of FAO’s *State of the World’s Forests*, which provides an analysis of how forests support people’s livelihoods and the development of sustainable forest industries. According to the report, forest industries are improving resource efficiency and recycling efforts and are making progress in promoting wood products as more environmentally friendly than alternative materials. Moreover, *State of the World’s Forests 2011* indicates that community-based and traditional knowledge forest management approaches can help communities harvest and sell non-wood forest products to create more sustainable livelihoods.

The relevance of traditional forest-related knowledge and practices to global efforts to advance sustainable forest management, biodiversity conservation, adaptation to environmental change and livelihood security is highlighted by a recent six-year global study by IUFRO.

Emmanuel Ze Meka, ITTO Executive Director, noted that, “Already in many tropical countries, sustainably managed forests and the products that arise from them are contributing to sustainable development at both the national the

community level. But since sustainably managed forests still make up less than 10 percent of the total global tropical forest area, they clearly have the potential to play a much bigger role”.

A successful example of sustainable forest management can be seen in Guinea, where the Landscape Management for Improved Livelihoods (LAMIL) project by ICRAF and CIFOR has had a profound influence on the sustainability of four large forest areas. Prior to the project, local people were forbidden from using the forest resources and illegal logging, poaching and land clearance were leading to forest loss. The LAMIL project developed a system of co-management involving local communities and government where the local people derive real benefits from the forests, and in return have shown their willingness and ability to manage them sustainably.

“The project illustrates how changes in how forests are governed can lead to win-win outcomes for forests and people,” said Frances Seymour, CIFOR Director General.

“This project has done much to improve the welfare of the local people,” said Dennis Garrity, ICRAF Director General. “It has also shown that sustainable forest management and improved livelihoods are inextricably linked.”

“Forests, soils and water are a trilogy and not stand-alone, self-sustaining resources,”

said Luc Gnacadja, Executive Secretary of the UNCCD. “To foster a holistic approach to the management of these environmental resources, we must attend to three things. First, we need to focus on the causes, not the symptoms of deforestation. Second, we need to focus on the soil, which is the real source of life for the land. Third, the communities that maintain the ecosystems we depend upon need to be rewarded.”

At a UNFF meeting in February, ministers and high-level officials agreed on a Ministerial Declaration which stressed that, “forests are an integral part of the global environment and human well-being, providing multiple goods and services essential for people worldwide and crucial for sustainable development and the achievement of the internationally agreed development goals, including the Millennium Development Goals”.

The UNFF Ministerial Declaration contains the most important global forest policy issues and concerns as the concrete input on forests to the upcoming (June 2012) Rio+20 conference. Rio+20 marks the 20th anniversary of the adoption of Agenda 21, the blueprint for sustainable development that was agreed at the 1992 United Nations Conference on Environment and Development. The conference will review the progress made towards sustainable development and map out future strategies to address sustainable development and environmental challenges.



# Global forestry institutions call for increased investments for arid zone forests

**17 June 2011** – Twenty-seven international, regional and sub-regional institutions and over 100 participants from around the world gathered in Dakar today for the observance of the World Day to Combat Desertification. Among the participants were members of the Collaborative Partnership on Forests, a mechanism comprising 14 global institutions and organizations dealing with forestry matters, which called for more, and urgent, investments to stem the growing degradation of natural resources, especially forests in Africa's drylands.

Drylands make up 40 percent of the world's land area, cover more than 100 countries and are the basis for the livelihoods of 2 billion people. The world's largest concentration of mammals, and more than 50 000 known plant and 1 500 bird species, as well as the native habitats and wild relatives of the world's most widely consumed seeds, are supported by these forests. But the long-term sustainability of dryland forests is in jeopardy due to a shortage in the investments needed to scale up sustainable forest management practices and to support policies to prevent and reverse land degradation in the drylands, the process commonly known as desertification.

## **Forests central to drylands health**

The World Day to Combat Desertification, marked every 17 June since 1995 by a decision of the United Nations General Assembly, is dedicated to sensitizing the public and policy-makers to the increasing global dangers of desertification, land

degradation and drought. With 2011 as the International Year of Forests, this year's observance is under the theme "Forests keep drylands working" to highlight the value of the little-known but hugely important dryland forests.

The First Africa Drylands Week, held on 10–16 June 2011 in observance of the World Day to Combat Desertification, was an opportunity to explore these challenges. It drew on the experience in Africa, where 44 percent of the land area is dryland, in addition to its vast deserts. The field visits in Senegal, the testimonies of local populations and discussion with policy-makers, non-government organizations and the scientific and research community showed that efforts to combat desertification and mitigate the effects of drought inevitably involve improving forest and vegetation cover. Forests and trees improve the fertility of and organic matter in the soil, and protect soil from erosion.

In Africa, forestry efforts in the drylands range from the Great Green Wall for the Sahara and Sahel Initiative and the Lake Chad Initiative to community tree-planting campaigns and farmer-managed natural regeneration in agroforestry systems led by farmers and peasants. Such initiatives have spread from village to village to rehabilitate over 5 million hectares across three countries. Clearly, every effort counts.

"Environmental degradation is one of the greatest risks to local communities that

depend on natural resources for their livelihoods. The GEF's engagement therefore is based on two overarching principles: environmental security and food security for peace in fragile regions. Environmental security includes maintaining services provided by ecosystems and their impacts on livelihood conditions. That's why in the heart of Africa, the GEF has established a program to support the Great Green Wall and Lake Chad initiatives," says Monique Barbut, Chief Executive Officer and Chairperson of the GEF.

"It's a monumental effort of 11 Sahelian countries who have collectively embraced the Great Green Wall of Sahel and Sahara Initiative as a platform to mobilize partnerships with the international community. Leaders of the 11 countries have committed to an environmental and development transformation in the region that will mitigate the risk of desertification while at the same time alleviating poverty. This vision is fully endorsed by the African Union, with an action plan for implementation. During several high-level events over the last year, ministers from the 11 countries have reaffirmed their commitment to this vision and repeatedly called for support and engagement by the international donor community, including the GEF, which we are ready to provide over the next four years," she said.

### **Increasing support needed for dryland forests**

Half the world's livestock, a lot of the wildlife and a significant proportion of drylands people highly depend on dryland natural resources. Dryland forests and vegetation are the source habitats of many of the seeds feeding the global population today and provide valuable ecosystem services, not least of which is regulating the global climate. A number of members of the Collaborative Partnership on Forests are undertaking projects and programmes dedicated to dryland forests in Africa.

One example is Shinyanga in northern Tanzania. In 1984, then President, Julius Nyerere, described Shinyanga as the "desert of Tanzania". Today, as a result of a comprehensive soil conservation and agroforestry project supported by ICRAF, the landscape has been rehabilitated and tens of thousands of smallholders have seen their profits rise by as much as US\$500 per year. They have planted woodlots, grafted fruit orchards and fodder banks and made use of nitrogen-fixing trees to increase fertility and crop yields. The ancient *ngitili* system of land management, which Sukuma pastoralists traditionally used to conserve livestock fodder for the dry season, has been revived.

A project led by FAO piloted technologies for water-harvesting techniques and initiated a process to build capacity in resin and gum production and the rehabilitation of degraded lands. By encouraging the planting a local acacia species, the project help to restore traditional acacia agro-silvo-pastoral systems, which have significant environmental, social and economic value and are now contributing to food security across six gum-and-resin producing countries in Africa. The project has generated benefits for local communities and restored thousands of hectares across the six countries.

Given the importance of forests in arid and semiarid zones for rural development and environmental protection, their development is a pressing challenge for both researchers and decision-makers.

"Facing global climate changes that are foreseen for the present century, including reductions in the already limited rainfall and variations in its seasonal distribution, this challenge becomes even stronger," said Santiago Barros Asenjo, who coordinates an IUFRO working group on forest management in arid and semiarid regions.

Deforestation is the first step towards land degradation. A change in the spatial spread

of an arid zone forest also signals the decline or recovery of degraded land. Yet, the significance of dryland forests is not matched by either public discourse or investment. Few financial investments are allocated to these forests compared to other forest ecosystems. Given growing local conflicts over these resources, such underinvestment could become an obstacle to global peace.

### **Early investments show returns in arid forests, but more resources needed**

"Arid zone forests are a key forest resource that is often overlooked by the international community," said Eduardo Rojas-Briales, Assistant Director General of the FAO Forestry Department. "FAO, together with its partner organizations, is working to raise awareness of the importance of arid zone forests and their contribution to food security and soil protection, with the hope that an increasing number of governments and local communities will understand the benefits of investing in these forests and the application of sustainable forest management in these areas to prevent land degradation and desertification."

"Key to the rehabilitation of drylands are technologies such as rainwater harvesting, fodder trees to reduce grazing pressure on fragile lands, rotational woodlots for fuelwood, revegetation of degraded lands and carbon storage above and below ground in the soil," says Tony Simons, ICRAF Deputy Director General. "These agroforestry interventions have been a successful form of dryland management and soil conservation in many parts of the world."

Two notable positive developments have taken place on the policy front recently. The parties to the United Nations Convention to Combat Desertification have agreed that, starting in 2012, the progress reports submitted on national activities to combat desertification, land degradation and drought will show, quantitatively, how things are changing on the ground. They will

state the proportion of the population that is above the poverty line in the affected areas as well as the changes observed in land cover. And in order for the real economic value of the services rendered by drylands, including arid zone forests, to be determined, the parties decided to hold the Second UNCCD Scientific Conference in 2012 with the theme "economic assessment of desertification, sustainable land management and resilience of arid, semi-arid and dry sub-humid areas". But this is only a start.

"If history is to be trusted, then for change to come, we must think outside the box. A box that puts blinkers around our individual mandates. A box that gives attention to the symptoms, not the causes of deforestation. A box that takes soil and water as givens that do not require a deliberate conservation approach nor, indeed, targets. A box with policy tools that pay for some, not all, ecosystem services," says Luc Gnacadja, UNCCD Executive Secretary.

Together, partners reinforced their commitment by identifying concrete actions, as well as technical and financial inputs, to achieve the vision of the Great Green Wall for the Sahara and the Sahel Initiative. Many major successes have already been achieved, providing excellent basis on which to build. Partners also recommended the organization of a second Africa Drylands Week to maintain the momentum built by this first successful gathering.

The First Africa Drylands Week demonstrated renewed solidarity and unity throughout the circum-Saharan region. Scientific and operational partnerships, based on comprehensive consultation and inclusive approaches and methodologies between development and cooperation partners, countries and civil society will reinforce governance systems, including sustainable land management, land tenure and secure livelihoods. Under this framework, individual countries or groups

of countries will be able to develop their own initiatives that will together contribute to successful land management, combat the effects of climate change, prevent and combat desertification, conserve

biodiversity and mitigate the vulnerability of rural and urban societies and ensure food security for the tens of millions of families, across the Sahara and the Sahel.



FAO/Roberto Faidutti



# Forests facing increased threat from extreme weather

Improved forest management needed

**9 August 2011** – Extreme weather events and natural disasters will pose an increasing threat to the world's forests in coming years, requiring heightened cooperation between regions and countries, an international partnership for forest conservation and improvement warned today.

The Collaborative Partnership on Forests, comprising 14 international organizations and secretariats, issued its warning as FAO released a new report, *Abiotic disturbances and their influence on forest health*.

Almost 4 000 extreme events — so-called “abiotic disturbances” such as cyclones, floods, landslides, tornadoes, earthquakes, volcanic eruptions and “mega” forest fires — occurred between 2000 and 2009 worldwide, according to the report. There have also been several recent human-induced disturbances, such as radioactive contamination and oil spills.

The Collaborative Partnership on Forests called on forest managers to apply forest policies such as diversifying species, using windbreaks and mixed cropping patterns to protect forests from disasters and to minimize the risks and impacts of extreme events.

“Disturbances are expected to continue to increase in intensity, quantity and frequency,” said Eduardo Rojas-Briales, Assistant Director-General of the FAO Forestry Department. “Adaptive forest management involving all sectors and stakeholders is therefore essential to protect the world's forest resources. And since such disturbances do not respect

borders, regional or international cooperation is urgently needed.”

Examples of abiotic disturbances and their impacts on forests include: a major storm in Sweden in 2005, which uprooted or damaged trees in over 1.2 million hectares of forest; tropical cyclone Sidr, which hit Bangladesh in 2007 and affected almost nine million people and damaged nearly 1.5 million houses and some four million trees; and the 2010 earthquake and subsequent tsunami in central Chile, which killed more than 700 people and caused up to US\$30 billion in economic losses to the country.

## Minimizing damage from extreme events

The condition of forests themselves can have an influence on extreme events. For example, deforestation or poor management can increase flooding and landslides during cyclones. The degradation of mangrove forests may increase the damage caused by storms or tsunamis.

Observations from the Maldives showed that coastal forests are most resilient to tsunami impacts when left as undisturbed, mixed-species communities. Sand dunes, mangrove forests and coral reefs all help to reduce the energy of tsunami waves as well as retain soil and preserve safe conditions to allow biodiversity to thrive. Although mature mangroves are quite resistant to water surges, there are limits to this resilience.

In 2004, when the Indian Ocean Tsunami hit Indonesia, it cleared nearly 49 000 hectares of coastal forests (excluding mangroves) and significantly damaged 300–750 hectares

of mangrove forests, representing economic losses of US\$21.9 million and US\$2.5 million, respectively.

But with improved coastal and mangrove forests management, these types of effects can be substantially reduced.

For example, "ITTO-funded projects to rehabilitate tsunami-damaged mangroves in the Ayeyarwady delta of Myanmar, in Phang Nga and Ranong Provinces, southern Thailand, and in many other countries are helping to ensure that future extreme weather or tsunami events will be less damaging to local communities than the tragic 2004 Indian Ocean event," said ITTO Executive Director Emmanuel Ze Meka.

#### **Climate change impacts can heighten intensity of events**

Expected increases in the frequency and severity of drought and heat stress associated with climate change can fundamentally alter the composition and structure of forests. Increases in tree mortality are of particular concern because decaying trees also release large amounts of carbon into the atmosphere.

Moreover, decreased rainfall and more severe droughts, such as that presently being experienced in the Horn of Africa, are

expected to be particularly stressful for African populations that depend on forests for food, clean water and other basic needs.

"Climate change adaptation planning is hampered by a lack of information about current and future climate-related impacts", said Steve Makungwa from the Forestry Research Network for Sub-Saharan Africa (FORNESSA), an initiative that has worked with IUFRO on climate change impacts on African forests. "There is a need for reliable regional projections as well as early warning systems that require investments in research and monitoring infrastructure."

In November 2011, the Intergovernmental Panel on Climate Change will release a special report on managing the risks of extreme events and disasters to advance climate change adaptation. The report aims to become a resource for decision-makers to more effectively manage the risks of these events.

In advance of the report, members of the Collaborative Partnership on Forests called on forest managers to develop strategies to adapt to future drought events, such as by reducing tree density to ease competition, selecting plants with improved drought resistance, and shifting from monoculture plantations to species-rich forests.



# Including indigenous peoples and traditional knowledge in forest management key to REDD+

**9 August 2011** – The full and effective engagement of indigenous peoples and the incorporation of traditional forest knowledge in forest management strategies are crucial for REDD+ success in curbing climate change, say experts ahead of the International Day of the World's Indigenous Peoples.

REDD+ aims to create value for forests as a means to protect them. If designed and implemented in a more inclusive manner, the experts say, REDD+ could contribute to generating revenue, securing indigenous lands and livelihoods and maintaining the culture of forest-dependent communities.

"At the very outset, indigenous peoples have to be involved in the design and implementation of REDD+ projects," said Terry Sunderland, a forests and livelihoods scientist at CIFOR. "Although engagement with indigenous peoples carries many complexities, these need to be overcome for REDD+ to work."

REDD+ stands for reducing emissions from deforestation and forest degradation in developing countries while fostering forest conservation, sustainable management and the enhancement of carbon stocks. It is predicted that up to US\$30 billion could flow from developed to developing countries each year to help facilitate significant reductions in deforestation.

Although REDD+ is recognized as one of the cheapest and most efficient ways to mitigate climate change, it will face costly setbacks should the mechanism not respect the rights of indigenous peoples and other forest-dependent communities that are involved in or near REDD+ projects.

"At present, the cultural capital of traditional societies is no match for the financial capital of interests that dominate policy debates worldwide on climate change and REDD+," said John Parrotta, coordinator of the IUFRO Task Force on Traditional Forest Knowledge.

Indigenous and local communities have developed significant bodies of knowledge on how to cope with local climatic shifts, including agricultural techniques for managing and conserving forests, water and soil resources. "These practices can help guide the design of mitigation measures that involve carbon sequestration, forest conservation and other environmental and social benefits," said Parrotta.

Myrna Cunningham Kain, an indigenous Miskita from Nicaragua and Chair of the United Nations Permanent Forum of Indigenous Issues, believes that the best scenarios for REDD+ will occur when indigenous peoples become active players in the decision-making process. They must be provided with complete and true information, and allowed continued access to forests and their resources.

"We must commit to respect international human rights standards that establish moral and legal obligations to protect and promote rights of indigenous peoples in all matters related to climate change," said Cunningham Kain. "This includes rights to lands, territories and resources, right of traditional knowledge and free, prior and informed consent as enshrined in the UN Declaration on the Rights of Indigenous Peoples."

The adoption of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the recognition of free, prior, and informed consent (FPIC) therein are important milestones in securing the rights of indigenous peoples. FPIC refers to the collective right of indigenous and tribal peoples to give or withhold consent regarding decisions that may affect the rights and interests associated with their lands, territories and resources.

International programmes such as the United Nations Collaborative Programme on REDD+ (UN-REDD Programme) have undertaken global and regional consultations with indigenous groups and other forest-dwellers to elaborate on how this right can be operationalized.

“The adoption of procedures to respect FPIC could be vital for ensuring permanence in REDD+ while respecting the rights of indigenous peoples and forest dependent communities,” said Charles McNeill, who

coordinates stakeholder engagement work at UNDP on behalf of the UN-REDD Programme. The United Nations is developing guidelines – in consultation with indigenous peoples and forest-dependent communities – to operationalize FPIC on the ground, under the United Nations mandate to support the implementation of UNDRIP.

While questions need to be clarified in the operationalization of FPIC – such as who gives consent and defining adequate representation – the right to FPIC, says McNeill and others, is fundamental to indigenous peoples’ right to self-determination to strengthen the legitimacy, efficacy, ownership, sustainability and longevity of REDD+ actions.

To address the accelerated loss of biodiversity in forests, other international bodies, such as the CBD, are adopting strategies relevant to indigenous peoples and local forest communities. The CBD has set a target to halve the loss of natural habitats, including forests, by 2020.



FAO/Mario Marzot

# Better landscape management needed to prevent forest fires

Fire management will require increased investment

**9 September 2011** – Countries need to pay more attention to fire management on lands bordering forests in order to prevent the 95 percent of wildfires that originate from human activities in forests and adjacent areas, an international partnership for forests warned today.

The Collaborative Partnership on Forests, which consists of 14 international organizations and secretariats, issued its warning as many countries are experiencing an increasing incidence in the frequency and size of wildfires due to the impacts of climate change and the lack of fire management policies.

“In many cases the fire starts on agricultural or pasture lands and spreads quickly to nearby forests,” said Pieter van Lierop, an FAO expert on forest fire management. “When people continue to burn rubbish and agricultural waste, clear lands by burning vegetation for agricultural or development purposes, or burn pastures to allow grass to sustain its high productivity, there is always a danger of large-scale vegetation and forest fires, particularly under dry and hot weather conditions,” he added.

## **Integrated landscape management approach to prevent fires**

There are practical things that can be done to reduce the risk of fire escaping from agricultural areas, said van Lierop. It is vital to think about fire prevention and the suitable use of fire, not only in forests but also in other parts of a landscape, in particular on land in the vicinity of forests. For example, people should try to avoid establishing large homogeneous forest areas in regions with fire-prone vegetation,

which usually exacerbate fire, and instead maintain mosaic landscapes with natural firebreaks provided by combining different land-uses.

Burning agricultural waste early in the dry season before the surrounding landscape gets too dry and avoiding burning during high winds will also help avoid big wildfires.

Activities on lands on or around peat soils require control. For example, mega-fires in the Russian Federation last year damaged more than 14 million hectares, killed more than 50 people. These fires were almost uncontrollable largely because nearby peat lands had been drained for the irrigation of adjacent agricultural lands. This affected neighbouring forests, which also became drier. Experience has shown that dried peat-land fires are nearly impossible to extinguish.

## **More funds needed for fire management**

The Collaborative Partnership on Forests said that the frequency and intensity of forest fires could be reduced by including fire management in broader landscape management strategies and through more integrated approaches to fire management. Such approaches would include not only fire suppression but also fire prevention, controlled burning, early warning and preparedness. All require increased investment. “As most fires are started by people, countries should invest more in integrated fire management strategies, especially in the often overlooked area of prevention,” said van Lierop. “Local communities should be trained on how to prevent vegetation fires throughout the whole year and not only during the fire



season. More attention should also be given to monitoring wildfire greenhouse gas emissions as a potential contributor to climate change.”

Countries should also invest in research on the social and economic drivers of fire to improve the way in which they address the underlying causes of fires. Ongoing research at CIFOR is showing that the preconceived notions of why and how fires start are not always right and that, at best, forest managers generally understand only a part of the picture.

FAO is now forming a multidonor trust fund programme to raise funds to respond better to member countries’ demands for assistance in integrated fire management. It is expected to be finalized by November this year.

ITTO published guidelines on fire management in tropical forests in 1997 that provide a basis on which policy-makers and managers at various levels can develop programmes and projects to address specific national, socio-economic and natural problems related to fire in natural and planted tropical forests.

ITTO’s Executive Director, Emmanuel Ze Meka, endorsed the proposed multi-donor trust fund to be established by FAO to assist countries to deal with forest fires.

“We have the knowledge and policies in place to reduce the damage from fire in tropical forests – the main missing link is sufficient funding for training, equipment and monitoring technologies to be able to effectively implement such policies,” he said.



FAO/Simon Maina

# Ecotourism can play vital role in maintaining healthy forests

Rural communities can maximize the benefits of sustainable ecotourism

**27 September 2011** – The continuing boom in ecotourism has the potential to save endangered forests or destroy them, depending on how effectively tourism expansion is managed, an international partnership for forest conservation and improvement said today.

The Collaborative Partnership on Forests, comprising 14 international organizations and secretariats, issued its view on the relationship between ecotourism and forestry today as the world celebrates World Tourism Day and the International Year of Forests.

## **Ecotourism and livelihoods in developing countries**

Tourism has demonstrated resilience in the face of the global economic downturn. Globally, the tourism industry generated more than US\$1 trillion in 2010, according to the World Tourism Organization (WTO). The share of tourism in developing countries is rising steadily, up from 31 percent in 1990 to 47 percent in 2010.

“Sustainable tourism has proven one of the most effective ways of providing economic and employment opportunities for local communities while protecting the world’s natural resources,” said Taleb Rifai, WTO Secretary-General.

Ecotourism, characterized by responsible travel to natural areas that promotes the conservation of the local environment, is one of the fastest-growing segments of tourism worldwide. It is growing by more than 20 percent annually, which is 2–3

times faster than the tourism industry overall.

“For many people, there is an attitude of “we had better see it while it is still there to see” when it comes to visiting threatened forests or endangered wildlife,” said Patrick Durst, a senior forestry official at FAO’s Regional Office for Asia and the Pacific.

## **Local benefits**

Ecotourism can provide local communities with motivation to maintain and protect forests and wildlife. When local people get income and employment from ecotourism, they are less likely to destroy the natural resource through unsustainable exploitation.

“Ecotourism has far greater potential for contributing to income and livelihoods in poor rural communities than what is realized,” said FAO’s Edgar Kaeslin, Forestry Officer in Wildlife and Protected Area Management. “It is crucial that local people are fully involved in the activities and receive sufficient benefits.”

The benefits of ecotourism flowing to local businesses are dramatically higher than those from mass tourism. Standard all-inclusive package tours typically deliver just 20 percent of revenue to local companies, while the rest is captured by airlines, hotels and large tour companies, whereas locally based ecotourism operations that hire locally and are based locally can return as much as 95 percent of earnings to the local economy.

### **Excessive ecotourism poses dangers**

However, failure to limit tourist numbers at popular sites can quickly overload ecosystems and damage fragile natural resources, sometimes permanently.

Also, as with most economic endeavors, when profits are to be made, there is a risk that powerful players will dominate and squeeze out smaller local operators. Under the guise of "ecotourism", less scrupulous enterprises sometime have wittingly or unwittingly introduced negative influences to local people, disrupted local economies and tarnished unique indigenous cultures. In some of the worst instances, indigenous peoples have been displaced or dispossessed of traditional access to natural areas.

### **Ecotourism as sustainable forest management**

The best ecotourism programmes strive to regulate against such abuses and guide it toward maximizing local benefits. Training for local people is crucial to ensure they can compete successfully for desirable ecotourism jobs.

Training for local people is crucial to ensure they can compete successfully for desirable ecotourism jobs. One prominent example is

ecotourism involving critically endangered mountain gorillas in Rwanda, Uganda and the Democratic Republic of the Congo. Tourism in those countries generates significant incentives for governments and local communities to conserve the environment rather than following unsustainable pathways to development, said Doug Cress, coordinator of the UNEP-led Great Apes Survival Partnership.

"Mountain gorillas are the only species of great ape that are actually rising in number," Cress said. "There is no question that is a direct result of the careful commitment to responsible tourism in East Africa that respects the gorillas and their habitat."

In recent years FAO has provided technical assistance to a number of countries, including Egypt, Hungary, Laos, the Philippines and Tunisia, to develop ecotourism as a sustainable forest use. With support from the GEF, FAO recently began implementing a US\$18 million programme in collaboration with Pacific island nations (Fiji, Niue, Samoa and Vanuatu) aimed at developing ecotourism as a major component of sustainable forest management.





# As world goes urban, new focus on role of trees in cities

More attention needed to maximize benefits of urban forests

**3 October 2011** – As the world becomes increasingly urbanized, focused policies and investments aimed at protecting and managing forest and trees in and around cities are needed to strengthen urban livelihoods and improve city environments. This was the message from the international Collaborative Partnership on Forests today on World Habitat Day.

In addition to improving the quality of urban environments, forests in cities can mitigate severe weather impacts by shielding buildings from strong winds and flooding and can save energy and cooling the environment by acting as a buffer in hot weather.

“The accelerating rate of natural disturbances affecting cities such as storms, droughts, floods and landslides reminds us that resilience to disasters is of critical importance and that trees play an important role in protecting city environments,” said Assistant Director-General for the FAO Forestry Department, Eduardo Rojas-Briales. “Good practices in urban and peri-urban forestry can contribute to building resilient cities in terms of mitigation and adaptation to the effects of climate change”.

## **Ecosystem services**

“Trees and forests in cities provide urban dwellers with much needed recreational and ecological values, and during the International Year of Forests we have seen many examples of community activities in cities from tree plantings to nature hikes,” said Jan McAlpine, Director of the UNFF Secretariat. “These ‘green belts’ also serve as valuable habitats for birds and small animals and create an oasis of biological diversity in urban environments.”

Additionally, urban trees afford vital ecosystem services, such as carbon sequestration and

carbon storage, and can serve as a source of alternative energy.

## **Benefits for food security, environmental education**

Urban agriculture and agroforestry, home gardens, and the harvesting of non-wood forest products like mushrooms can supplement household food supplies, although this is not common globally.

Urban forests can also serve as a living laboratory for environmental education in urban settings, helping to bridge the gap between urbanized populations and forests.

## **First ever guidelines on urban forestry**

FAO is helping to develop guidelines for policy-makers and decision-makers on urban and peri-urban forestry to promote sound policies and highlight good practices.

“Often, unclear responsibilities for different parts of the urban forests, a lack of policies and legislation and a lack of comprehensive information hamper successful integrated approaches to urban forestry,” said Cecil Konijnendijk, Deputy Coordinator of a research group on urban forestry initiated by the IUFRO. “Initiatives such as FAO’s guidelines for urban forest policy and management are of great importance.”

“The guidelines, which are set to be published in 2012, will give a comprehensive review of good practices and highlight significant initiatives around the world with the aim of contributing to improved policy development and decision-making.”

# Forests are potential solution in the fight against hunger

More attention to forest foods and services can improve food security in poor nations

**26 October 2011** – The role of forests in providing timber and other wood products must not overshadow their important contribution to feeding many of the world's poorest communities, a group of international forest organizations and secretariats said today.

According to the Collaborative Partnership on Forests, forests can play an even greater role in feeding the world and helping farmers cope with climate change, but their potential to do so is not being fully realized.

With nearly one billion people in the world suffering from chronic hunger, the Collaborative Partnership on Forests said that more attention is needed from national and regional policy-makers and international development agencies on the potential of forests and trees to improve food and nutritional security.

"Forests and trees on farms are a direct source of food and cash income for more than a billion of the world's poorest people," said Assistant Director-General for the FAO Forestry Department, Eduardo Rojas-Briales. "They provide both staple foods and supplemental foods. To enhance these benefits, governments and development partners should increase investments in support of sustainable forest management and the rehabilitation of degraded forest lands."

Rojas noted that, in India, more than 50 million people depend directly on forests for subsistence, while in the Lao People's Democratic Republic, 80 percent of the population consumes wild foods on a daily basis.

## Nutritional values of forest flora substantial

Forest foods and wild animals make a small but critical contribution to the otherwise often bland and nutritionally poor diets of rural people. For instance, wild leaves can be an excellent source of vitamins A and C, protein and micronutrients such as calcium and iron. Fruits are especially good sources of minerals and vitamins and contribute significant quantities of calories. A variety of forest plants have edible roots and tubers, which provide carbohydrates and some minerals.

"Food products are the fastest-growing component of non-wood forest products in many tropical countries," said Emmanuel Ze Meka, ITTO Executive Director. "And adding value to the forest makes it more likely to remain forest rather than converted to other uses."

In many developing countries, however, forest-dependent wildlife and forest foods are increasingly threatened by overexploitation, causing biodiversity loss and putting food security at risk. At a meeting in November 2011, The CBD and CIFOR will discuss new measures for improving the sustainable management of wildlife in tropical and subtropical countries.

Women play an important part in the processing of tree and forest products, the income from which helps their families to achieve food security. In West Africa, for instance, women use shea as a cooking fat and food accompaniment. The harvesting and processing of shea, which is an important ingredient in chocolate and other confectionery, provides rural women with nearly 80 percent of their income.

### **Agroforestry can double yields for smallholder farmers**

Agroforestry combines working trees with crop or livestock production and holds great promise for smallholder farmers. These trees are part of the cycle of productivity on farms and provide numerous products, including food for humans and fodder for livestock.

“Agroforestry provides a climate smart agriculture alternative that can increase food production and improve farmers’ incomes and living standards,” said Tony Simons, ICRAF Director General.

“Agroforestry can both mitigate climate change by storing carbon and help farmers become resilient and adapt to unpredictable seasons.” Over 400 000 farmers in Malawi, United Republic of Tanzania, Mozambique, Zambia and Zimbabwe who are using fertilizer tree systems in their farming

systems have seen food production yields doubled. ICRAF plans to scale-up similar programs across Africa and South Asia.

### **Forests support the agriculture sector**

In addition to their direct contribution to rural diets, forests play another essential role in food security.

“While some observers have posed increased forest protection and increased agricultural production as a zero-sum trade-off, in fact forests provide many ecosystem services – such as those related to pollination, hydrology and climate moderation – that sustain agricultural productivity,” said Frances Seymour, CIFOR Director General. These services are hugely valuable but cannot be measured easily.



FAO/FO-7229/J. Masuch

# Global forest institutions highlight vital role of forests in bioenergy

**7 November 2011** – Rising prices of fossil fuel as well as global efforts to mitigate climate change and reduce greenhouse gas emissions from fossil fuel combustion has put the expanded use of renewable energy high on the political agenda. Wood energy, the world's most important source of bioenergy, is key to responding to growing demands for a potentially carbon-neutral supply of energy.

"Sustainable, well-managed forests can contribute to a switch-over to a greener economy and renewable energy systems with low impact on climate and environment," says Niels Elers Koch, President of IUFRO and chair of the International Conference on the Future Role of Bioenergy from Tree Biomass in Europe, held on 6–11 November 2011 in Vienna, Austria. IUFRO is a member of the Collaborative Partnership on Forests, which comprises 14 international organizations and secretariats.

## **Increasing demand for wood as source of energy**

Global energy demand is projected to increase rapidly in coming years as more people have access to energy and as lifestyles become more energy-demanding.

"In the longer term, forest biomass has the potential to significantly lessen the strain on global energy supply when oil resources decline", said Elspeth MacRae, of Scion, the Forest Research Institute in New Zealand and member of the IUFRO Task Force on Forest Bioenergy. New opportunities for the efficient use of wood for multiple purposes may also arise from innovations in biotechnology for the production of renewable and cost-efficient bioproducts

such as bioplastics, biofuels and biochemicals.

Rolf Björheden, from Skogforsk (the Swedish Forestry Research Institute) and Coordinator of the IUFRO Task Force, said that the increased demand for wood as a source of energy must be balanced with other needs such as conserving biodiversity, storing carbon, ensuring the livelihoods of forest-dependent communities and indigenous peoples, and meeting the needs of conventional forest industries. "Development of regionally adapted technologies and methods for increased, economic, yet sustainable production and harvest of forest biomass for different needs is essential," he said.

In many parts of the world, policy-makers have committed to greater use of bioenergy. For example, the European countries have agreed to achieve a 20 percent share of renewable energy by 2020. Biomass for heat and power generation may come from agriculture, forestry and waste. The recently published European Forest Sector Outlook Study II indicates that wood is by far the largest potential source of renewable energy in Europe.

## **Need for accurate information**

Wood energy is often being traded on informal markets. Therefore it is difficult to assess its real contribution to national energy supply and consumption and its current and potential future removals from forests. In some countries, only 20 percent of current wood energy consumption is being reported by official statistics. The Joint Wood Energy Enquiry of the United Nations Economic Commission in Europe and FAO assists countries in accounting for



these volumes and helps keep track of the rapid changes in wood energy production and consumption. It also facilitates cross-sectoral communication and understanding between energy and forestry.

### **Need to ensure energy security in developing countries**

While the focus in Europe and other regions of the world is on increasing the contribution of forests to renewable energy supply, the challenge in many developing countries is to better ensure energy security and reduce the vulnerability of forest-dependent communities and indigenous peoples. In many developing countries, rural and urban communities are heavily dependent on biomass energy for household cooking and other heating needs. In sub-Saharan Africa, for example, woodfuel accounts for over 80 percent of primary energy demand. Thus, people in Africa are highly dependent on forests and trees outside forests as a source of energy.

Agroforestry – growing trees on farms – is one way of meeting local needs for fuel and, at the same time, taking pressure off forests and woodlands. In developing countries, much of the wood for cooking and heating is grown on farms. According to ICRAF, which promotes the integration of trees into farming systems, half the firewood consumed in Thailand, more than three-quarters of the firewood consumed in Indonesia, Java, Pakistan, the Philippines, Sri Lanka and Vietnam, and four-fifths of the firewood burned in Kerala, India, is cut from farmland and other non-forest areas. In humid Eastern and Central African countries – Burundi, Rwanda and Uganda, in particular – trees grown in home gardens meet most household needs for fuel and timber. In many cash-crop systems, trees grown for shade also eventually provide wood, for example, the silky oak grown in tea plantations in Kenya.

### **Need to understand impacts**

Increasing demand for forest biomass may capitalize on the immense global potential for forest restoration. New analyses show that more than two billion hectares of the world's deforested and degraded landscapes – equivalent to half the size of Asia – offer opportunities for restoration. This potential holds promise not only for the expansion of forest biomass for bioenergy but also for carbon capture as a means to combat climate change.

Currently, the use of fuelwood and charcoal is a driver of landscape degradation in many developing countries. To make fuelwood a source of sustainable and potentially carbon-neutral energy in those countries requires major effort and investment. This could and should become a major element in developing countries' climate change mitigation policies, such as those evolving under the Forest Investment Program in the Democratic Republic of the Congo. The fact that solid biomass in the form of pellets or chips can be transported economically over long distances opens up opportunities for trade in biomass between countries.

"Imports from timber producing countries are likely to increase dramatically, potentially increasing pressures in these countries on land and local populations if sustainable production schemes are not adopted," said the World Bank's Gerhard Dieterle.

The growing use of forest biomass will also increase competition with conventional uses. Thus, adjustments in forest policy and management, and innovations in forest-based production are likely to be required. New technologies and new forest and bio-based products have the potential to provide responses to growing and changing markets and the expectations of societies. "Yet, for benefits to materialize, particularly in developing countries, enhanced access to new technologies and finance streams, along with more transparent markets and improved forest governance conditions, will be required if

these emerging opportunities are to decrease the pressure on primary forests, reverse the trade and market relations that impede the development of more inclusive business models, and facilitate a better distribution of economic benefits," said Pablo Pacheco, a scientist at CIFOR.

"Research can make essential contributions to understanding bioenergy drivers, options and impacts on forest management and forest-based production in the future," said IUFRO President Niels Elers Koch, also in view of the International Year of Sustainable Energy for All in 2012.



# Markets one of the keys to sustainability

Healthy national and international markets are essential for sustaining forests

**16 November 2011** – Markets play a key role in sustaining the environment and particularly the world's forests, according to members of the Collaborative Partnership on Forests, an international consortium of 14 organizations, secretariats and institutions working on international forest issues.

“For many countries, forests provide a major source of foreign exchange and domestic revenue for economic development,” said Emmanuel ZeMeka, Executive Director of ITTO, a member of the Collaborative Partnership on Forests. Moreover, he said, there was a need to establish markets for “a wider range of the goods and services provided by forests”. Ze Meka made these remarks ahead of ITTO's Annual Market Discussion in La Antigua, Guatemala, which focuses on the global benefits of trade in wood products.

## **Expanding markets for forest products and services**

Given that the output value of the world's forest industries was US\$1.7 trillion in 2010 and global wood products exports were worth around US\$400 billion, it is clear that international and domestic markets for these products are very significant, both in formal and informal parts of the economy. A common trend globally is to add more value to products domestically and invent new products and solutions to promote wood use. Tropical countries account for about 10 percent of global output value and of forest products exports. However, significant areas of forests in these countries continue to be lost each year.

How can more value be added to forests to ensure that they are well-managed and not converted to other land-uses? Markets have a crucial role to play in this regard. Recent studies suggest that the value of forest ecosystem services, when taking into account water, biodiversity, carbon storage and other diverse benefits, is in the trillions of dollars. Few functioning markets exist to realize these values, however, so they remain largely theoretical, especially in developing countries where the need to increase the value of standing forests is most urgent.

Recent developments in carbon markets are encouraging, however. A voluntary market in forest carbon is developing to help countries in their efforts to mitigate and adapt to climate change. Discussions on reducing emissions on deforestation and degradation under the framework of the UNFCCC may result in an international forest carbon market, or a fund-based mechanism, but there is still work to be done to operationalize this. In the meantime, regional and bilateral initiatives to compensate countries that conserve and sustainably manage their forests have raised hope that emerging forest carbon markets will be a significant new source of revenue to add value to forests.

## **Alternative solutions sought in the transition to the green economy**

Even if carbon markets deliver the benefits hoped for, there will still be a need to realize more of the value of forests in order to compete with highly lucrative alternative land-uses like oil palm, soy beans and other agricultural and energy crops. International

initiatives need to look for innovative solutions, including payments for biodiversity conservation. Despite global concern regarding the loss of biodiversity, the forests that hold the bulk of such diversity are those that are being lost the fastest. With this evidence of a market failure, it should be within humanity's grasp to introduce payments similar to those being developed for carbon to help fund conservation of biodiversity.

Additionally, a move toward a green economy in many parts of the world has resulted in rising demand for eco-friendly products. This demand ranges from building materials to less carbon intensive fuels. New technologies and the use of more wood fibre from forests can play a role in meeting these mounting demands. Increasing the use of sustainably produced wood in existing and new applications needs to be a key component of any

transition to a green economy. In the effort to promote such products, market distortions need to be avoided and subsidies should not divert resources to less than optimal uses. And efforts such as certification and public procurement policies to ensure that forest products really do meet the environmental standards required of them should not become market barriers.

The forest sector has played and continues to play an important and long-term role in the social, environmental and economic development of many countries around the world. The Collaborative Partnership on Forests is working to help unlock the potential of markets to realize the value of forests in reducing carbon emissions, conserving biodiversity, providing clean water and other roles that forests play and thereby retain these values in perpetuity.



FAO/Joan Manuel Baliellas