



FAO FORESTRY



New leader for FAO forestry

The FAO Forestry Department welcomes a new head, Assistant Director-General Eduardo Rojas-Briales, effective 1 March 2010.

Rojas-Briales, a Spanish national, comes to FAO from the Faculty of Agronomy of the Polytechnic University of Valencia, Spain, where he was a professor in the M.Sc. programme in Forestry from 2003. In 2004 he was appointed Vice-Dean of the Faculty.

Rojas-Briales holds an M.Sc. degree in Forestry from the University of Freiburg, Germany and a Ph.D. from the Polytechnic University of Madrid, Spain. From 1992 to 1998, he was Director of the Catalan Forest Owners Association. He also served as part-time Professor of Forestry Policy at the University of Lleida, Spain (between 1994 and 2000). From 1996 to 1999 he headed the Forest Policy Area for the Mediterranean Regional Office of the European Forest Institute (EFI), where he was responsible for projects on multifunctional forestry as a means for rural development, on multifunctional forest management and policy for mountainous regions and on national forest programmes. From 1999 to 2003 he did consulting work in forest policy. Earlier in his career, he worked for the forest services of Germany and Catalonia, Spain.

His particular areas of interest and expertise include silviculture, afforestation, forest law, forest policy, national and regional forest programmes, and institutional reform.

Since 1997 Eduardo Rojas-Briales has been on a number of boards and panels, among others the Scientific Advisory Board of EFI from 1998 to 2002.

FAO releases key findings of the Global Forest Resources Assessment 2010

World deforestation, mainly the conversion of tropical forests to agricultural land, has decreased over the past ten years but continues at an alarmingly high rate in many countries, according to the results of the Global Forest Resources Assessment 2010 (FRA 2010), released in March.

FAO's most comprehensive forest review to date indicates that globally, just under 13 million hectares of forests were converted to other uses or lost through natural causes each year in 2000–2010, as compared with close to 16 million hectares per year during the 1990s. The study covers 233 countries and areas. It indicates that the world's total forest area is just over 4 billion hectares or 31 percent of the total land area.

Brazil and Indonesia, which had the highest loss of forests in the 1990s, have significantly reduced their deforestation rates. In addition, ambitious tree planting programmes, especially in China, India, the United States of America and Viet Nam – combined with natural expansion of forests in some regions – have added more than 7 million hectares of new forests annually. The net loss of forest area has thus been reduced to 5.2 million hectares per year in 2000–2010 (an area equivalent to that of Costa Rica), down from 8.3 million hectares per year in the 1990s.

South America and Africa had the highest net annual loss of forests in 2000–2010, with 4.0 and 3.4 million hectares respectively. Oceania also registered a net loss, due partly to severe drought in Australia since 2000.

Asia, on the other hand, registered a net gain of some 2.2 million hectares annually in the last decade, mainly because of large-scale afforestation programmes in a few countries, especially China. However, conversion of forested lands to other uses continued at high rates in many countries in South and Southeast Asia.

In North and Central America, the forest area remained fairly stable, while in Europe it continued to expand, although at a slower rate than previously.

In general, the results are encouraging, showing for the first time that the rate of deforestation has decreased globally through concerted efforts taken at both the local and international levels.

However, the rate of deforestation is still very high in many countries. Primary forests – forests undisturbed by human activity – account for 36 percent of total forest area but have decreased by more than 40 million hectares since 2000. This change is largely due to reclassification of primary forest to "other naturally regenerated forests" because of selective logging or other human interventions.

Other key findings of FRA 2010 include the following:

- The area of forest in national parks, wilderness areas and other legally protected areas has increased by more than 94 million hectares since 1990, now equalling 13 percent of the total forest area.
- Forests – among the world's most important carbon sinks – store some 289 gigatonnes (Gt) of carbon in trees and vegetation. Carbon stocks in forest biomass decreased by an estimated 0.5 Gt per year in 2000–2010, mainly because of a reduction in total forest area.
- Fires, pests and diseases are causing increased damage to forests in some countries. On average, 1 percent of all forests



was reported to be significantly affected each year by forest fires. Outbreaks of forest insects damage some 35 million hectares of forest annually. Extreme weather events such as storms, blizzards and earthquakes also took a heavy toll in the past decade.

- Seventy-six countries have issued or updated their forest policies since 2000, and 69 countries – primarily in Europe and Africa – have enacted or amended their forest laws since 2005.

Data collection for the Global Forest Resources Assessment is becoming more comprehensive and precise. New data and additional information on afforestation and on natural expansion of forests for the past 20 years has made it possible to estimate rates of deforestation and loss from natural causes more accurately. The new global estimate for 1990 to 2000 (close to 16 million hectares per year) is higher than was estimated in FRA 2005 (13 million hectares), because it now also includes deforestation within countries that have had an overall net gain in forest area.

FAO's Global Forest Resources Assessments are published every five years. More than 900 specialists from 178 countries and forest-related international organizations were involved in the Global Forest Resources Assessment 2010. The full report of this assessment will be released in October 2010. In addition, an FAO-led global remote-sensing survey of forests, sampling some 13 500 sites in the world over a 15-year period, will be completed towards late 2011, providing even more accurate information on rates of deforestation, afforestation and natural expansion of forests.

A brochure reporting the key findings is available at: www.fao.org/forestry/fra/fra2010

Reforestation and agroforestry for longer-term recovery in Haiti

The magnitude 7.0 earthquake that struck Haiti on 12 January 2010 was devastating in terms of fatalities, injuries and loss of housing, infrastructure and livelihoods. Recovery will be an enormous undertaking. The United Nations immediately launched a Flash Appeal for US\$1.4 billion to cover emergency humanitarian assistance and key early recovery projects until December 2010.

In the longer term, relief efforts will have to focus on "building back better" – ensuring that Haitian institutions are stronger and more resilient than before, and that the most vulnerable people are protected. With more than 65 percent of Haitians engaged primarily in agriculture, FAO has already begun to provide seeds, fertilizer and tools, aiming to reach 180 000 smallholder farming families.

Forestry will have a key role in improving the country's low agricultural productivity. Over time, Haiti has suffered from loss of fertile soils and potential farmlands as a result of heavy

deforestation and poor watershed management, which have caused severe soil erosion and vulnerability to flooding from frequent tropical storms and hurricanes. Some 95 percent of Haiti's original forests have been destroyed; nearly 10 percent of the country's forest cover (11 000 ha) was lost between 1990 and 2005.

The earthquake creates a risk of even greater deforestation as displaced residents of Port-au-Prince, seeking food and shelter in the countryside, are likely to cut remaining trees as a source of energy and construction material.

The restoration of the protective and productive functions of forests through reforestation and agroforestry on the barren hills of Haiti will play a critical role to prevent soil erosion and landslides, protect downstream agricultural production and act as a protective buffer to regulate the quantity and quality of water to downstream communities, agriculture and fisheries. FAO considers upland reforestation and agroforestry as urgent priorities, as any initiatives in downstream rural areas and cities can be destroyed without related upstream integrated watershed management. FAO has developed project proposals on reforestation and agroforestry which are to be presented for funding at the International Donors' Conference "Towards a New Future for Haiti" in New York on 31 March 2010. The conference has been organized by the United Nations Office of the Special Envoy for Haiti to mobilize international support to lay the foundation for Haiti's long-term recovery.

The proposed reforestation programme includes targeted measures to protect reforested areas from overexploitation for fuelwood and charcoal to ensure the sustainable long-term rehabilitation of Haiti.

FAO has also launched the initiative "Fruit Trees for Haiti" in support of the Haitian Government's campaign to plant 10 million trees. FAO Director-General Jacques Diouf, during a four-day visit to the country in March, noted that a significant increase in national food production, rural employment and reforestation are the keys to a greener, more productive Haiti. The FAO initiative focuses on providing fast-growing fruit trees for school gardens. Later other tree species will be included. A mere US\$5 donation will buy an avocado or mango tree for a Haitian school garden, and covers fertilizer and other inputs as well as educational material to build awareness of the role of trees in protecting the environment and reducing risks from hurricanes, flooding and erosion. For more information, or to contribute, see: getinvolved-donate.fao.org

FAO and CPF investigate measurement of forest degradation

Rates of deforestation and forest loss are regularly measured, but forest degradation is harder to measure, even though it is similarly important. Many recent environmental goals and initiatives rely on measurement of forest degradation – including the first Global



Objective of the United Nations Forum on Forests, climate change initiatives for reducing emissions from deforestation and forest degradation (REDD) in developing countries, and the 2010 Biodiversity Target of the Convention on Biological Diversity.

International forest-related organizations have defined forest degradation as the reduction of the capacity of a forest to provide goods and services. Beyond this core definition, however, perceptions regarding forest degradation are many and varied, depending on the driver of degradation and the main point of interest – biodiversity conservation, carbon sequestration, wood production, soil conservation or recreation, for example. In the absence of agreed definitions and assessment methods, few countries are currently able to report on the area of degraded forests or the degree of forest degradation.

FAO and other members of the Collaborative Partnership on Forests (CPF), together with other partners, are undertaking a special study to identify the elements of forest degradation and the best practices for assessing them. The main objective of the study, which is carried out under the umbrella of the Global Forest Resources Assessment 2010 (FRA 2010), is to help strengthen the capacity of countries to assess, monitor and report on forest degradation by:

- identifying specific elements and indicators of forest degradation and degraded forests;
- classifying elements and harmonizing definitions;
- identifying and describing existing and promising assessment methodologies;
- developing assessment tools and guidelines.

Forests may be degraded in terms of loss of any of the goods and services that they provide (fibre, food, habitat, water, carbon storage and other protective, socio-economic and cultural values). By using the seven thematic elements of sustainable forest management, the study will identify suitable indicators to assess the degree of degradation of a forest at different management levels.

The study approach includes a survey of existing country practices to see what is being measured; an analytical study on definitions to provide a framework for the process; and a series of case studies to describe proven or promising methodologies and tools for assessing different aspects of forest degradation.

From 8 to 10 September 2009 a technical meeting was held at FAO headquarters in Rome to review the results and to recommend actions to improve measurement, assessment and reporting on forest degradation. Participants included all the contributors to the study and representatives of international agencies.

The case studies and an analysis of definitions of forest degradation were presented and discussed. Working groups then discussed indicators of degradation and proven and promising assessment methodologies in more detail. A session was also held on forest degradation and climate change.

Among its main outcomes, the meeting endorsed a generic definition of “forest degradation” as a reduction in the capacity of a forest to provide goods and services, and noted that this definition provides a framework for developing more specific definitions for particular purposes. Participants also called for:

- improved communication of the many different aspects of forest degradation to climate change negotiators;
- focused attention on harmonization of definitions and methods for monitoring five aspects of forest degradation: stocking level, biodiversity, forest health, level of use/production and forest soil;
- the inclusion of forest degradation in terms of climate change into the proposed mechanism for reducing emissions from deforestation and forest degradation (REDD), since methodologies do exist to monitor changes in carbon stocks;
- the development of tools and guidelines for measuring different aspects of forest degradation.

Further information is available at: www.fao.org/forestry/degradation-cpf