



FAO FORESTRY

FRA 2005: FAO presents new global forest figures

The latest global data collected by FAO indicate that deforestation continues at an alarming rate, although net forest loss is slowing down.

FAO released key findings of *the Global Forest Resources Assessment 2005* (FRA 2005) at a press conference in Rome on 14 November 2005. The Organization has been coordinating such global assessments every five to ten years since 1946. Yet FRA 2005, which covers 229 countries and territories for the period 1990 to 2005, is the most comprehensive assessment to date of forest resources, their uses and value. The data for FRA 2005 were provided to FAO by national governments and resource assessment specialists, with more than 800 people involved in the entire process, including 172 national assessment teams.

The results indicate that each year about 13 million hectares of the world's forests are lost to deforestation. However, the annual net loss of forest area (taking into account gains due to new planting and natural expansion of existing forests) has decreased from an estimated 8.9 million hectares per year between 1990 and 2000 to 7.3 million hectares per year between 2000 and 2005 – equivalent to a loss of 0.18 percent of the world's forests per year, or 200 km² every day.

Forests now cover nearly 4 billion hectares or 30 percent of the world's land area. However, half of all forest area lies within only five countries: the Russian Federation, Brazil, Canada, the United States and China.

South America suffered the largest net loss of forests between 2000 and 2005 – around 4.3 million hectares per year – followed by Africa, which lost 4.0 million hectares annually. Oceania registered a smaller net loss (356 000 ha per year), as did North and Central America (combined, 333 000 ha per year).

Asia moved from a net loss of around 800 000 ha per year in the 1990s to a net gain of 1 million hectares per year between 2000 and 2005, primarily as a result of large-scale afforestation reported by China. Europe's forest area continued to expand, although at a slower rate than in the 1990s.

Primary forests – forests with no visible signs of past or present human activities – account for 36 percent of total forest area, but are being lost or modified at a rate of 6 million hectares a year through deforestation or selective logging.

FRA 2005 also indicates that new forests and trees are being planted at increasing rates, but forest plantations still account for less than 5 percent of the total forest area.

In addition to the figures on forest area and area change, FRA 2005 includes information on a large number of variables, from biological diversity to carbon sequestration. The following are some of the highlights:

- 11 percent of forests are designated principally for the conservation of biological diversity, and such areas have increased by an estimated 96 million hectares since 1990.
- Around 348 million hectares of forests are designated primarily

for protective functions: to conserve soil and water, control avalanches and desertification, stabilize sand dunes and protect coastal areas.

- One-third of the world's forests are mainly used for production of wood, fibre and non-wood products, and more than half have production of these products as one of their management objectives.
- The number of native tree species varies widely, from three in Iceland to 7 780 in Brazil. In most regions the ten most common tree species (by volume) account for more than 50 percent of the total wood volume. On average, 5 percent of the tree species native to a country are either vulnerable, endangered or critically endangered.
- 84 percent of the world's forests are publicly owned, but private ownership is on the rise.
- Around 10 million people are employed in forest management and conservation.
- The amount of carbon stored in forest biomass alone is about 283 gigatonnes (Gt), but this amount decreased globally by 1.1 Gt annually between 1990 and 2005. Carbon stored in forest biomass, deadwood, litter and soil (to a depth of 30 cm) is more than the amount of carbon in the atmosphere.

The findings of FRA 2005 will support decision-making for policies, programmes and outlook studies in forestry and sustainable development at all levels – local, national and international. The assessment will also assist countries and the international community in gauging the important role of the world's forest resources in fulfilling the Millennium Development Goals, in particular in meeting the targets set for reducing poverty and ensuring a sustainable global environment.

The FRA 2005 main report, which analyses the FRA results in the light of progress towards sustainable forest management, will be published in early 2006. It will be followed by seven thematic studies providing additional information on planted forests, mangroves, bamboo, forest fires, forest insect pests, ownership of forests and trees, and forests and water. The global tables and individual reports from each of the 229 countries and territories covered are available online at www.fao.org/forestry/fra2005.

Oscar Fugalli (1922–2005)

FAO and the forestry community lost a dedicated colleague and mentor with the passing of Oscar Fugalli, at age 83, on 15 October 2005.

Fugalli was born in Italy and studied forestry at the State University of Florence, Italy and the New York State University, Syracuse, United States. He began his professional career with the Italian Forestry Service. In 1951, during the difficult restoration period following the Second World War, he was seconded to FAO – the beginning of an association that lasted more than half a century.



At a Commonwealth Forestry Association outing, Oscar Fugalli holds a Hollywood Oscar statuette as he spoofs Oscar Wilde, speaking on “the importance of being Oscar”

Oscar Fugalli worked on the staff of the FAO Forestry Department for more than 30 years. From his early years in the special section on forest policy, where he worked with René Fontaine (one of the founding fathers of FAO), Fugalli rose through the professional ranks to become Chief of the Forest Management Branch within the Forest Resources Division.

He was instrumental in having the secretariat of the International Poplar Commission placed within FAO and guided its activities for 20 years. Fugalli was also instrumental in founding the FAO Panel of Experts on Forest Gene Resources, established in 1968 to provide international leadership and guidance in this field. He served as Secretary of the FAO Committee on Mediterranean Forestry Questions – *Silva Mediterranea*, encouraging forestry research projects in countries in the Mediterranean basin and supporting networking of research institutions. He was involved with all World Forestry Congresses held during his FAO career, and was Associate Secretary General of the eighth congress, held in Jakarta, Indonesia in 1978. Subsequently he was seconded by FAO to the Permanent Interstate Committee for Drought Control in the Sahel (CILSS), where he was adviser in forestry economics until his retirement in 1982.

Throughout his FAO career, Fugalli forged links between FAO and the International Union of Forest Research Organizations (IUFRO), seeking to bridge the gap between forestry science and development, particularly in developing countries. While at FAO, he helped organize three FAO/IUFRO World Consultations on Forest Tree Breeding (1963, 1969, 1977), the first FAO/IUFRO Symposium on Internationally Dangerous Forest Diseases and Insects (1964) and the FAO/IUFRO Symposium on Man-Made Forests (1967).

For many people, retirement is a time to slow down, but when Oscar Fugalli retired from FAO he was just getting started. From 1983 to 1991, he helped initiate IUFRO's Special Programme for

Developing Countries (SPDC) and served as its first coordinator. FAO subsequently executed a number of the national and subnational projects in forest tree seed research and forest tree improvement formulated in Africa under this programme. After 1991, Fugalli continued to serve IUFRO and SPDC as a volunteer, both in Vienna and Rome. In recognition of his outstanding service he was awarded the IUFRO Distinguished Service Award in 1992 and IUFRO's highest award, Honorary Membership, in 1995.

Fugalli's association with FAO did not end with his retirement. He was a great supporter of the ideals and work of the Organization, and volunteered his services without compensation for 23 years, undaunted by age or illness. “I feel very much indebted to FAO,” he said in an internal FAO newsletter 1997. “I’m paying back what I got. I continue working for FAO to help the developing world, which is poor and getting poorer and poorer. The little I can do is something that is needed. What I can do is far from being adequate, but at least it is a contribution that I’m happy to be able to make.” In addition to lending his extensive experience and knowledge to the Forest Resources Division and the International Poplar Commission, he worked humbly and tirelessly to review and classify the invaluable collection of “grey literature” held in FAO's Forestry Branch Library, which he had helped to establish. He was still working in the library – where he had his own desk – until a few weeks before his death.

Oscar Fugalli was a friend and father figure to many and had a great influence on the careers of foresters, forest researchers and leaders in forestry. He delighted in bringing together people from all over the world and transferring knowledge and technology to younger generations and to those in developing countries. He believed in teamwork and instilled a sense of camaraderie among those who worked with him, at FAO and beyond. He was available to all, young and old, regardless of their position, and stood by his colleagues and friends in times of need.

He loved plants and books; his office was so full of both that it was difficult to find a place to sit, and he filled his garden with exotic trees. Admired for his memory, he was able to recall in detail people, writings, events and issues. Colleagues and friends remember Oscar Fugalli as the heart of the FAO Forestry Department: steady, smart and balanced, warm, fair, meticulous and helpful. He always retained a strong though quiet sense of humour and mischief – and knew how to circumvent the rules and protocols when necessary.

Oscar Fugalli was a member of the FAO forestry team for as long as anyone can remember. As noted by FAO Deputy Director-General David Harcharik, who was originally hired by him, Oscar Fugalli was a brick in the very foundation of FAO's work in forestry – the last of the original bricks on which the work of today's department is based. His dedication to duty, his unerring focus, his institutional memory and his technical knowledge were an inspiration to all. No one in history was more associated with FAO



Forestry. It was sadly fitting that on the day of his funeral, FAO celebrated its sixtieth anniversary. Oscar Fugalli worked with FAO for 55 of those years as a leader, manager, friend, mentor and volunteer – to the very end.

FAO award for leader of community-based natural resource management project in Cambodia

Patrick T. Evans has been awarded the 2005 B.R. Sen Award in recognition of his role in leading an eight-year FAO project that helped develop community-based integrated management of forestry and fishery resources on Cambodia's Tonle Sap Great Lake. The B.R. Sen Award is presented annually to an FAO field officer who has made an outstanding contribution to the advancement of the country or countries to which she or he is assigned.

Although the Tonle Sap lake had long been the main source of sustenance and survival for the millions of people who live around its shores and on its waters, in the 1990s its rich resources were being poorly managed. Fish and timber from surrounding forests were being harvested unsustainably, and fishing rights were hotly disputed. In addition to overfishing, excessive clearing of the forested land surrounding the lake, primarily for agriculture and for fuelwood to support an expanding brick-making industry, was affecting the productivity of the lake's fisheries; the fish depended on the annual flooding of hundreds of thousands of hectares of forest for nutrients, food and habitat.

In light of the mounting problems, Cambodia's Ministry of Agriculture, Forestry and Fisheries teamed up with FAO to establish the project "Participatory Natural Resource Management in the Tonle Sap Region" in one of the lake's poorest provinces, Siem Reap. After assessing the way that natural resources were

FAO prepares for Regional Forestry Commission meetings in 2006

FAO, through its decentralized forestry structure, supports six Regional Forestry Commissions, established between 1947 and 1961: one each for Africa, Asia and the Pacific, Latin America and the Caribbean, Europe, the Near East and North America. These commissions provide a forum for FAO member countries to discuss both technical and policy issues at the regional level, supporting the efforts of countries to implement sustainable forest management. The commissions generally meet every second year; all six will meet in 2006:

African Forestry and Wildlife Commission – fifteenth session

29 March – 1 April 2006

Maputo, Mozambique

Asia-Pacific Forestry Commission – twenty-first session

17–21 April 2006

Dehra Dun, India

European Forestry Commission – thirty-third session

23–26 May 2006

Zvolen, Slovakia

Near East Forestry Commission – seventeenth session

5–9 June 2006

Larnaca, Cyprus

Latin American and Caribbean Forestry Commission – twenty-fourth session

26–30 June 2006

Santo Domingo, Dominican Republic

North American Forest Commission – twenty-third session

23–25 October 2006

Vancouver, Canada

Drawing on regional experiences, the commissions advise FAO on policy formulation and on priorities for its forestry programme. They report to the FAO Committee on Forestry (COFO), a global forum that brings together the heads of the world's national forestry agencies every two years. Regional Forestry Commissions address issues identified by the countries in the region as well as issues identified at the global level, linking international dialogue with national action.

To enrich the discussions, FAO encourages wide participation of government officials from forestry and other sectors as well as representatives of international, regional and subregional organizations, including NGOs, and the private sector.

For more information, visit the Web site of the Regional Forestry Commissions: www.fao.org/forestry/site/30135/en



used in the area, in 1997 the project team began to help the villagers organize local resource management organizations which integrated concerns for people's livelihoods with attention to the sustainability of forestry and fisheries. The improved management, combined with a 1997 government ban on brick kilns in the region, stemmed excessive timber harvesting, and today much of the cleared flood forest is growing back.

As a result of a visit by Prime Minister Hun Sen to the project area after a series of devastating floods in 2000, the government initiated broader fisheries reform, releasing 56 percent of the area previously controlled by commercial interests to public access.

By the project's end in April 2005, some 15 community-based natural resource management organizations were established in 116 villages in Siem Reap, actively managing 108 000 hectares on and around the lake. These organizations make decisions via democratic processes, with clear by-laws for their transparent and effective operation, and manage the resources under their control according to detailed five-year plans.

The government has now incorporated the concept of community-led development planning and resource management into its development planning programmes and national legislation, to spread the project benefits countrywide.