

unasyuva



Food and Agriculture
Organization
of the United Nations

An international journal
of forestry and forest
industries

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237



INTERNATIONAL YEAR OF FORESTS 2011

Celebrate forests every day

EDITORIAL

INTERNATIONAL YEAR OF FORESTS 2011

Celebrate forests every day

2011 is a special year for forests and for all who care about them. To inaugurate it, FAO has created a special issue of *Unasylva*.

More than 100 international days are celebrated throughout the year, in recognition of a vast range of issues, occupations, activities and cultural values important to humanity. What better way to demonstrate the myriad functions of forests than to show that forests have a link to almost all of them? The *Unasylva* Editor, Andrea Perlis, has compiled a collection of images that illustrate these links. With only photos and the briefest of stories, the issue expresses the theme of the international year – “Forests for people” – by showing how forests are important to nearly all kinds of human activity. So when you celebrate Peace Day in 2011 – or International Women’s Day, or Human Rights Day, or World Health Day – even International Civil Aviation Day – you can celebrate forests.

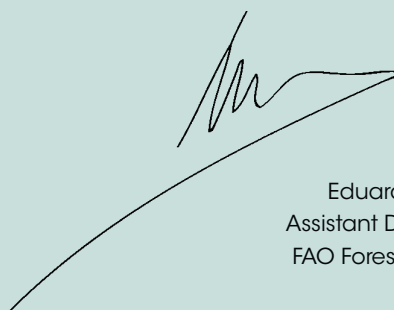
While the international days are the thread that holds this collection of photos together, the organization is thematic, rather than chronological, the better to catalogue forests’ place in many sectors. We admit that a few have been left out – World Tobacco-Free Day and World Television Day, for instance – but perhaps you can think of forest linkages even to these.

Some of the photos highlight FAO activities and those of our partners; many come from less usual partners, UN agencies that are not often associated directly with forestry – such as the International Organization for Migration, the United Nations Capital Development Fund, the United Nations Industrial Development Organization, the International Fund for Agricultural Development and the United Nations Educational, Scientific and Cultural Organization.

We have not managed to be completely comprehensive in the selection – it has not been possible to obtain photos from every country, and you will surely think of great examples that we have left out. We welcome you to send us your own photos and captions (to unasylva@fao.org), and time and space permitting, we may highlight them on a calendar that we will run on the FAO Forestry Web site throughout the year.

You may notice that one day is missing from the collection. There is no universally celebrated day for forests. We hope that the International Year of Forests will change this, and give impetus to consider creating an international day for forests, as recommended by the FAO Committee on Forestry at its most recent meeting in October 2010.

I hope you will enjoy this special all-photo issue, and celebrate forests all the year long. Celebrate forests for people – and people for forests, and forests for life.



Eduardo Rojas-Briales
Assistant Director-General
FAO Forestry Department

Visit the Web site for the international year, www.un.org/en/events/iyof2011, and FAO’s site devoted to the year at www.fao.org/forestry



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Cover photo: In a mass wedding held on Valentines Day, 14 February, hundreds of couples celebrate their marriage by planting mangrove saplings. In this annual event designed to rehabilitate fish spawning grounds, the government of Puerto Princesa City, the Philippines, allows couples to marry free of charge – as long as they plant a mangrove. ©Reuters/Romeo Ranoco

PEOPLE

Family

1 JANUARY
Global Family Day

15 MAY
International Day of Families

There are 25 million family forest owners worldwide. Organizing these small forest holders is a key to sustainable forest management and better livelihoods. The International Family Forestry Alliance (IFFA) gives them a voice at the global level and assists in sharing of experience. For example, IFFA organized this exchange exercise for Swedish and Kenyan family foresters, supported by Growing Forest Partnerships.

JIM DEGERMAN



A mother and her children transport wood home from the Yoko Forest in the Democratic Republic of the Congo. In forested developing countries, rural families commonly depend on woodfuel for cooking and heating. ©FAO/24683_1790/GIULIO NAPOLITANO



Forests: a rich resource for family recreation: bicycling on a family-friendly forest trail.

©CROWN COPYRIGHT/FC PICTURE LIBRARY



1 OCTOBER
International Day for Older Persons

In Europe, private forest owners are ageing, as part of a general trend towards an ageing population in developed regions, compounded by increased rural-to-urban migration. This is likely to have an impact on forest management, as the motivation of future owners to participate in forestry is uncertain (Turkey). FAO/FO-6988/SEVGI GORMUS



Elders pass along knowledge and respect for natural resources: In Gujarat, India, a tribal elder speaks up in a community's effort to protect tribal rights over forests and forest resources, facilitated by the non-governmental organization ARCH (Action Research in Community Health and Development). ARCH



1 JUNE
International Children's Day
12 AUGUST
International Youth Day

Childhood encounters age.
©UNESCO



Children are the hope for the forests of the future: a young boy paints a home-made tree in a Tokyo street, Japan. As the world becomes increasingly urbanized, it is more important than ever to educate city children about the importance of forests and trees. UN PHOTO/70319/JAN CORASH

Schoolchildren in Rwanda set out to plant trees on World Environment Day 2010. MEAGHAN O'NEILL



Children plant trees to celebrate Tree Day (el Día del Árbol) at the Escuela Nacional Central de Agricultura, Guatemala. FAO/FO-6147/EDWIN E. VAIDES LÓPEZ

12 JUNE
World Day Against Child Labour

Like children in many countries, this young boy in Assam, India labours hard in carrying fuelwood over long distances. UN PHOTO/149396/JEAN PIERRE LAFFONT



PEOPLE Women



In Elisiya, Bangladesh, Alo Rani, 36, weaves a basket from bamboo, an important non-wood forest product. She received financial and technical assistance to develop her bamboo weaving business.

©IFAD/3590/G.M.B.AKASH

8 MARCH

**International Women's Day
United Nations Day for Women's
Rights and International Peace**

15 OCTOBER

International Day of Rural Women

25 NOVEMBER

**International Day for the
Elimination of Violence against
Women**



This women's collective in Burkina Faso gathers *Butyrospermum paradoxum* ssp. *parkii* nuts for processing into shea butter for sale.

FAO/CFU000183/ROBERTO FAIDUTTI

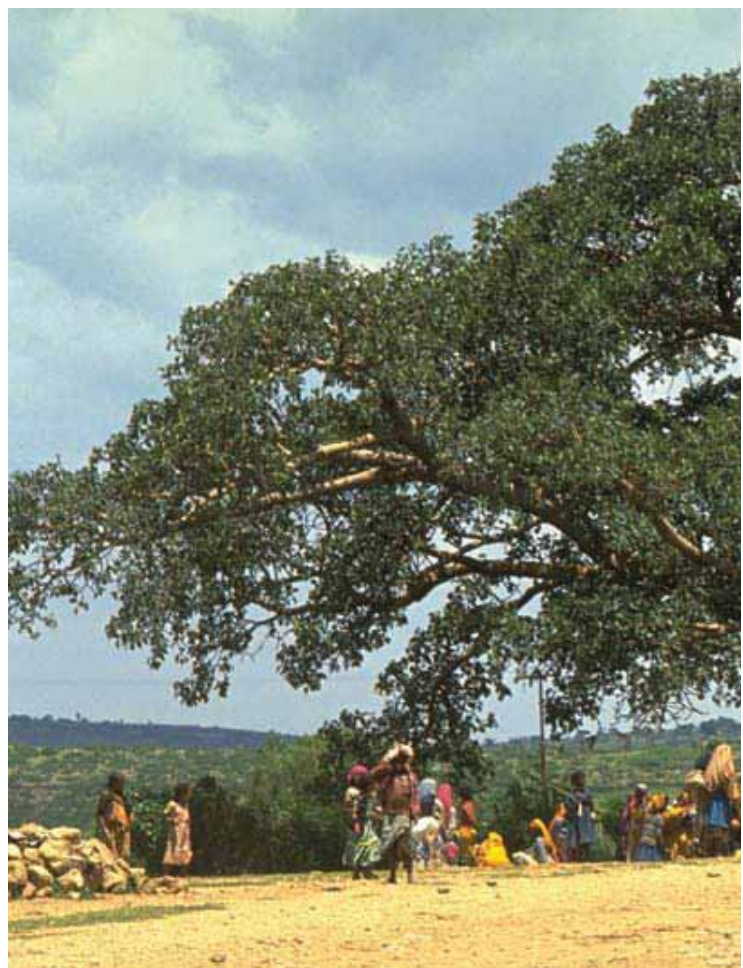


Women play a particularly important role in managing forests because they depend on them for many of their activities. This woman in Argentina, for instance, has to spend much time and effort in collecting fuelwood and carrying the heavy load home. CARE



The indigenous Shavante Indians of Brazil make fire using sticks from the buriti (*Mauritia flexuosa*), a palm that grows in the Amazon forest; the fibre is also used to make art crafts such as baskets.

UN PHOTO/31707 / JOSEANE DAHER



21 MAY
World Day for Cultural Diversity for
Dialogue and Development

11 JULY
World Population Day

9 AUGUST
International Day of the World's
Indigenous People

16 NOVEMBER
International Day of Tolerance

DECEMBER 20
International Human Solidarity Day



People rest under the shade of a large tree in the Shewa region, Ethiopia.

©IFAD/12342/ALBERTO CONTI

3 DECEMBER
International Day of Disabled
Persons

All people should be able to enjoy the beneficial effects of visiting the forest. In the United Kingdom, where there are over 8.6 million disabled people (including people with hearing, sight, speech and learning impairments as well as those with physical impairments), the Forestry Commission consults with representatives of disabled access groups to ensure equal access and enjoyment of the outdoors for all people under the Equality Act 2006 and the amended Disability Discrimination Act 2005.

FORESTRY COMMISSION/1044046/
ISOBEL CAMERON



SOCIAL AND ECONOMIC DEVELOPMENT

Food security

16 OCTOBER
World Food Day



In the Democratic Republic of the Congo, the leaves of *Gnetum* sp. are consumed as a leaf vegetable and also provide revenue for women, further contributing to food security. FAO/FO-7084/ OUSSEYNOU NDOYE



Children learn improved food production skills in an FAO food security project in a drought-prone area of Honduras. The project encourages tree growing to shade and protect crops and poultry and to retain moisture in the soil. The trees are also pruned for fuelwood.

©FAO/22087/GIUSEPPE BIZZARRI

In Senegal and other savannah areas of sub-Saharan Africa, baobab (*Adansonia digitata*) is an important contributor to food security. Its fruit contains 50 percent more calcium than spinach, is high in anti-oxidants, and has three times the vitamin C of an orange. The leaves are also an important source of vitamins and micronutrients, and the seeds produce edible oil.

©IFAD/14920/ROBERTO FAIDUTTI



SOCIAL AND ECONOMIC DEVELOPMENT

Alleviating poverty

More than 25 percent of the world's population – an estimated 1.6 billion people – rely on forest resources for their subsistence and livelihoods. Of these almost 1.2 billion live in extreme poverty, like this family in Bangladesh. Sustainable forest management, including ensuring people's rights to use forest resources in a sustainable way, is therefore key to the fight against poverty. ©FAO/24706_0831/MUNIR UZ ZAMAN



The Lobi people of southern Burkina Faso live in houses made out of mud and tree branches. Forests and trees provide poor families with food, shelter, clothing and heating...

©IFAD/10291 /FRANCESCO PAOLO GIANZI

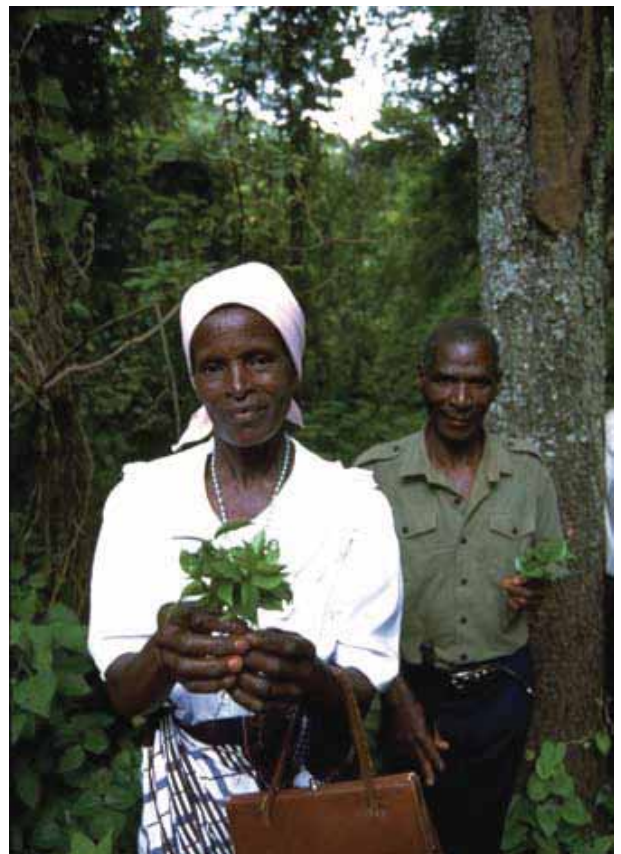
17 OCTOBER
International Day for the
Eradication of Poverty

A United Nations Development Programme (UNDP) supported project in Khovd Province, Mongolia, offers farmers converted land for the production of fruit tree seeds to generate additional income and prevent deforestation in the region. UN PHOTO/420689/ESKINDER DEBEBE



....and also generate income through employment
and through the sale of goods and services (Malawi).

UNCDF/MALAWI047 / ADAM ROGERS



SOCIAL AND ECONOMIC DEVELOPMENT

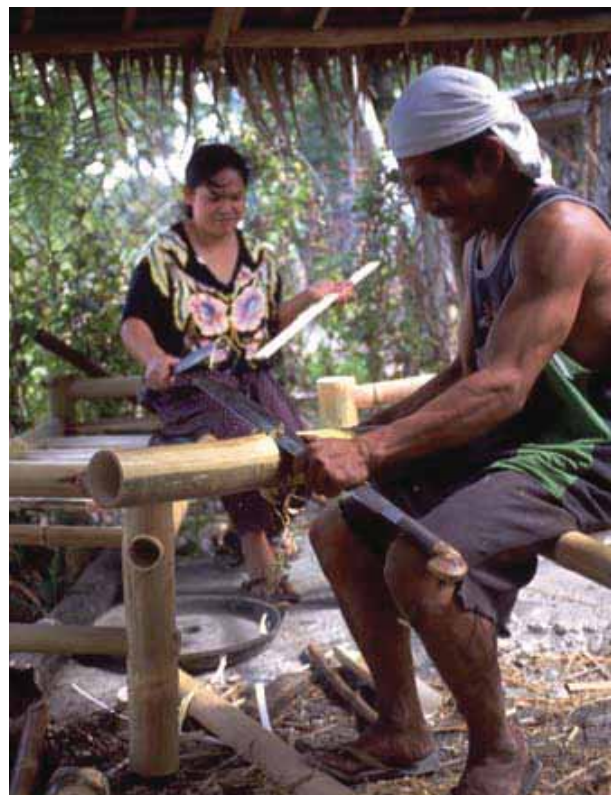
Products and livelihoods

16 APRIL
World Entrepreneurship Day



A craftsman in Kinshasa, Democratic Republic of the Congo, weaves a rattan chair. An FAO project in Central Africa is promoting small-scale entrepreneurial activities based on sustainably managed non-wood forest products, through reinforcement of existing capacities. ©FAO/24683_1006/GIULIO NAPOLITANO

In the Philippines, the United Nations Capital Development Fund (UNCDF) supports efforts by UNDP to help small-scale entrepreneurs gain access to the financial services they need to succeed. This couple was thus able to obtain loans to purchase the supplies and tools they needed for their bamboo furniture making business. ©UNCDF/2372/ADAM ROGERS



A small enterprise in Nepal makes traditional lokta paper for export. This strong, insect-resistant paper is made from the bark of *Daphne* spp., a flowering shrub growing at forest margins in the high Himalayas. Community forest user groups provide the raw material, for which they have obtained Forest Stewardship Council (FSC) certification.

ASIA NETWORK FOR SUSTAINABLE AGRICULTURE
AND BIORESOURCES



Sustainable forest industry contributes to Africa's development: men at work in a sawmill, Democratic Republic of the Congo. An FAO project in the country is helping to improve financial, scientific and technical capacity, including implementation of forestry research as well as efforts to improve infrastructure. ©FAO/24683_0637/GIULIO NAPOLITANO

20 NOVEMBER
Africa Industrialization Day



SOCIAL AND ECONOMIC DEVELOPMENT

Products and livelihoods

26 APRIL
World Intellectual Property Day

Maasai women grind bark from the neem tree (*Azadirachta indica*) into a paste for deworming animals and treating abdominal pains in humans. In the United Republic of Tanzania, an FAO project on gender, biodiversity and local knowledge systems is promoting greater recognition of rural people's knowledge about the use and management of biodiversity among researchers and development workers.

©FAO/24605_A3_0092/GIUSEPPE BIZZARRI



Non-wood forest products prepared for sale in a Cameroon market, to be used as condiments and spices. Fair trade initiatives can help the producers obtain better trading conditions locally and abroad, while promoting resource sustainability.

FAO/FO-7083/OUSSEYNOUNDOYE





15 MARCH
World Consumer Rights Day
SECOND SATURDAY OF MAY
World Fair Trade Day

Employees of the Société Générale de Surveillance (SGS) verify compliance with chain-of-custody requirements for certification.

©TFT/EDWARD PARKER/CIB



The forest company Congolaise Industrielle des Bois (CIB) provides housing for its employees – as well as health care and education – in efforts to fulfil certification requirements. ©TFT/EDWARD PARKER/CIB

SOCIAL AND ECONOMIC DEVELOPMENT

Work

28 APRIL

International Workers' Memorial Day (an international day of remembrance and action for workers killed, disabled, injured or made unwell by their work)

1 MAY

Labour Day



A logger standing on the end of a log above the North Umpqua River in southwest Oregon, United States of America, in a snowstorm. Forest harvesting is surely among the most dangerous and physically demanding professions. JIM PETERSEN



A forest industry worker in the Congo wears protective glasses and gloves in accordance with good safety practices. ©TFT/EDWARD PARKER/CIB

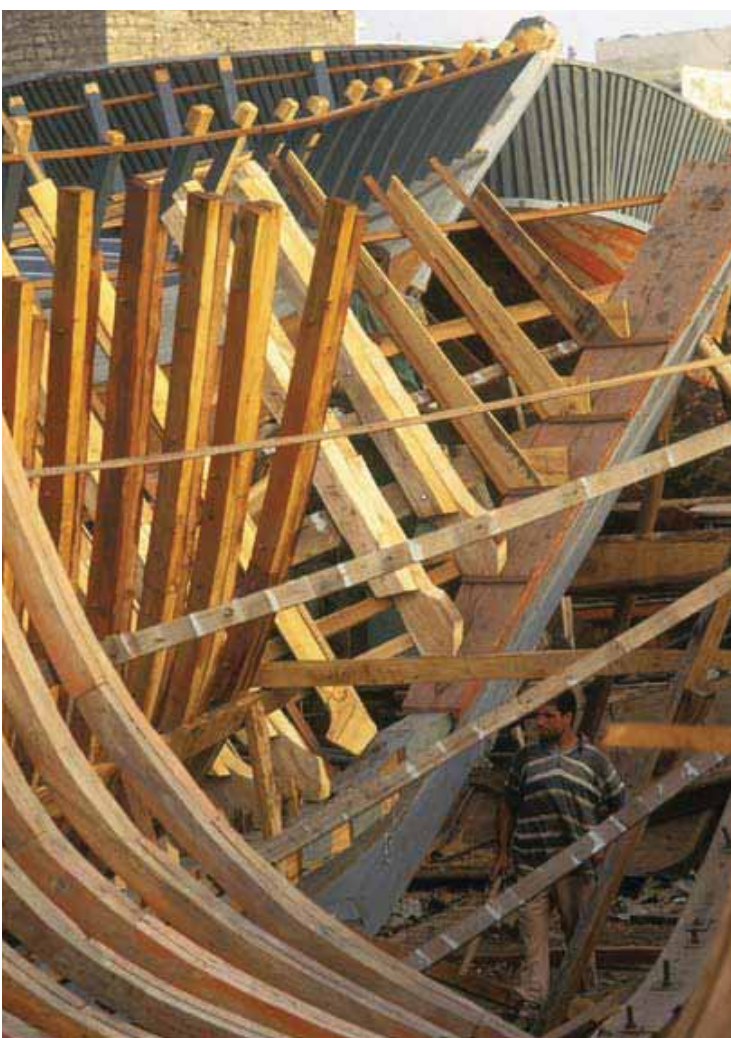


18 DECEMBER
International Migrants Day

Families of migrant workers in Phang Nang, Thailand, often undocumented, marginalized and impoverished, depend on the forest for their survival – like this young woman with her harvest of mushrooms. ©IOM/MTH0043/THIERRY FALISE

4 MAY
International Firefighters Day

Southern Europe suffered severe forest fires in the summer of 2009. On the French island of Corsica, 6 000 ha of land were destroyed in just a few days. ANP



DURING THE LAST WEEK OF SEPTEMBER
World Maritime Day

Boat-building using wood at El Jadida shipyard, Morocco. ©FAO/21913/GIUSEPPE BIZZARRI

SOCIAL AND ECONOMIC DEVELOPMENT

Cooperation

In its work with forest products industry, the United Nations Industrial Development Organization (UNIDO) relies mainly on south-south cooperation for technology transfer. A project with the Indian Cane and Bamboo Technology Centre of Guwahati helped establish a Bamboo Skill Development and Demonstration Centre in Timor-Leste, where bamboo is plentiful but underutilized. With the aid of Indian expertise and technology, the centre trains craftspeople and entrepreneurs in production of bamboo laminates and furniture, among other activities.

UNIDO CENTRE FOR SOUTH-SOUTH INDUSTRIAL COOPERATION (UCSSIC) INDIA BAMBOO PROJECT

19 DECEMBER
United Nations Day for South-South
Cooperation



A Vietnamese expert shares knowledge of food and fodder legumes with a counterpart in Senegal under an FAO programme for South-South cooperation. ©FAO/FABIO MASSIMO ACETO/AG. GRAZIA NERI

FIRST SATURDAY OF JULY
International Day of Cooperatives

Members of a women's cooperative in Mauritania work on their tree nursery, preparing *Prosopis filensis* to be planted on dunes for stabilization – illustrating the theme of the International Day of Cooperatives in 2010: “Cooperative enterprise empowers women”. ©IFAD/13731/HORST WAGNER



The Ohio Forestry Cooperative, United States of America, holds a field day. These forest owners collaborate to market and increase the value of their wood, share the costs of developing stewardship plans and also help each other with forest work such as thinning. NATIONAL NETWORK OF FOREST PRACTITIONERS/SUSI



A project of FAO and partners in Central Africa assists with collective marketing of non-wood forest products in Nkolandom, Cameroon. FAO/FO-7178/IGNACE FOKOU SAKAM

SOCIAL AND ECONOMIC DEVELOPMENT

Health



7 APRIL

World Health Day

FIRST TUESDAY IN MAY

World Asthma Day

10 NOVEMBER

World Immunization Day

Forests contribute to human health by offering pharmaceutical products and nutritional foods derived from forest products, as well as living environments conducive to good health. They also provide mental and physical health benefits as a setting for exercise and fresh air – especially for people who live in cities and have little daily contact with nature. FAO/FO-6113/VIRGINIE ST-ONGE



Women preparing baby food with a combination of flowers and fruit from *Adansonia digitata* and the leaves of *Tamarindus indica*. FAO/CFU000243/ROBERTO FAIDUTTI



Many forest plants, including leaves, bark and seeds, have medicinal properties. The nut or seed of *Garcinia kola* (bitter kola), for example, is used in Central Africa as a purgative, antiparasitic and antimicrobial. It is used in the treatment of bronchitis, coughs and throat infections and to prevent and relieve colic, and it may benefit ebola victims by slowing down multiplication of the virus, giving the patient's body more time to develop a proper autoimmune response.

FAO/FO-7207/ARMAND ASSENG ZE

A health care worker weighs a child using a scale suspended from a village tree, Mozambique.

UNCDF/1777/ADAM ROGERS



The medicinal plant *Chuquiraga jussieui*, locally called chuquirahua, is used for treating kidney problems in the Andean highlands of Ecuador.

FAO/CFU000737/ROBERTO FAIDUTTI



SOCIAL AND ECONOMIC DEVELOPMENT

Health



25 APRIL
World Malaria Day

Malaria claims almost a million lives every year. Wormwood (*Artemisia annua*) has been used in China to treat malaria for over 400 years and is the source of the leading antimalarial drug artemisinin. A research project at the University of York, United Kingdom, is using the latest biotechnology to develop improved varieties of *Artemisia annua* with increased artemisinin yields, to help fight malaria while also providing an important source of income for farmers in Asia and Africa.

UNIVERSITY OF YORK

1 DECEMBER
World AIDS Day

The HIV pandemic in Africa has increased the dependence of woodland communities on forest resources, especially in terms of herbal medicines, wood energy and food, as illness and deaths lead to livelihood crises. FAO developed the concept of Junior Farmer Field and Life Schools to help fill knowledge and skill gaps left by the premature death of parents, enhancing children's agricultural and life skills (Kenya).

©FAO/24679_0012/SIMON MAINA



2 APRIL
World Autism Awareness Day

10 SEPTEMBER
World Suicide Prevention Day

10 OCTOBER
World Mental Health Day

Studies have shown that activities in woodland settings can improve mood – depression, anger, tension, confusion and fatigue. In the Branching Out project of the Forestry Commission Scotland, adult clients of mental health services spend approximately three hours per week in the forest doing physical activities (walks and tai chi), conservation activities, bushcraft (e.g. fire lighting and shelter building, shown in the photo) and environmental art. Participants – both men and women – report increased energy, confidence and self-esteem.

FORESTRY COMMISSION/1060201/JOHN MCFARLANE



In Mozambique, *Aloe* spp. (left) and *Hypoxis* spp. (right) collected from the woodlands are sold in the market and used in the treatment of HIV for about one-sixth the price of retroviral therapy. A. SITO

DEMOCRACY AND HUMAN RIGHTS

People's participation

Children pick blueberries in Finland – where an “Everyman’s Right” provides open access to all forests, making it possible for anyone to pick berries and mushrooms without restriction in any forest, whether private or publicly owned.

METLA/ERKKI OKSANEN



Democratic, participatory decision-making, involving all those who have a direct stake in forest resources, is of critical importance for their effective, sustainable management. A women's forest user group in Nepal helps give a voice to those who have traditionally had less say.

FAO/FO-5505/THOMAS HOFER

Trees are often gathering places for community democracy: a local government development planning meeting in Guinea, near Fouta Djallon. UNCDF/841/ADAM ROGERS



15 SEPTEMBER
International Day of Democracy
10 DECEMBER
Human Rights Day

The Tree of Guernica ("Gernikako Arbola" in Basque) is an oak tree that symbolizes traditional freedoms for the Basque people of Spain. The original tree was planted in the fourteenth century and lasted 450 years. Under it, the Lords of Biscay swore to respect the Biscayan liberties. The tree has been replanted several times on the same site, and modern leaders continue to be sworn in there. Government gardeners keep several spare trees grown from the tree's acorns. The trunk of the original tree's successor, planted in 1742, is preserved in a small temple nearby (right).

DEMOCRACY AND HUMAN RIGHTS

Public service



Participants in a food-for-work project sponsored by the United Nations World Food Programme (WFP) in Afghanistan planted over 80 000 trees during the first six months of 2007, in addition to building or repairing roads and canals. UN PHOTO/WFP/167254



These volunteers in Umbria, Italy cleaned the mountain forest in observation of an Ecological Day sponsored by a local hunting association. They gathered more than a tonne of refuse, including old appliances, mattresses and tyres left by the roadsides, restoring the forest as a place of beauty.

GOODMORNING UMBRIA



Farmers and community pillars Houssain (centre) and Mahfoud (right) volunteer with a project for community-based adaptation to climate change, supported by the United Nations Volunteers (UNV) programme. They contribute their time, tools and land in developing water-sharing systems and tree-planting initiatives, and share their knowledge with local youth. Here, they discuss climate change and its effect on their oasis at Iguiouaz, Morocco, with a respected elder. On International Volunteer Day in 2009, UNV organized for thousands of volunteers around the world to collectively put in 1.5 million hours of effort to tackle climate change and other environmental issues.

UNV / BAPTISTE DEVILLE D'AVRAY

23 JUNE
United Nations Public Service Day

19 AUGUST
World Humanitarian Day

24 OCTOBER
United Nations Day

5 DECEMBER
International Volunteer Day for Economic and Social Development



Corporate volunteers in a Swiss mountain forest clear a stump area to help favour regeneration and prevent blockage of streams (see article in *Unasylva* 236). BERGWALDPROJECT

DEMOCRACY AND HUMAN RIGHTS

Conflict and peace

The Nobel Peace Prize (2004) awarded to Wangari Maathai, founder of Kenya's Green Belt Movement, underlined the interconnectedness of environmental conservation, gender issues and peace. Through its extensive tree planting and other projects, the Green Belt Movement (composed primarily of women) has promoted environmental consciousness, volunteerism, conservation of local biodiversity, self-empowerment, community development and accountability. Maathai is shown here handing over a plant for distribution in 1983.

UN PHOTO/317842/JACKIE CURTIS



1 JANUARY

**One Day of Peace and Sharing/
World Day of Peace**

20 FEBRUARY

World Day of Social Justice

29 MAY

**International Day of United Nations
Peacekeepers**

21 SEPTEMBER

International Day of Peace

2 OCTOBER

International Day of Non-Violence

6 NOVEMBER

**International Day for Preventing the
Exploitation of the Environment in
War and Armed Conflict**



Buddhist monks of the Santi Sena (or Peace Army), meeting in the Prey Koki forest in Cambodia's Svay Rieng province. Monks from Santi Sena have replanted tens of thousands of trees here after the forest was destroyed by bombing during the Viet Nam war, and more recently by illegal loggers.

IRIN/200907131044260489/©DAVID GOUGH

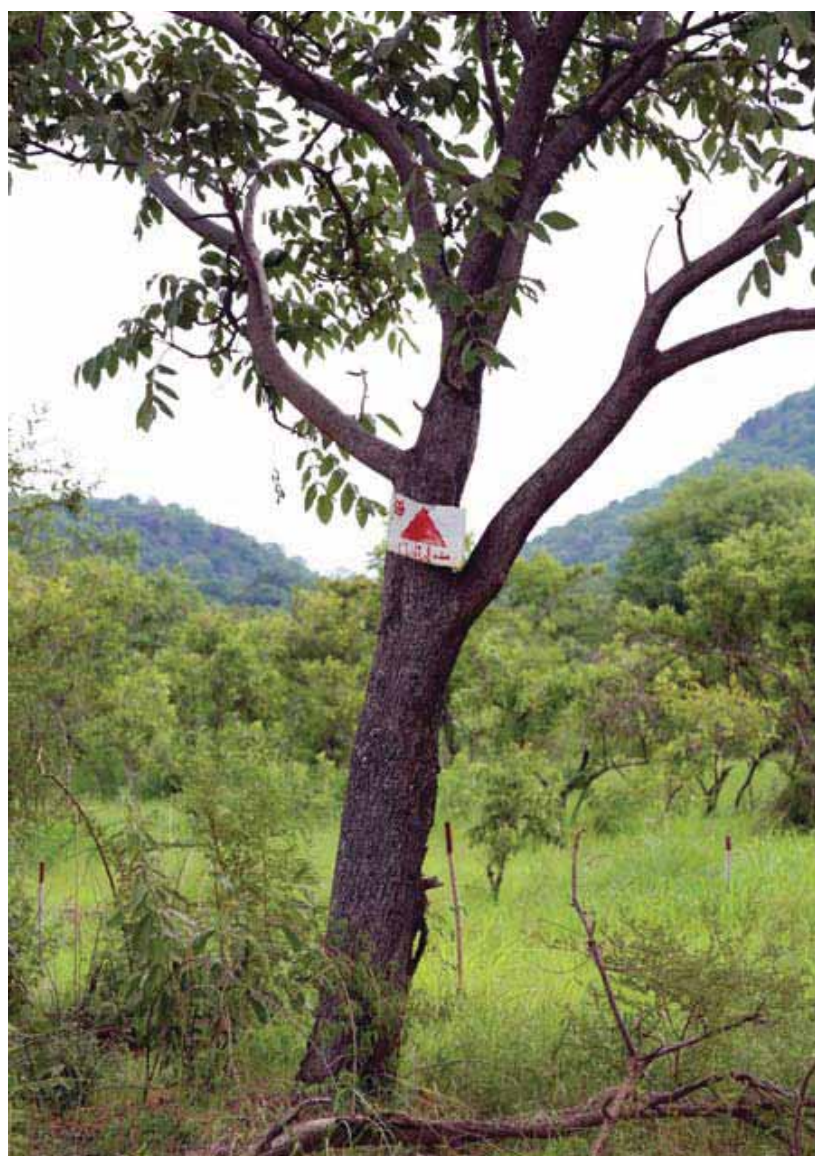


Conflict and violence are particularly widespread in forested regions, in part because many impoverished people live in remote forested areas far from government influence, where property rights are often poorly developed. Outside intervention can also cause local conflict, particularly when it is profit driven (as in extraction of natural resources such as timber). Remote forest areas also provide cover for insurgents. Furthermore, war in forest areas is often financed by timber incomes, usually illegal.

4 APRIL
International Day for Mine
Awareness and Assistance in
Mine Action

A sign on a tree warning of land
mines in Southern Sudan, 2007.
Land mines are a threat to both
people and forests.

IRIN/2007070512/©MANOOCHER DEGHATI



DEMOCRACY AND HUMAN RIGHTS

Human rights

21 MARCH
International Day for the
Elimination of Racial Discrimination

20 JUNE
World Refugee Day

Southern Sudan is richly endowed with natural forest and woodlands, on which people depend for grazing, fuelwood and charcoal, and wood and non-wood forest products. During the second Sudanese Civil War, many Dinka, one of the main tribes in Southern Sudan, had to flee from their homes to escape racial and religious persecution or massacre. These displaced Dinkas wave on their return to their home and traditional livelihoods. ©SVENTORFINN/IOM 2006 - MSD0134



The area of Thailand along the Myanmar border has some of the country's most beautiful forest. It also houses seven refugee camps holding up to half a million refugees at any one time. The largest, Mae La, is home to over 45 000 refugees from Myanmar. Most are ethnic Karen who fled to Thailand because of systematic ethnicity-based persecution which resulted in loss of their freedoms and livelihoods, forced labour and demolition of their villages. Although movement outside the camp is restricted, many of the refugees find a way to forage in the forest for goods to barter and trade.

©IOM/MTH0243/THIERRY FALISE





20 FEBRUARY
World Day of Social Justice

25 MARCH
**International Day of Remembrance
of the Victims of Slavery and the
Transatlantic Slave Trade**

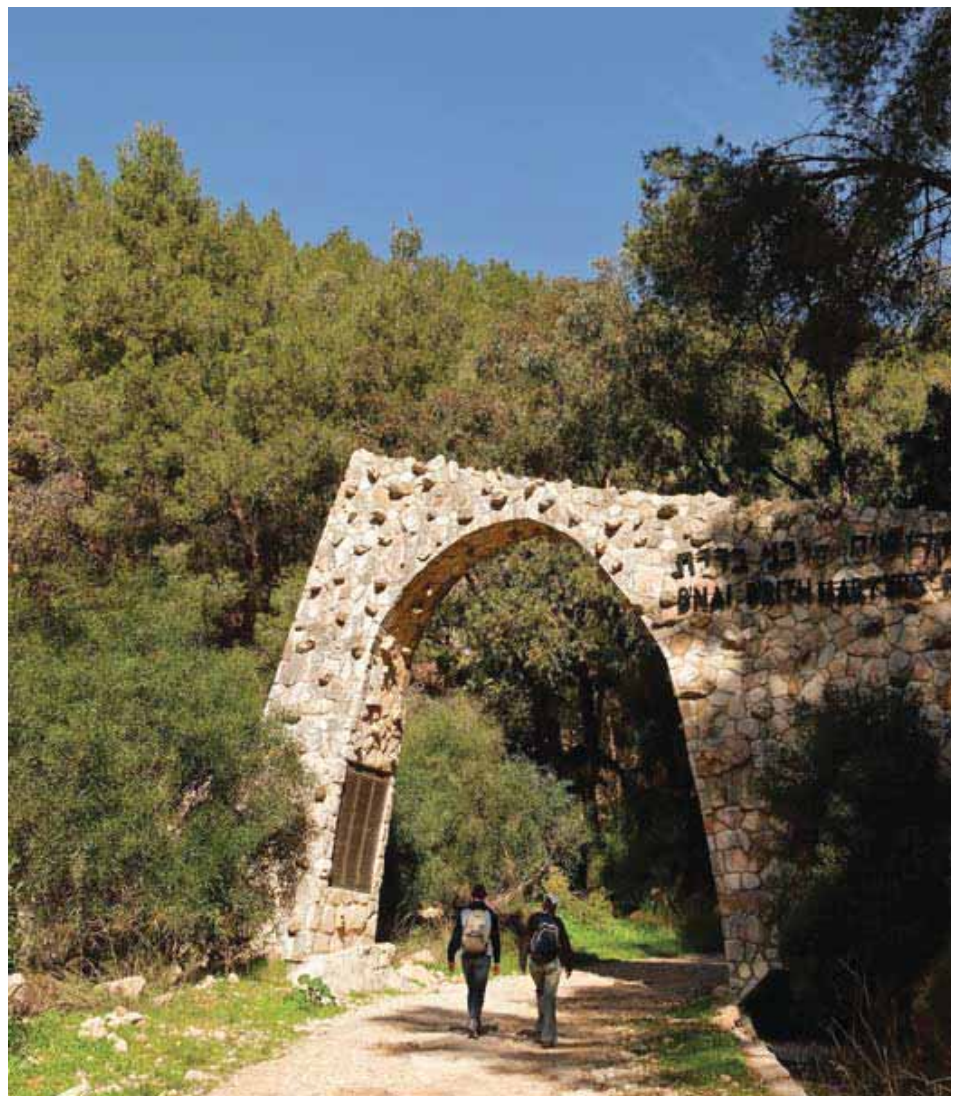
23 AUGUST
**International Day for the
Remembrance of the Slave Trade
and its Abolition**

2 DECEMBER
**International Day for the Abolition
of Slavery**

The famous Cotton Tree of Freetown, Sierra Leone. In 1792 a group of former African American slaves, who had gained their freedom by fighting for the British during the American War of Independence, founded modern Freetown. According to legend, they held a service around the tree upon their arrival to give thanks for their deliverance to a free land. Sierra Leoneans believe that this very tree was where the settlers prayed more than 200 years ago, and they regard it as the symbol of their capital city. Sierra Leoneans still pray and make offerings for peace and prosperity beneath the great Cotton Tree. PETER C. ANDERSEN

27 JANUARY
**International Day of
Commemoration in Memory of the
Victims of the Holocaust**

Planting trees, which live long lives, is a fitting way to remember the dead. The Martyrs' Forest on the outskirts of Jerusalem, Israel (shown in the photo), was planted as a memorial to those who died in the Holocaust. It will eventually contain six million trees, symbolizing the six million Jews who perished at the hands of the Nazis in the Second World War. And in the Forest of the Righteous, adjacent to the Holocaust museum of Yad Vashem, one tree has been planted in honour of every non-Jew who made an effort to oppose the Holocaust. These commemorative forests also contribute to the afforestation of Israel, a low-forest-cover country. ©HANAN ISACHAR



DEMOCRACY AND HUMAN RIGHTS

Legality



An employee of the National Tapajos Forest in Brazil shows effects of illegal logging in a government protected area. This forest has a management programme for sustainable industrial timber production.

UN PHOTO/160710/ESKINDER DEBEBE

9 DECEMBER
International Anti-Corruption Day



At a government checkpoint in the Congo, all vehicles are monitored for illegal bushmeat, valuable non-wood forest products or timber. ©CIB/CONGO

26 JUNE
International Day Against Drug Abuse and Illicit Trafficking



Fighting cocaine means fighting deforestation: In the last 30 years of the twentieth century, the Cochabamba tropics of Bolivia suffered severe loss of forest resources as a result of clearing for coca leaf cultivation. An FAO project helped introduce alternative forestry and agroforestry practices to diversify and strengthen local economies and raise living standards so that farmers would have less incentive to grow coca illegally. FAO/20753/JON SPAULL

ENVIRONMENTAL SERVICES

Environment

22 APRIL
Earth Day

5 JUNE
World Environment Day

A larch forest on the Putorana Plateau in Siberia, near the geographic centre of the Russian Federation. The Putorana Nature Reserve, established in 1988 to protect the world's largest herd of reindeer as well as bighorn sheep, was placed on UNESCO's World Heritage List in 2010 as representing a complete set of subarctic and arctic ecosystems including pristine taiga and forest tundra, as well as arctic desert and water systems.
UNESCO/30211122/A.ROMANOV



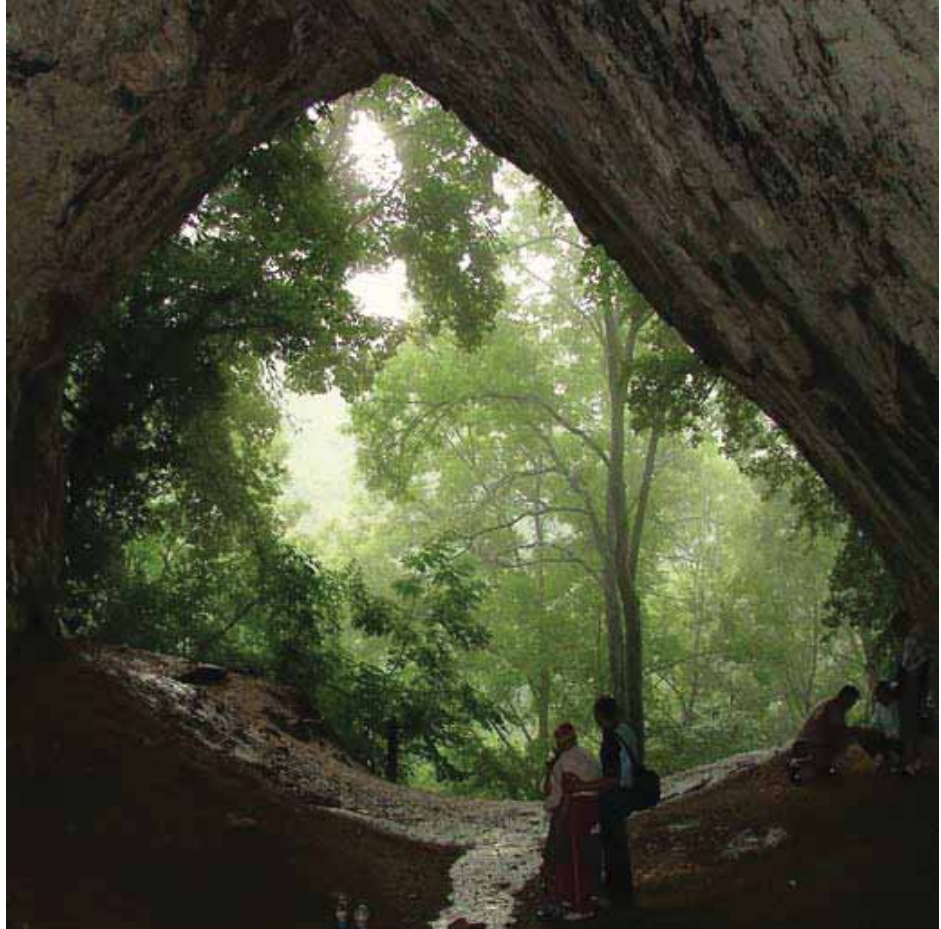
Environmental functions of forests and trees, such as soil and water conservation, are of special importance to small islands because of the relatively high ratio of coastline to land area, short distances between uplands and coastal areas, and limited size of watersheds. The forests are also important for biodiversity conservation, since small islands generally have a high percentage of endemic species (of which many are found in forests) and small populations make them relatively susceptible to extinction from deforestation, unmanaged tourism and the introduction of exotic species (Marquesas Islands, French Polynesia). CLAIRE M.



27 SEPTEMBER
World Tourism Day

Forest hikers take shelter from the rain, Hungary.

FAO/FO-6034/ÉVA SZABADOS



Forest-based nature tourism and ecotourism help drive both social and environmental development. Around the world, excursions in the canopy have become popular activities for tourists. Admission fees contribute to local development and forest conservation and management. This suspension bridge over the Breakfast River Gorge in Dominica is reached by an aerial tram which carries visitors through the tropical forest in suspended gondolas.

FAO/METTE WILKIE



ENVIRONMENTAL SERVICES

Environment

In the coastal province of Quang Binh, Viet Nam, *Casuarina* trees are planted to prevent the gradual intrusion of sand dunes into areas of cultivated land. The International Fund for Agricultural Development (IFAD) promoted a participatory protection scheme for the young trees. This woman and her son replant trees uprooted by the wind. They are responsible for the upkeep of 2 ha of land (about 10 000 trees). ©IFAD/6850/LOUIS DEMATTEIS



17 JUNE
World Day to Combat
Desertification and Drought

A nursery worker in Luxor, Egypt tends tree seedlings for use in sand dune fixation and afforestation, under an FAO project to improve plantation management in desert lands using available sources of water, including wastewater.

©FAO/22118/ROSETTA MESSORI



A nursery raises local *Acacia* species for dune fixation to fight against sand encroachment in Mauritania, a country that has been chronically affected by desertification and drought.

MOUSTAPHA OULD MOHAMED



In the Near East, overgrazing is one of the main drivers of desertification: goats in southwestern Morocco climb the argan tree (*Argania spinosa*) to graze. CONALL O'BRIEN

ENVIRONMENTAL SERVICES

Environment

11 DECEMBER
International Mountain Day



Deforestation amplifies risk for mountain communities. Landslide could spell disaster for the inhabitants of these precariously constructed buildings in Banaue, the Philippines. *FAO/FO-5744/PATRICK DURST*

Many mountain people live in poverty, isolated through difficult topographic and climatic conditions and distance from economic and political centres. Like these Nepali women collecting fodder, mountain people often rely on the forest for much of their livelihoods. *FAO/22739*





Healthy mountain forests provide tourism value and aesthetic pleasure, as when viewed across a valley on the South Island of New Zealand. TREY RATCLIFF



Afforestation of mountain areas can have important benefits such as stabilizing slopes and providing energy supply for local populations. However, it is important to plant the appropriate species at the right altitude. These pine trees are unable to thrive in Ecuador's páramo ecosystem, at 3 600 m above sea level. FAO/THOMAS HOFER



A protection forest in Switzerland shows two tree lines: the natural one above, and the one created by land use below. FAO/THOMAS HOFER

ENVIRONMENTAL SERVICES

Water

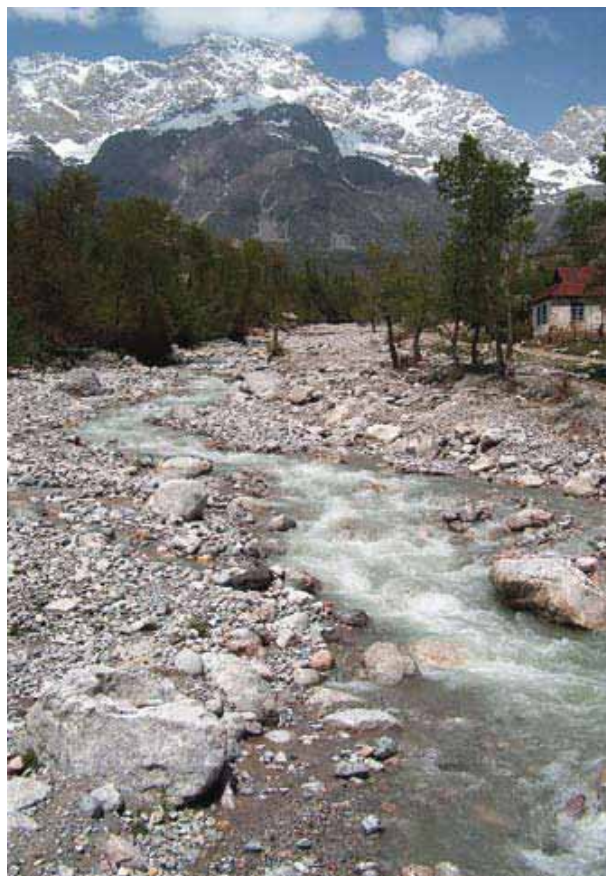
22 MARCH
World Water Day



Throughout the world, watershed and riparian forests have an essential role in stabilizing water supply and ensuring its purity – from Canada...



In Yemen, as elsewhere in the Near East, forests have a crucial role in safeguarding scarce water supplies. FAO/QIANG MA



...to Kyrgyzstan.



A waterfall in the Fouta Djallon Highlands of Guinea – the water tower for the major West African river systems.

FAO/THOMAS HOFER

In dryland communities in northern Senegal, the top priority is water.

UNCDF/4851/ADAM ROGERS



ENVIRONMENTAL SERVICES

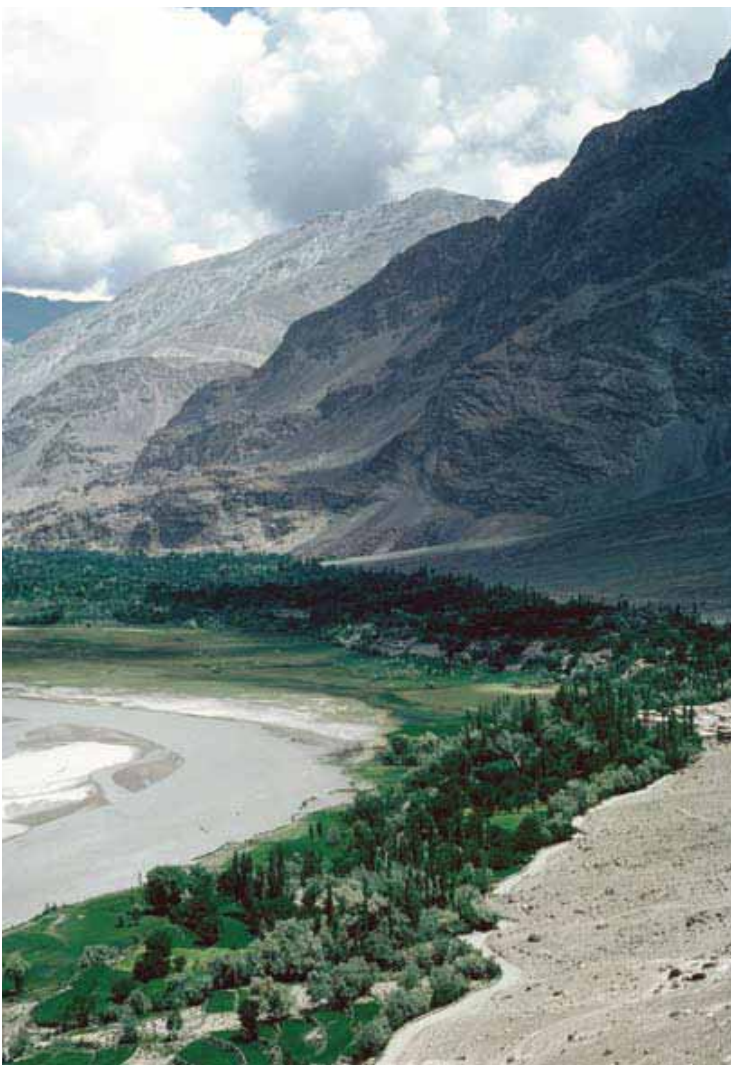
Water

14 MARCH
International Day of Action for
Rivers

Riparian forests filter sediments and pollutants, influencing water flows and quality (Madagascar).

©UNESCO/30204691 /RHETT BUTLER

Riparian forests have a dramatic effect in the arid Shigar Valley of Pakistan. FAO/FO-5689/PATRICK DURST



Forest inhabitants in the Congo depend on the river – and on the wood from their forests – for transport of people and products. ©TFT/EDWARD PARKER/CIB



Coastal forests are rich habitats for birds as well as sea creatures. Their leaf litter and detritus enters the marine food web. Mangroves (below) serve as feeding, breeding and nursery grounds for numerous commercial fish and shellfish.

UNCDF/4315

2 FEBRUARY
World Wetlands Day
8 JUNE
World Ocean Day

Coastal forests such as these mangroves in Belize offer protection against storm surges and erosion, helping to conserve wetlands and the livelihoods of people who depend on them. BERNT ROSTAD



Grazing camels have depleted these mangroves of their foliage below 3 m, preventing them from fulfilling their protective role. This stand (in the Sudan) also shows signs of extensive timber-cutting. UNEP

ENVIRONMENTAL SERVICES

Biodiversity

22 MAY
International Day for Biological
Diversity

4 OCTOBER
World Animal Day



A tree frog (*Boophis madagascariensis*) in the Eastern rainforests of Northern Madagascar – ecosystems of unique biodiversity, of which the majority of species are endemic to specific localities or protected areas.

©UNESCO/30204694/RHETT BUTLER

Bella Vista Cloud Forest in Ecuador is home to many different kinds of hummingbird.

©UNESCO/10036378/ALISON CLAYSON



The stinkhorn fungus *Phallus indusiatus*, also known as the bridal veil, is common in humid tropical forests of Asia, the Americas, and Africa, where soils are rich with organic matter. The fungus is covered with a foul-smelling substance that attracts flies and other insects, which spread the spores, ensuring its reproduction. It is edible (after removal of the spore mass) and is considered a delicacy in some cultures.

©TFT/EDWARD PARKER/CIB

ENVIRONMENTAL SERVICES

Biodiversity



FIRST MONDAY IN OCTOBER
World Habitat Day

A spotted quoll or tiger quoll (*Dasyurus maculatus*) in Australia's Central Eastern Rainforest Reserve. Native to Australia, this carnivorous marsupial is about the size of a domestic cat and lives mainly on the forest floor. IUCN classifies its conservation status as vulnerable, and its habitat is mostly limited to national parks.

©UNESCO/10026807/G.THRELFORD

SECOND WEEKEND IN MAY
World Migratory Bird Day



Yellow-billed storks (*Mycteria ibis*) perch in a tree along the Chobe River, Namibia.

©UNESCO/30208212/PIERRE GAILLARD



The forest and its products also provide habitat for humans: a home made of wood, Madagascar...
 UNCDF/MADAGASCAR063/ADAM ROGERS



...and a village set in the forest, Hungary. FAO/FO-6084/MIKLOS KERESZTES

ENVIRONMENTAL SERVICES

Climate

23 MARCH
World Meteorological Day

16 SEPTEMBER
International Day for the
Preservation of the Ozone Layer

Climate change doesn't only mean melting glaciers and rising sea level. It also means shifting habitats and increased occurrence of extreme weather events such as droughts and severe storms, with impacts for forests and people. Mountain forests are among the most vulnerable ecosystems (Glaciers National Park, Argentina).



Forest ecosystems (including biomass, dead wood and soil) contain roughly the same amount of carbon as the Earth's atmosphere. The forest sector thus has a crucial role in mitigating climate change by reducing emissions from deforestation and forest degradation, and by conserving and enhancing forest carbon stocks – for example, through afforestation and forest restoration. The planting of trees to restore this degraded landscape in Khao Kho, Thailand, is one illustration. FAO/FO-5817/PATRICK DURST



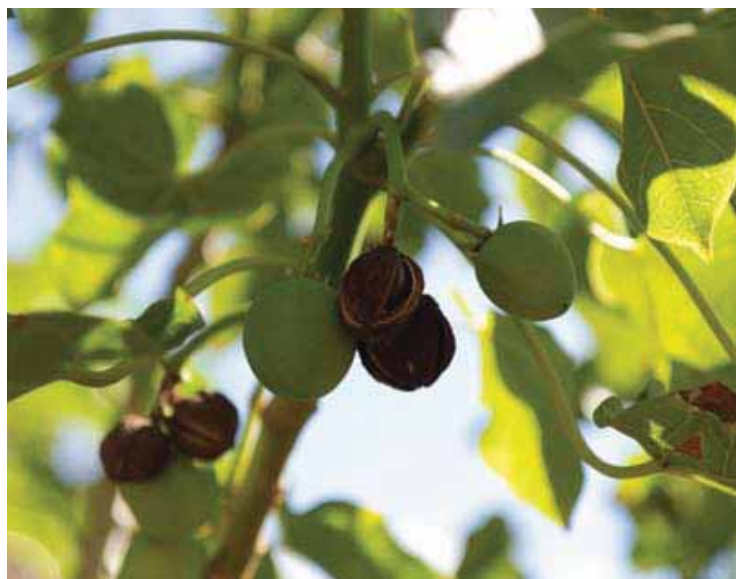


Liquid biofuels made from wood and other cellulosic feedstocks – such as bioethanol and biodiesel – are under development as substitutes for fossil fuels. These researchers in Indiana, United States of America, for example, are using genetic tools to find ways to convert short-rotation poplar trees into bioethanol. Could such research make it unnecessary to celebrate a car-free day in the future?

PURDUE AGRICULTURAL COMMUNICATION

22 SEPTEMBER
World Car Free Day

The non-edible seeds of *Jatropha curcas* contain a high proportion of oil which can be used to produce biodiesel. The plant may yield more than four times as much fuel per hectare as soybean, and is therefore considered to have good potential to become a sustainable source of fuel that would not compete with food production. FAO/ROBERTO CENCIARELLI



FAO's Regional Support Programme for the Coordination and Technical Supervision of Disaster and Drought Risk Reduction in the Horn of Africa focuses on reducing vulnerability and strengthening capacity to respond to recurrent droughts and other climatic hazards. Facilitators for the establishment of Pastoral Field Schools receive training under the shade of a tree, Ethiopia. ©FAO/24702_2010R58F22/GIULIO NAPOLITANO

ENVIRONMENTAL SERVICES

Disaster prevention

SECOND WEDNESDAY IN OCTOBER
**International Day for Natural
Disaster Reduction**

Prescribed fire is used to maintain the health of fire-dependent ecosystems (reducing invasive species and stimulating native plants) and to clear the forest of excess fuels such as dead wood and brush to prevent catastrophic wildfire, as shown here in the western United States.

CUSTER NATIONAL FOREST/DON SASSE



In steep areas, mountain forests prevent erosion and landslide. In this landscape in Nepal, deforestation of slopes has resulted in severe gully formation, but the first signs of improvement resulting from afforestation measures are visible. FAO/FO-0305/THOMAS HOFER

Seedlings from this mangrove nursery on Hainan Island, China, will be planted to protect the coastline against damage from tropical storms. FAO/FO-6959/JIM CARLE



Recovery from disaster: after Hurricane Ivan struck Grenada in 2004, beneficiaries of an FAO carpentry project used fallen trees to rebuild homes. ©FAO/24637_5015/GIUSEPPE BIZZARRI



CULTURAL AND SPIRITUAL LIFE

Spirituality

Throughout the world, religion and spirituality are linked with reverence for all creation – making forests a natural setting for worship. Buddhist monks in procession, Thailand. FAO/FO-5979/UMNAJ JAREARNIN



Forest chapel in Lázně Kynžvart,
Czech Republic. VOJTA SREJBER





The Mijikenda people of Kenya regard the kaya (meaning “home” or “village”) forests as the abodes of their ancestors and revere them as sacred sites – which also contributes to their conservation. In one traditional rite, women dance before memorial grave posts after dressing them with ribbons. UNESCO/S. OKOKO ASHIKOYE

CULTURAL AND SPIRITUAL LIFE

Spirituality



Many cultures mythologize a “tree of life”. This image made from glass chips decorates the outside wall of the sixteenth century Wat Xieng Thong temple in Luang Prabang, Lao People’s Democratic Republic.

©UNESCO/WWAP/10035010/ALISON CLAYSON

Many northern European countries have a folk tradition of dancing and celebrating around a maypole on May Day or at midsummer. Although the origin of the maypole is uncertain, one theory holds that it is a remnant of a pagan (pre-Christian) reverence for sacred trees (the tree of life or the centre of the universe).

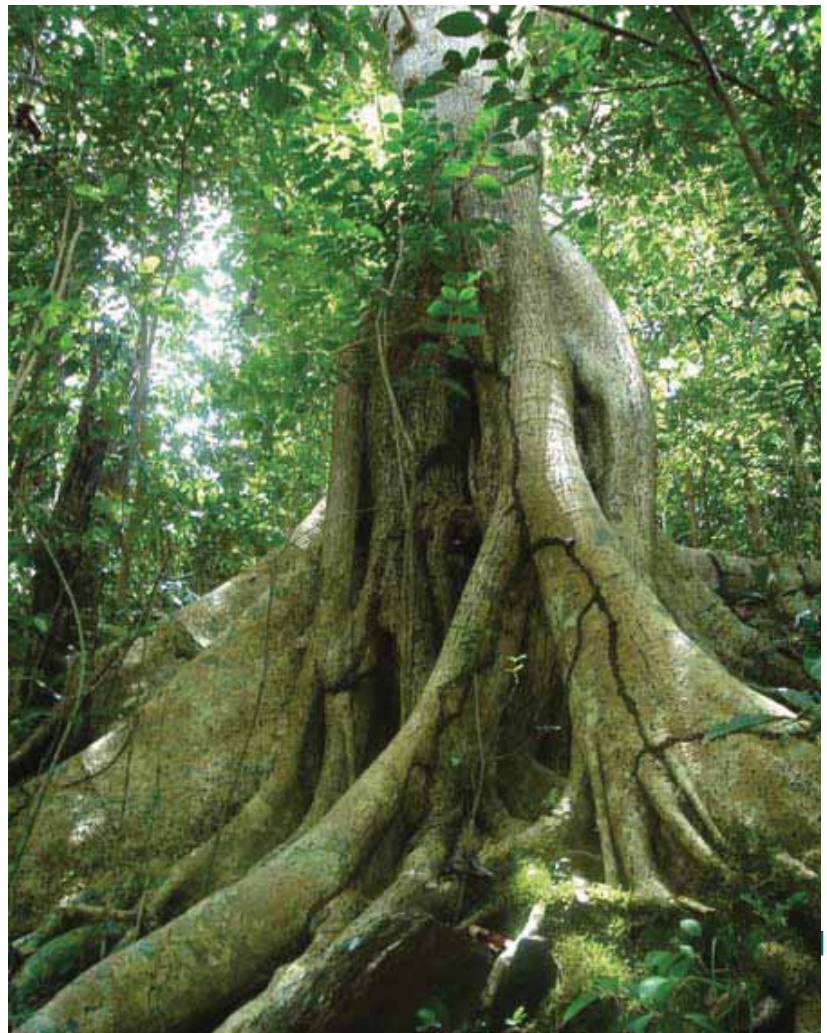
ASIO OTUS





Votive horses in a sacred grove, Tamil Nadu, India. The ancient Tamils considered trees the abode of spirits and gods, and set aside sanctified land for the worship of the tree spirits. Taboos, rituals and beliefs associated with the sacred groves continue to provide motivation for conserving them in as pristine a condition as possible, and these groves now function not only as spiritual havens, but as genetic reservoirs of wild species.

The indigenous Maya peoples of Mexico and Central America considered the kapok tree (*Ceiba pentrandra*) sacred. They believed that the souls of the dead climbed a mythical kapok whose roots extended to the underworld and whose branches reached into heaven.



CULTURAL AND SPIRITUAL LIFE

Culture

21 APRIL
World Creativity and Innovation
Day



The Forest of Oma in the Urdaibai Natural Reserve, Spain is a creative work by sculptor and painter Agustín Ibarrola – a *Pinus radiata* forest with a difference. Individual tree trunks painted with people, animals and geometric shapes combine to form a complete image when viewed from certain positions. More tree art can be seen at: landscapeandurbanism.blogspot.com/2008/12/tree-art.html SIMONCIO



The Hill of Witches near Juodkrantė, Lithuania, is an outdoor sculpture gallery on a forested sand dune. Begun in 1979, it now contains about 80 wooden sculptures along a series of trails. The artists drew on a long tradition of woodcarving in the region, and on the equally long tradition of Midsummer Night's Eve celebrations on the hill. The statues depict characters from Lithuanian folklore and pagan traditions. THOMAS PUSCH



21 MAY
World Day for Cultural Diversity for
Dialogue and Development

A Native Alaskan totem pole on display at Sitka National Historical Park, Alaska. The indigenous peoples of the Pacific Northwest Coast of North America carve these monumental sculptures from large trees, mostly western red cedar (*Thuja plicata*). Totem poles may recount clan lineages (the word totem is derived from the Ojibwe word *odoodem*, meaning "his kinship group"), legends or notable events. ©ROBERT A. ESTREMO

CULTURAL AND SPIRITUAL LIFE

Culture



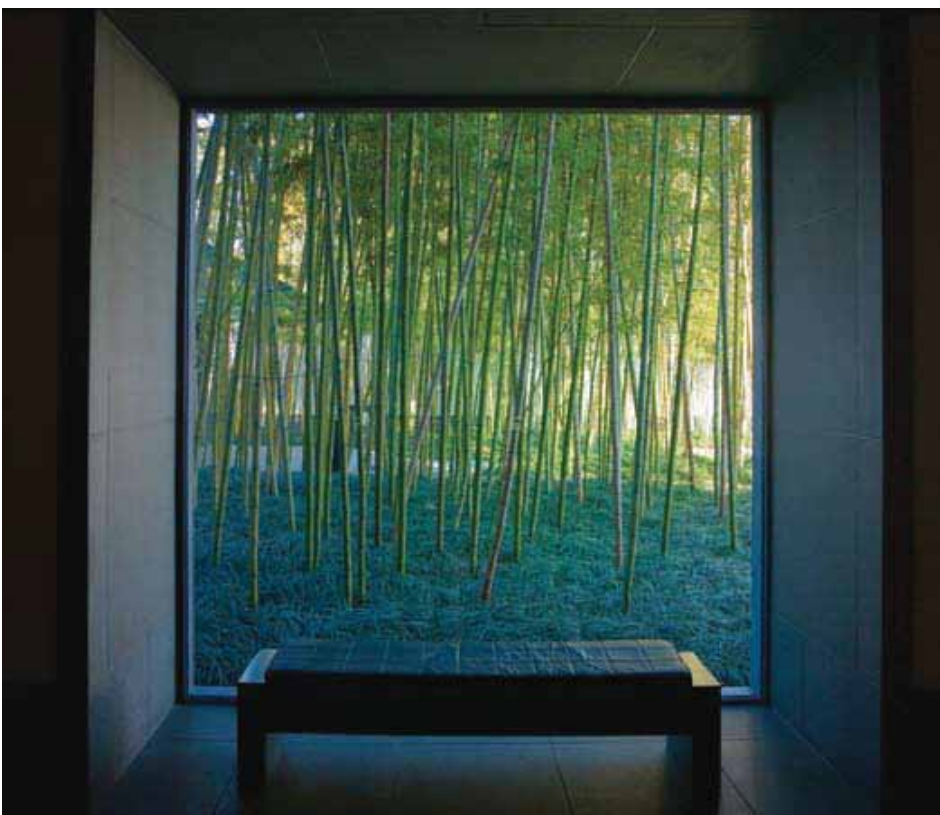
18 MAY
International Museum Day

An arboretum is like a tree museum: a collection of woody plants intended at least partly for scientific study. The botanical garden at Padua, Italy (one of the first, created in 1545) has an arboretum of many historic trees, including a gigantic hollow-trunked oriental plane (*Platanus orientalis*) from 1680. The garden still preserves its original layout – a circular central plot, symbolizing the world, surrounded by a ring of water – in which many other historic trees are found, such as a ginkgo (*Ginkgo biloba*) dated 1750 and a southern magnolia (*Magnolia grandiflora*) which was probably planted in 1786 and is considered to be the oldest in Europe. ©UNESCO/30208691/YVON FRUNEAU

Great representations of forests and trees in art are so numerous they could never be catalogued. One example is Gian Lorenzo Bernini's famous marble statue (in the Borghese Gallery, Rome, Italy) of the nymph Daphne being transformed into a laurel tree (*Laurus nobilis*) to avoid the pursuit of the god Apollo. The sculptor captures Daphne's skin turning to bark, her arms to branches, her hair to leaves and her feet to roots. In Ovid's myth, Apollo makes a wreath from Daphne's branches and proclaims the laurel as a sacred tree.

WITH KIND PERMISSION OF THE SPECIAL SUPERINTENDENCE P.S.A.E. AND MUSEUM COMPLEX OF THE CITY OF ROME





A window at I.M. Pei's modern Suzhou Museum in Suzhou, China, offers a view of bamboo forest for visitors to admire as if it were a painting in its own right.

©KEREN SU/CORBIS



The 65 m² Liaoning Forest Diorama at the American Museum of Natural History in New York is a detailed recreation of how the Jehol Forest in China looked 130 million years ago. It depicts the rich biodiversity of the Mesozoic forest, with life-size models of more than 35 different species of dinosaurs, reptiles, early birds, insects and plants.

©AMERICAN MUSEUM OF NATURAL HISTORY/RODERICK MICKENS

CULTURAL AND SPIRITUAL LIFE

Culture



29 APRIL
International Dance Day

Members of the Talaandig tribe from the forests of Mindanao, the Philippines, dance in the annual Kaamulan festival in the city of Malaybalay. Their dance shows their way of life, with representation of shifting cultivation, weaving and hunting.

ANY MARSANTI

The dance company Fevered Sleep in the United Kingdom created "The Forest", a dance piece aimed at children aged 3 to 7 years, to explore imagery of real forests, the forests of myth and fairytales, and the forests of the imagination. Like a forest, the dance is full of movement, rhythm, sound and texture.

FEVERED SLEEP





In Finland, the annual open-air forest festival known as "Konemetsä" promotes an alternative lifestyle of peace, love, unity and respect.



The Parque Nacional Bosque de Pedregal, an urban forest in Mexico City, has its own cultural centre, the Casa de Cultura, which among its activities sponsors workshops for dance and other arts.

CULTURAL AND SPIRITUAL LIFE

Culture



27 MARCH
World Theatre Day

William Shakespeare's "A Midsummer Night's Dream" is performed in the arboretum at the University of Michigan, United States of America. Outdoor theatre offers a special way to enjoy the urban forest, and is especially effective for plays set in nature. In this play, as often in literature and drama, the forest is portrayed as a setting for enchantment and mystery.



The Forest Theater in Carmel-by-the-Sea, California, originally founded in 1910 as the first outdoor proscenium theatre on the West Coast of the United States, was rebuilt in 1939 with funds from the Work Projects Administration (WPA), which provided jobs and income to the unemployed during the Great Depression.

In Italy, a collaborative project of the "Zompo Lo Schioppo" Nature Reserve and the Cooperative Theatre "Il Lanciavicchio" combines theatre with nature to help children learn about the environment. In an itinerant performance called "Tales of the wood", actor-guides lead the children on an excursion through the forest, where the young spectators interact with the creatures they encounter and hear their stories.





21 MARCH
World Poetry Day

THIRDTURSDAY IN NOVEMBER
World Philosophy Day

*Be content with your natural beauty
Drink plenty of water
Let your limbs sway and dance in the breezes
Be flexible
Remember your roots*

From "Advice from a Tree", Ilan Shamir

United States author, poet and storyteller Ilan Shamir adopted a name meaning "protector of the trees" to reflect his passion for trees and the inspiring messages they bring. In 1990 he co-founded a community forestry organization that has planted or sponsored the planting of over 30 000 trees involving thousands of volunteers.

©IFAD/13249/SAHAR NIMEH (KENYA)

*I wonder about the trees.
Why do we wish to bear
Forever the noise of these
More than another noise
So close to our dwelling place?*

From "The Sound of Trees",
Robert Frost (1915)

©IFAD/16236/MASY ANDRIANTSOA (MADAGASCAR)



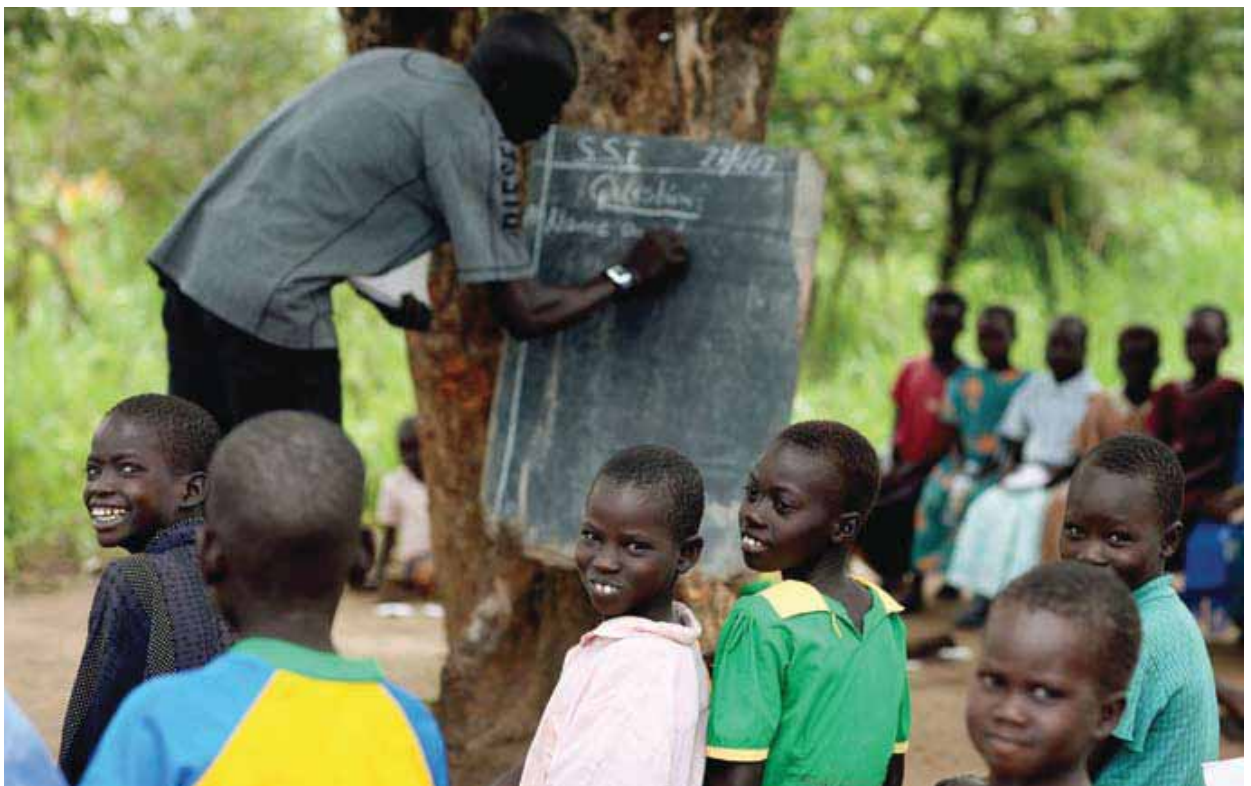
CULTURAL AND SPIRITUAL LIFE

Education and literacy



5 OCTOBER
World Teacher's Day

A forest ranger in Slovenia teaches schoolchildren about the joys of the forest. FAO/FO-6858/ANDREA PERLIS



Trees make an outdoor classroom: children attend classes under a tree in a village in Southern Sudan.

IRIN/2007070510/©M. DEGHATI

The modern trend towards electronic publishing notwithstanding, for centuries books and newspapers have depended on the existence of paper. Import of newsprint at Port Canaveral, Florida, United States of America. CANAVERAL PORT AUTHORITY



21 FEBRUARY
International Mother Language Day

23 APRIL
World Book and Copyright Day

3 MAY
World Press Freedom Day

8 SEPTEMBER
International Literacy Day

Two young mothers learning to write in a literacy class at a village near Lucknow, India. UN PHOTO/497

An elderly person reads a newspaper in a public park in Rome, Italy. UN PHOTO/104032/JOHN ISAAC



INFORMATION

Assessment and monitoring

14 OCTOBER
World Standards Day

Criteria and indicators serve as standards for measuring progress towards sustainable forest management. Recent FAO regional initiatives to recognize excellence in sustainable forest management applied a mix of such criteria to evaluate nominated forests. The forest shown here, in the Peruvian Amazon, was selected as an exemplary case in Latin America and the Caribbean in part for its contribution to local development and poverty reduction, in accordance with the criterion of the Tarapoto Process relating to local socio-economic benefits.

CESAR SABOGAL

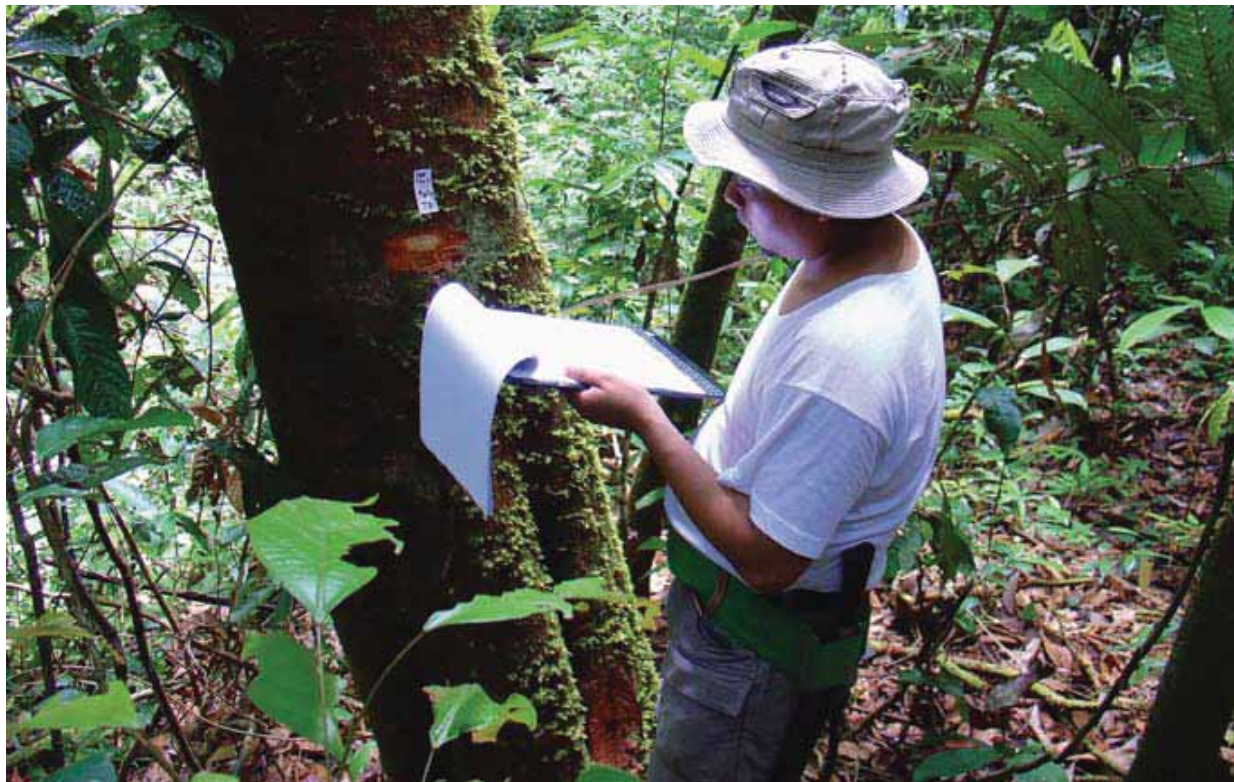


International trade of forest and wood products can result in the inadvertent spread of invasive insect pests and diseases. The International Plant Protection Convention establishes standards to prevent such spread. FAO is preparing a guide, to be published in 2011, to help foresters implement phytosanitary standards to ensure the health of forests worldwide. Wood packaging material is a potential source of infestation.

FORESTRY COMMISSION/1013425/FORREST LIFE
PICTURE LIBRARY

Accurate and reliable forest information is critical to support national policies and decision-making. Information gathered at the national level also contributes to more far-reaching assessments such as FAO's periodic Global Forest Resources Assessment, supporting international negotiations and decisions in all forest-related matters, including on such topical issues as food security and climate change. (Forest inventory, Malaysia.)

FAO/WALTER KOLLERT



Young civil servants take part in intensive training on mapping and remote sensing as part of an FAO project that is helping Angola establish a long-term forest monitoring, management and information system. Forests cover almost half of Angola's territory and are of major food security and economic importance for the population. FAO/ANNE BRANTHOMME

INFORMATION

Information and communications

17 MAY

**World Information Society
Day (formerly World
Telecommunication Day)**

24 OCTOBER

**World Development Information
Day**

Modern hand-held devices, often combined with global positioning systems (GPS), are used to measure distances and inclinations, mark precise positions, and enter and transmit data, changing the way forest inventory and other types of fieldwork are done in the twenty-first century.



A new species, *Pseudopinus telephonyensis*? In some countries, cellular transmission towers are dressed as trees to mask their unwelcome appearance in the landscape.

9 OCTOBER
World Post Day

A series of stamps from China urge citizens to "Plant trees and make the country green".



A VIEW FROM ABOVE

7 DECEMBER
International Civil Aviation Day



Under an FAO Technical Cooperation Programme project some years ago, an old plane was outfitted with modern micro-atomizers for targeted spraying of biological (non-chemical) pesticides to control an insect pest outbreak in The former Yugoslav Republic of Macedonia. Local personnel received training in aerial application technology. FAO/GILLIAN ALLARD



The Upper Hartz water management system, Germany. ©UNESCO/30211159/JUSTUSTEICKE



A forest area in Indonesia, of which parts had earlier been cleared for agriculture. FAO/FO-5613/ HIROSHI HIRAOKE

An island in the Maldives.
FAO/FO-6542/SUSAN BRAATZ



A town with peri-urban forest on the plains of northern Thailand.
FAO/FO-5726/PATRICK DURST



FAO FORESTRY



Twentieth Committee on Forestry held with second World Forest Week

The twentieth session of the FAO Committee on Forestry (COFO) convened from 4 to 8 October 2010 at FAO headquarters in Rome, to address FAO programme priorities and member countries' concerns in forestry. Attendance was high, with more than 480 official delegates from 115 member countries and the European Union (member organization) as well as other UN agencies and intergovernmental and non-governmental organizations (IGOs/NGOs).

Under the overall theme "Forests and sustainable development: you are the key", the meeting addressed the following central topics:

- forest health, fire management, biodiversity and water in the context of climate change;
- emerging opportunities and challenges in forest finance and forest governance, including Reducing Emissions from Deforestation and Forest Degradation (REDD+);
- the role of forests in sustainable development.

Innovations in 2010 included seven panel discussions among top forestry officials on these main agenda items.

The committee agreed on programme priorities for FAO activities in forestry for 2012–2013 and beyond. Its recommendations to member countries and to FAO included the following:

- to include fire management in REDD+ programmes and in broader land-use and landscape policies and programmes;
- to strengthen efforts to address the challenges of forest governance, in collaboration with other sectors;
- to highlight forests' contributions to the global development agenda and to integrate sustainable forest management into development strategies;
- to participate actively in the International Year of Forests 2011.

The committee made a number of specific recommendations related to climate change and REDD+, inviting FAO to assist countries in:

- integrating forests in national climate change strategies;
- strengthening information exchange and cooperation;
- supporting forest and climate change related monitoring;
- implementing best practices in forest management to facilitate climate change mitigation and adaptation;
- overcoming deforestation and forest degradation, which are the root constraint to the expansion of carbon sinks.

The main report of the Global Forest Resources Assessment 2010 (FRA 2010) was released on 4 October (see "Books" section of this issue). The Committee agreed that the next FRA will be prepared by 2015 and that FAO should continue to strengthen country capacities to monitor forest resources.

In parallel to the meeting, many special events were held by FAO and its partner organizations as part of the second World Forest Week. Ten of these events were organized around the main topics of COFO, shedding more light on key issues and allowing for more detailed discussion. There were also 25 side events held during the week including panel discussions and presentations on phytosanitary standards; measuring forest degradation; forest restoration; remote sensing; green design; wildlife management; new developments in forest finance and governance; as well as the role of sustainable management of forests and enhancement of forest carbon stocks (REDD+). Among the notable events was a three-day international conference addressing emerging economic mechanisms and their implications for forest policy and governance (see below).

Further information and the full report of COFO are available at: www.fao.org/forestry/cofo.

Exploring implications of emerging economic mechanisms for forest policy and governance

Emerging economic mechanisms such as Reducing Emissions from Deforestation and Forest Degradation (REDD), the Clean Development Mechanism, certification schemes, payments for environmental services (PES) and voluntary partnership agreements hold promise for sustainable forest management while offering new investment opportunities. Directly or indirectly, they focus on valuing the environmental services of forests, which in the past have often been considered as non-marketable. They also tend to address forestry in the context of broader land-use issues at the landscape level and may foster better integration of forestry with other sectors. These emerging economic mechanisms will almost certainly influence policies and governance, not only in forestry but also in related sectors.

Under the umbrella of World Forest Week 2010, a conference was held at FAO headquarters to discuss how forest policies,



South Africa to host XIV World Forestry Congress

The next World Forestry Congress will be held in Durban, South Africa in 2015, hosted by South Africa's Department of Agriculture, Forestry and Fisheries. The offer was presented at COFO in October and approved by the Council of FAO at its hundred and fortieth session, held in Rome from 29 November to 3 December 2010.

governance and institutions are being and will be affected by the new economic mechanisms. The forum Emerging Economic Mechanisms: Implications for Forest-Related Policies and Sector Governance was co-organized by the University of Tuscia, Italy and FAO with the support of the International Union of Forest Research Organizations (IUFRO). It was attended by 80 policy specialists, economists, managers and decision-makers from 30 countries. Discussions and presentations ranged from global policy and economic analysis to national and field-based case studies.

The conference envisaged that the new economic mechanisms will fundamentally change the framework of forest governance. It noted that while many of the mechanisms have been designed at the global level, their successful implementation will depend on coordination with and adaptation of national policies, which has thus far proved difficult. It was agreed that the best approach is to adapt both the specific mechanism and the national forest policy in tandem, where possible. The conference also discussed the need for greater integration between the State and markets and between various mechanisms and instruments (e.g. PES and REDD), as well as the need for involvement of non-governmental sectors. It was concluded that scientists and policy-makers should continue to work together to integrate rigorous, multidisciplinary scientific analysis with policy.

Implementing the Non-legally Binding Instrument on All Types of Forests

In October 2007, the United Nations General Assembly adopted the Non-legally Binding Instrument on All Types of Forests, also commonly known as the "Forest Instrument". Implementation of the Forest Instrument will boost sustainable forest management and contribute to reducing deforestation and forest degradation.

The 25 national policies and measures of the Forest Instrument represent a wide range of actions for achieving sustainable forest management. Most countries are already making efforts to implement at least some of these actions at various scales, mostly in the context of national forest programmes (NFPs) or similar forestry development strategies. However, the country activities may not be linked explicitly to the Forest Instrument, as many forest stakeholders are not yet familiar with it. In addition, many

countries lack capacity for monitoring progress and for collecting, analysing and reporting the necessary information.

Since 2009, FAO has been providing Ghana with technical support for implementation of the Forest Instrument, with funding from the German Government. A participatory multistakeholder assessment identified four of the instrument's 25 policies and measures requiring additional attention in the country:

- cross-sectoral coordination for sustainable forest management;
- law enforcement;
- financial strategies for sustainable forest management;
- implementation of the national forest programme and its integration in national development programmes.

In addition, science and technology, gender mainstreaming and education were identified as cross-cutting issues to be addressed.

For each of the four priority areas, participants proposed actions, responsibilities and partners. Key catalytic activities are now being implemented in these areas. A monitoring and evaluation system has been developed, taking into account relevant existing systems. Detailed monitoring will focus on the priority areas. Progress on all 25 national policies and measures will be evaluated annually through a participatory process, using the assessment from 2009 as a baseline, and the results will be used in reporting to the United Nations Forum on Forests (UNFF).

Although this exercise is still in its early stages, the participants have already noted several positive effects. Because of its comprehensiveness, the Forest Instrument is seen as an important mechanism for coordinating forest policy with other national policy processes and for strengthening institutional capacities.

The approach used in Ghana has shown promise for application in other countries, and the pilot effort has recently been extended to Liberia, Nicaragua and the Philippines. With funding from the Japanese Government, FAO will also support a number of developing countries in monitoring implementation of the Forest Instrument and reporting on progress to UNFF.

Progress in improving forest law enforcement, governance and trade in ACP countries

Ineffective forest governance often results in a high level of illegal activities which have important social, economic and environmental consequences. Illegal forest activities threaten the livelihoods of forest-dependent people; cause loss of government revenue; discourage long-term investments; and promote deforestation, forest degradation and loss of ecosystem services of forests.

Through the Forest Law Enforcement, Governance and Trade Support Programme for African, Caribbean and Pacific Countries (ACP-FLEGT Support Programme), funded by the European Union, FAO has been assisting ACP countries to address illegality problems since 2009. To date, the four-year programme has supported 21 countries and one regional organization.



The programme issues calls for proposals and provides grants to forest authorities, NGOs and private-sector organizations in areas they have identified as priorities for improving forest law compliance and governance. Support has been provided, for example, for capacity building and training, the development and management of timber verification systems, improving transparency and independent monitoring, community based FLEGT initiatives and reviewing and updating of relevant policies, legislation or regulations.

For instance, in Cameroon, industrial-scale logging is an important contributor to economic development but has often been associated with problems of illegality. Technical assistance provided by the programme is helping the Ministry of Forests and Fauna to review the current forest law enforcement procedures, improve them based on best practices and train its staff in a rigorous hands-on field programme.

In Jamaica, where shortcomings in the legal framework encourage deforestation and mismanagement of natural resources, support is provided to the Forestry Department to amend the Forest Policy and Forestry Act through a participatory process involving all relevant stakeholders.

Insecure tenure rights have prevented local communities in Papua New Guinea from benefiting from forest resources, and timber theft has been common. With support from the programme, the Foundation for People and Community Development, a local NGO, helps strengthen community tenure through forest certification. Communities will benefit directly from the sale of certified forest products.

For more information see www.fao.org/forestry/acp-flegt or contact: acp-flegt-info@fao.org

FAO awarded the Batefuego de Oro (Golden Fire Swatter)

In November 2010, the FAO Forestry Department received an important Spanish award in recognition of its assistance to developing countries in forest fire prevention and suppression. Each year, the Spanish NGO Asociación para la Promoción de Actividades Socioculturales (APAS) gives the Batefuego de Oro (Golden Fire Swatter) award to distinguished persons or organizations for outstanding merit in forest fire protection. In the international category for 2010, the jury of high-level experts from Spanish ministries, NGOs and civil society gave the award to FAO's Forest Assessment, Management and Conservation Division. "This is a great honour for FAO and an important recognition of our work in the field of fire management which has demonstrated over the years that well-established community based and integrated fire management systems can effectively protect human lives, livelihoods, forest and natural resources", said José Antonio Prado, Director of the division, after receiving the award in Madrid.

FAO coordinated the development of *Fire management voluntary guidelines* aimed at helping all countries develop an integrated approach to fire management, from prevention and preparedness to suppression and restoration. The guidelines advise authorities and other stakeholder groups that firefighting should be an integral part of a coherent and balanced policy applied not only to forests but also across other land uses in the landscape. The guidelines are now widely used all over the world by both industrialized and developing countries as a basis for formulating fire management policies, strategies and practices.

The guidelines are available online in seven languages at: www.fao.org/forestry/firemanagement/46135

National Forest Programme Facility update

The concept of national forest programmes (NFPs) was conceived as a framework for sustainable forest management 15 years ago in the international dialogue on forests. The framework comprises three clusters of core principles: national sovereignty and country leadership; consistency within and integration beyond the forest sector; and participation and partnership. NFPs provide a structure for integrating international commitments such as the Non-legally Binding Instrument on All Types of Forests into national forest policy and broader intersectoral processes, and for building stakeholder consensus on national forest issues.

The National Forest Programme Facility was created in 2002 to support countries in implementing their NFPs according to their own specific circumstances. The NFP Facility is hosted by FAO and works in close collaboration with its Forestry Department, which provides leadership and support to international and national policy dialogue. The Facility's support to countries includes small grants to stakeholders (civil society, NGOs, government), knowledge-sharing activities and capacity development in the formation of national multistakeholder forest forums. The Facility helps to develop sustainable institutional mechanisms for more consultative and collaborative planning, implementation and monitoring processes.

Overall, the NFP Facility has allocated more than 600 small grants (70 percent to civil society and 30 percent to governments) based on national priorities agreed in a participatory manner in 80 partner countries and regional organizations. Grants are awarded through a transparent process of call for proposals led by a national multistakeholder steering committee. Studies, training and pilot activities are supported in a wide range of thematic areas – among others, agroforestry, climate change, national forest financing strategies, conflict resolution, timber industry, indigenous knowledge, governance and land use. The NFP Facility opens up the debate on forestry to a greater public and provides a platform and linkages for sharing lessons learned.

For further information on country activities, visit: www.nfp-facility.org



WORLD OF FORESTRY

XXIII IUFRO World Congress

The twenty-third IUFRO World Congress, organized by the International Union of Forest Research Organizations (IUFRO), took place from 23 to 28 August 2010 in Seoul, Republic of Korea. With the theme "Forests for the future: sustaining society and the environment", the congress drew over 2 700 participants from 92 countries, the largest attendance in the gathering's history. Lee Myung-bak, President of the Republic of Korea, inaugurated the six-day event, which included daily keynote speeches from prominent figures in forestry. Outgoing IUFRO President Don Koo Lee led a special discussion on the future challenges of forest education. There were 150 technical sessions with over 2 000 presentations, 1 027 posters and a trade and exhibition area.

The congress and its technical and poster sessions focused specifically on: forests and climate change; biodiversity conservation and sustainable use of forest resources; forest environmental services; Asia's forests for the future; forest products and production processes for a greener future; emerging technologies in the forest sector; frontiers in forest and tree health; forests, communities and cultures; and forests, human health and environmental security.

In addition, there was significant discussion on a number of recurring themes during the week. These included narrowing knowledge gaps between science and policy; the need for the discipline of forestry and forestry education to evolve with changing demands on forests; the need for greater interdisciplinary work which recognizes the social perspective of efforts to protect and improve forest ecosystems; and the role of forestry in climate change mitigation and adaptation. Beyond these emerging concerns, participants also took time to discuss and review advances in areas of long-standing concern for forest research, including forest health and statistical modelling of forest growth.

During the closing ceremony, the Seoul Resolution was published, committing IUFRO to focus more on scientific research and international collaboration in the following six thematic areas: forests for people; climate change and forestry; bioenergy; forest biodiversity conservation; forest and water interactions; and forest resources for the future. Furthermore, the resolution commits IUFRO to the following goals:

- improving communication with scientists, students, forest professionals and the public, and increasing the visibility and accessibility of research findings;
- expanding and deepening IUFRO's work at the science-policy interface by enhancing scientific contributions to international processes, conventions and organizations, by responding rapidly to new policy issues and by expanding partnerships;
- urging member institutions and external stakeholders to renew and strengthen forest monitoring activities and support global monitoring efforts;

- improving IUFRO's capacity to expand its membership and funding base to provide fuller support to its member organizations;
- promoting high-quality forest-related research, encouraging interdisciplinary cooperation, strengthening scientific capacity and identifying emerging issues.

Further information is available at: www.iufro2010.com

Tenth meeting of the Conference of the Parties to the Convention on Biological Diversity

Following intense negotiations, the tenth meeting of the Conference of the Parties (COP 10) to the Convention on Biological Diversity (CBD) adopted a new Strategic Plan and a new international protocol for governing access to and equitable sharing of the world's genetic resources. COP 10, a central event of the International Year of Biodiversity 2010, was held from 18 to 29 October 2010 in Nagoya, Japan. It drew over 7 000 delegates, and the total participation was recorded to be as high as 18 000. A high-level segment was also held with the participation of 122 ministers and five Heads of State or Government.

The ten-year Strategic Plan or the "Aichi Target" adopted by the meeting includes 20 headline targets, organized under five strategic goals: addressing the underlying causes of biodiversity loss; reducing the pressures on biodiversity; safeguarding biodiversity at all levels; enhancing the benefits provided by biodiversity; and promoting capacity-building. Among the targets, Parties agreed to at least halve, and where feasible bring close to zero, the rate of loss of natural habitats, including forests; and to restore at least 15 percent of degraded areas. A new resource mobilization strategy was also announced in support of the Strategic Plan.

The new Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization provides a framework for balancing access and benefit sharing based on prior informed consent and mutually agreed terms, while taking into account the important role of traditional knowledge. The protocol also proposes the creation of a global multilateral mechanism for situations in transboundary areas or where prior informed consent cannot be obtained. UN Secretary-General Ban Ki-moon said the landmark agreement was a positive step in efforts to achieve the Millennium Development Goals, and demonstrated that countries are committed to pragmatic cooperation in meeting the challenges of sustainable development.

A decision was adopted on forest biodiversity; it calls for implementation of joint activities with the United Nations Forum on Forests (UNFF) and an expanded programme of work in developing countries on forest biological diversity and the Non-legally Binding Instrument on All Forest Types, through capacity building, collaboration with the Global Partnership on Forest Landscape Restoration and streamlining of forest-



related reporting, working with FAO and other members of the Collaborative Partnership on Forests. The COP also requested the CBD Secretariat to enhance coordination of capacity-building efforts on issues related to reducing emissions from deforestation and forest degradation, ecosystem-based carbon sequestration and the conservation of forest carbon stocks, in collaboration with the UNFF Secretariat and other UN agencies. Also of relevance to the forest sector were, among others, decisions on biodiversity and climate change, mountain biological diversity, and biofuels and biodiversity.

In total, COP 10 adopted some 47 decisions, including a de facto moratorium on climate-related geo-engineering; adoption of the Tkarihwaí:ri Code of Ethical Conduct on the Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities Relevant to the Conservation and Sustainable Use of Biological Diversity; and the establishment of clear steps to increase cooperation with the other international environmental conventions leading up to the Rio+20 Summit in 2012.

Further information on the outcomes is available at: www.cbd.int/nagoya/outcomes

Good news from Cancún

Most countries hailed the agreements reached at the climate change talks held in Cancún, Mexico from 29 November to 10 December 2010 – including the sixteenth session of the Conference of the Parties (COP 16) to the United Nations Framework Convention on Climate Change (UNFCCC) – as a balanced outcome that represents an important stepping stone towards a final agreement. There is cautious optimism that this could be reached at COP 17 in Durban, South Africa in December 2011.

For the past three years, two ad hoc working groups have been engaged in parallel-track negotiations – one addressing actions of all Parties under the Convention, including on climate change mitigation, adaptation, financing, capacity building and technology transfer; and the other focusing on further emission reduction commitments of developed countries (Annex I countries) under the Kyoto Protocol. The goals are to advance collective efforts to limit global warming to within 2°C above pre-industrial levels to avoid severe consequences of climate change and to promote adaptation to the inevitable consequences of climate change.

Perhaps the most significant development at Cancún was a change in atmosphere, marked by the restoration of confidence in the UNFCCC process, a willingness to compromise and heightened commitment of Parties to move forward together in seeking mutually acceptable and more ambitious climate change responses.

The main outcome was the validation of the elements of the Copenhagen Accord, which was drafted at COP 15 in December 2009. The Cancún Agreement launches the Green Climate Fund

and outlines a process for setting it up; creates a framework for providing incentives for forest-based climate change mitigation actions in developing countries (i.e. REDD+); establishes a Technology Mechanism, including a technology centre and network; and adopts the Cancún Adaptation Framework to promote international cooperation and action on adaptation.

The long-awaited decision on REDD+, under discussion for the past five years, confirms the scope of REDD+: reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forest; and enhancement of forest carbon stocks. It outlines principles as well as safeguards against negative social and environmental impacts of REDD+ actions. Countries are requested to develop national strategies and action plans for REDD+, a national (or as an interim measure, subnational) forest (emission) reference level, a national system for monitoring and reporting on REDD+ activities and a system for providing information on how environmental and social safeguards are being addressed and respected. Parties are expected to take a phased approach – from strategy development to pilot activities and finally to results-based actions. The Subsidiary Body for Scientific and Technological Advice (SBSTA) is requested to work on methodological issues in REDD+, including methods to estimate emissions and removals from REDD+ activities and modalities for developing forest reference (emission) levels and national forest monitoring systems. The issue of the REDD+ financing modality (e.g. fund-based, market-based or a mix) remains unresolved and will remain under discussion by the ad hoc working group.

The future of the Kyoto Protocol – whether it will be extended beyond 2012, in a second commitment period – is not clear. The ad hoc working group addressing this issue continues to struggle with numbers – i.e. developed countries' voluntary emission reduction pledges, which, in aggregate, so far are considered insufficient to limit the temperature rise to within 2°C. The question is how to reach the level of emission reductions needed – whether Annex I countries will make more ambitious cuts, how developing countries will contribute and whether action will be legally binding or voluntary. The Cancún Agreement indicates that for the second commitment period of the Kyoto Protocol, emission trading and project-based mechanisms (Joint Implementation, the Clean Development Mechanism), as well as offsets from carbon sinks in the land use, land use change and forestry (LULUCF) sectors, would continue to be available to Annex I Parties to meet their emission reduction commitments.

Agreement on revised LULUCF accounting rules for the second commitment period of the Kyoto Protocol could influence the level of emission reduction commitments that Annex I Parties are willing to make. Reporting on forest management, which was optional under the first commitment period, is the key issue; agreement on this remains elusive. The areas of debate include whether a cap should be applied to emissions and removals from



Forest Day 4

Forest Day 4 was held in parallel to COP 16 on Sunday 5 December 2010 in Cancún, Mexico, co-hosted by the Mexican National Forestry Commission (CONAFOR), the Center for International Forestry Research (CIFOR) and members of the Collaborative Partnership on Forests (CPF). It brought together more than 1 500 leaders, experts, practitioners and policy-makers, advocates and investors, indigenous people, community representatives and journalists to discuss and debate how to accelerate the integration of forests into climate change mitigation and adaptation from local to global levels. Felipe Calderón Hinojosa, President of Mexico, opened the event with a plea to for all to push hard for the full incorporation of REDD+ into a long-term international climate change agreement.

Forest Day participants shared experiences on a number of existing and promising approaches for integrating forests into strategies to address climate change. These include aligning REDD+ with national development objectives and poverty reduction strategies; ecosystem-based approaches to adaptation; restoring degraded lands; empowering communities to manage forests; addressing agricultural drivers of deforestation; increasing mitigation through forest management in developed countries; and mobilizing additional finance.

A summary statement was provided to UNFCCC to help it move forward in forest-related negotiations. It included recommendations on the following:

- harnessing REDD+ to manage forests sustainably and to reduce poverty;
- REDD+ as a key and cost-effective opportunity to mitigate climate change;
- the need to protect the rights of indigenous people and forest-dependent communities;
- the need for additional financing to implement REDD+ at scale;
- biodiversity conservation as a prerequisite for the success of REDD+;
- options for addressing agricultural drivers of deforestation (including increasing production efficiencies, promoting multifunctional landscapes, directing REDD+ financing to increase efficiencies in agronomic practices, and shifting extensive production systems to low-carbon landscapes);
- promoting synergies between climate change mitigation and adaptation across landscapes;
- strengthening linkages between national and subnational monitoring, reporting and verification systems for REDD+;
- improving greenhouse gas accounting rules for forest management in developed countries.

The statement cautioned that the success of REDD+ strategies and projects will depend on whether they influence governance reforms or are shaped by existing governance failures.

forest management, if and how emissions from extraordinary occurrences (*force majeure*) would be accounted, how to set a baseline or forest reference (emission) level and how to factor out changes in forest carbon stocks not caused by human intervention. Work on this issue will continue over the coming year.

Forests figured prominently in the negotiations and in events on the sidelines. Political support for a REDD+ decision was strong. REDD+ is already going ahead on the ground, as evidenced by the many side events on REDD+ pilot activities supported by NGOs, bilateral agencies and multilateral partnerships (including the

UN-REDD Programme and the Forest Carbon Partnership Facility). The discussions in the Kyoto Protocol related negotiations on carbon accounting rules for forest management – a complex and controversial issue – have also stimulated debates on what constitutes good forest management and how to provide incentives for it. The importance of forests to climate change mitigation has clearly raised the political profile of forests. The crucial role that forests play in climate change adaptation and in rural livelihoods has not yet received the same level of attention, but this can be expected to come.

NEW PUBLICATIONS FROM FAO

All FAO publications reviewed here are available online at www.fao.org/forestry/publications, where information is also available on ordering printed copies.

Main report of FRA 2010

Global Forest Resources Assessment 2010 – Main report. FAO Forestry Paper No. 163. Rome, FAO. ISBN 978-92-5-106654-6.

FAO, in cooperation with its member countries, has monitored the world's forests at five- to ten-year intervals since 1946. These global assessments provide valuable information to policy-makers, to international negotiations, arrangements and organizations related to forests and to the general public. The Global Forest Resources Assessment 2010 (FRA 2010) is the most comprehensive assessment of forests and forestry to date – not only in terms of the number of countries (233) and people (900) involved, but also in terms of scope. It examines the current status and recent trends for about 90 variables covering the extent, condition, uses and values of all types of forests and other wooded land for four points in time: 1990, 2000, 2005 and 2010, with the aim of assessing all benefits from forest resources.

Seven core chapters evaluate the status and trends for key aspects of sustainable forest management: extent of forest resources; forest biological diversity; forest health and vitality; productive functions of forest resources; protective functions of forest resources; socio-economic functions of forests; and the legal, policy and institutional framework guiding the conservation, management and use of the world's forests. Based on these results, the report analyses progress being made towards sustainable forest management over the past 20 years, with a series of "traffic lights" indicating where there is cause for optimism and where there is cause for alarm. Boxed texts report on a series of special studies that will complement the main assessment,

on topical issues such as trees outside forests, poverty and livelihoods and small island developing States. Annexes provide detailed country statistics and other background material.

This report is an essential reference for anyone interested in the status of the world's forests and will support policies, decisions and negotiations in all matters where forests and forestry play a part.

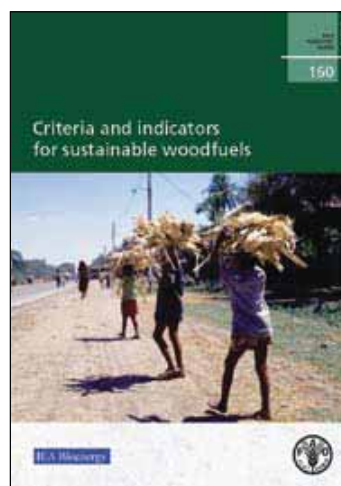
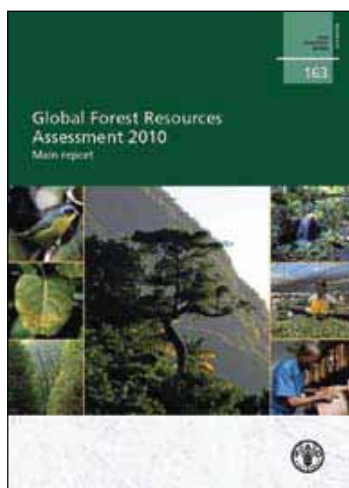
The publication is available in all FAO official languages (Arabic, Chinese, English, French, Russian and Spanish).

Ensuring sustainable woodfuel use

Criteria and indicators for sustainable woodfuels. 2010. FAO Forestry Paper No. 160. Rome, FAO. ISBN 978-92-5-106603-4.

Reliable, secure and safe energy sources are fundamental to the well-being and social and economic development of all societies. With growing pressure on energy resources and a heavy dependence on non-renewable fossil fuels, the world faces two key energy-related problems: the lack of a secure and affordable supply, and the threat of overconsumption leading to irreversible environmental damage. As part of the solution to these problems, many countries are looking increasingly to their biomass energy resources. This publication focuses on one major source of biomass energy – woodfuels.

In many developing countries, woodfuels are commonly used for household cooking and heating and are also important for local processing industries. In many developed countries, wood-processing industries often use their wood by-products for energy production. In some countries, notably the Nordic countries, forest residues are increasingly used for industrial-scale electricity generation and heating. Several developing countries have enormous potential for sustainable energy production from forests and trees outside forests, for both domestic use and export. However this potential is not often properly reflected in national energy-development strategies.





This publication sets out principles, criteria and indicators to guide the sustainable use of woodfuel resources and the sustainable production of charcoal. It is designed to help policy- and decision-makers in forestry, energy and environment agencies, non-governmental and other civil-society organizations and the private sector ensure that the woodfuel sector reaches its full potential as an agent of sustainable development. It was developed as part of a collaboration between FAO and the International Energy Agency (IEA) Bioenergy Task 31, "Biomass production for energy from sustainable forestry".

The publication first reviews existing policies and institutional frameworks for sustainable woodfuels at the international level and uses the frameworks of some countries to illustrate the options available at the national or subnational level. It then examines social and cultural, economic and environmental aspects of woodfuel production, and sets out four principles for sustainable woodfuels and a number of criteria and indicators for each. Principles, criteria and indicators for sustainable charcoal production are presented separately.

For effective policy processes

Developing effective forest policy – A guide. 2010. FAO Forestry Paper No. 161.
Rome, FAO. ISBN 978-92-5-106607-2.

Many countries have developed or revised forest policies to keep abreast of changing circumstances and to enhance the value of forests to society. Experience from these processes shows that substantial changes have occurred in the past 20 years in both the content of forest policies and the ways in which they are developed or revised.

This guide aims to support countries in planning and conducting forest policy development processes. Based on a review of practical experiences, it outlines the rationale and purpose of a national forest policy and the different elements of the policy development process.



It elaborates the first steps in policy development, such as planning, capacity building, determining who should be involved and garnering support. Next it explores how to develop an agreement in a participatory manner, from initial consultation up to the drafting of a forest policy statement and stakeholder validation. Finally it summarizes the preparation required for adopting and implementing the forest policy.

Given the unique characteristics of countries' forest resources and their usage, the guide is not intended as a template for forest policy development. Rather users are encouraged to adapt its contents to their specific needs. However the book includes useful annexes that provide, as examples, the table of contents of the forest policies of Bhutan, Liberia and Trinidad and Tobago, and statements of policy vision, goals or principles from 11 countries.

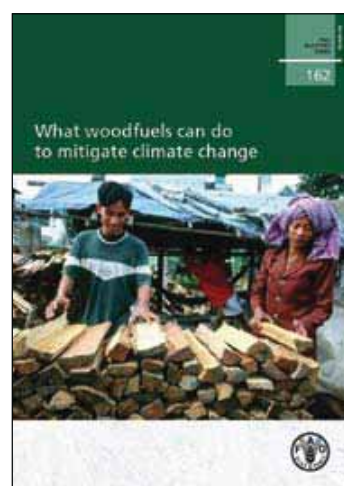
This publication will help senior officials in government administrations and other stakeholder representatives, including civil society organizations and the private sector, in developing or revising national forest policy.

The publication is available in English, French and Spanish.

Advantages of using woodfuels to substitute fossil fuels

What woodfuels can do to mitigate climate change. 2010. FAO Forestry Paper No. 162. Rome, FAO. ISBN 978-92-5-106653-9.

Climate change can be mitigated in several ways, but most strategies emphasize reducing greenhouse gas emissions by reducing energy use and switching to energy sources that are less carbon intensive than fossil fuels. This publication explores the scope, potential and implications for using woodfuels to replace fossil fuels and thereby contributing to climate change mitigation. It analyses the current woodfuel offset mechanisms in place and their relative emission reduction potentials.





The scope is limited to solid woodfuels; however, some themes covered will be applicable to all woodfuels, notably the socio-economic and environmental impacts, financing options and overall development implications of more intensive and efficient use of woodfuels.

Each chapter addresses a key element of the debate on the role of woodfuels in climate change mitigation: the status of forest resources and their potential to support expanded bioenergy production; the national, regional and global role of woodfuels within the overall energy resource base; the dynamics of future energy demand and their implications for the expanded use of woodfuels; cost-effective applications of woodfuels for fossil-fuel substitution; technical and economic characteristics of selected greenhouse gas emission reduction options; socio-economic drivers in the implementation of woodfuel projects and programmes; environmental impacts that facilitate or constrain the expanded use of woodfuels; financing options for woodfuel projects and programmes; and finally, key research and development issues related to woodfuels.

The publication will be of interest to specialists and policy-makers in forestry, climate change and renewable energy, as well as to forest managers, students and general audiences interested in learning more about the role of forests in energy production and the resulting climate change mitigation potential.

Outlook for forests in Asia and the Pacific

Asia-Pacific forests and forestry to 2020: Report of the second Asia-Pacific Forestry Sector Outlook Study. 2010. RAP Publication 2010/06. Bangkok, Thailand, FAO Regional Office for Asia and the Pacific. ISBN 978-92-5-106566-2.

In the 12 years since the first Asia-Pacific Forestry Sector Outlook Study was completed in 1998, the region has experienced tremendous changes in nearly every aspect. In the forest sector these changes have been particularly profound,

as the demands and expectations of society have dramatically increased. This publication summarizes the key findings and results of the second Asia-Pacific Forestry Sector Outlook Study, a comprehensive effort spanning nearly four years and involving all member countries of the Asia-Pacific Forestry Commission.

The report synthesizes observations and findings from almost 50 country and thematic reports in analysing the status and trends of all aspects of forestry in the region. The publication also analyses key factors driving changes in forestry in the region and sets out three scenarios for 2020: “boom”, “bust” and “green economy”. The report concludes by outlining priorities and strategies to move the region’s forest sector on to a more sustainable footing to provide continued benefits to future generations.

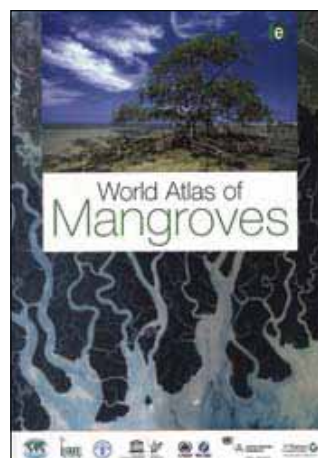
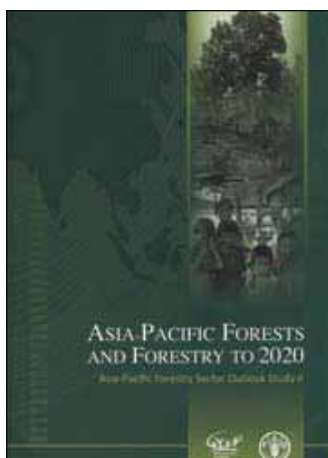
FROM OTHER PUBLISHERS

Complete picture of the world’s mangroves

World atlas of mangroves. M.S. Spalding, M. Kainuma & L. Collins. 2010. London, UK, Earthscan. ISBN 978-1-84407-657-4.

This atlas provides the first truly global assessment of the state of the world’s mangroves, providing reliable and recent coverage of 98 percent of the world’s 73 species of mangroves. The outcome of a collaboration among top international researchers and conservation organizations, this full-colour atlas contains 60 full-page maps, hundreds of photographs and illustrations and a comprehensive country-by-country assessment of mangroves.

Initial chapters provide a global view, with information on distribution, biogeography, productivity and ecology, as well as human uses, economic values, threats and management approaches for mangroves. These themes are revisited throughout the regional chapters, where the maps provide a spatial context for further exploration. The book also presents





a wealth of statistics on biodiversity, habitat area, losses and economic value, which provide a unique record of mangroves against which future threats and changes can be evaluated. Case studies provide insights into regional mangrove issues, including primary and potential productivity, management and biodiversity status and present and traditional uses.

The publication was a joint initiative of the International Tropical Timber Organization (ITTO) and the International Society for Mangrove Ecosystems. Project partners included FAO, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), the United Nations University Institute for Water, Environment and Health and The Nature Conservancy.

Guide to biodiversity monitoring

Monitoring forest biodiversity: Improving conservation through ecologically responsible management. T. Gardner. 2010. London, UK, Earthscan. ISBN 978-1-84407-654-3.

Better forest monitoring is essential to conservation of much of the world's terrestrial biodiversity, measurement of the impact of different human activities on biodiversity and identification of more responsible ways of managing the environment. This book integrates three complex topics – forest biodiversity, forest management and ecological monitoring – and examines the factors that make monitoring programmes fail or succeed.

The first two sections lay out the context and importance of biodiversity monitoring and shed light on some of the key challenges that have confounded many efforts to date. The third and main section presents an operational framework for developing monitoring programmes that will overcome the challenges and have the potential to make a meaningful contribution to biodiversity conservation and forest management.

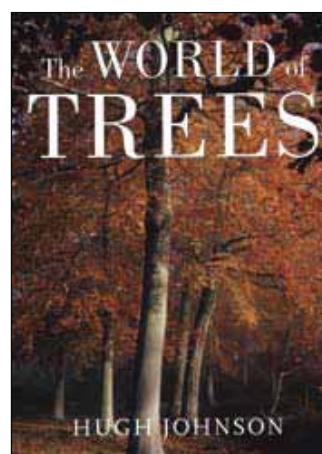


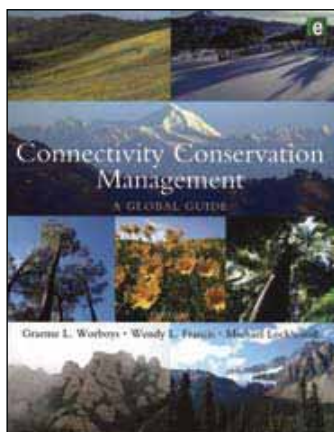
The publication addresses the scope and design of a forest biodiversity monitoring programme and delineates the implementation stages – definition of the purpose, goals and objectives of monitoring; indicator selection; and data collection, analysis and interpretation. Each chapter begins with a brief synopsis and includes boxed texts highlighting case studies or providing further information on key definitions or international processes. The final section addresses the importance of people in monitoring biodiversity and how to make such programmes viable and effective in the long term. This section ends with four overarching principles that are fundamental to successful monitoring: be collaborative, be realistic, be adaptive and keep sight of the bigger picture. This book is a timely and accessible guide for biodiversity researchers, policy-makers and forest managers.

An illustrated reference on temperate-zone trees

The world of trees. H. Johnson. 2010. Berkeley, California, USA, University of California Press. ISBN 978-0-520-24756-7.

The 2010 edition of *The world of trees*, first published in 1974, is a richly illustrated guide to more than 600 of the world's major coniferous and deciduous temperate forest and garden trees. Written for the general reader, the book opens with an introduction to the structure and life cycle of trees, how trees are named, a brief history of plant collecting, the use of trees in gardens and landscape design over time, and tree planting and care. Subsequent chapters give the traits, growing preferences and recent history for each family of trees, supplemented by personal and historical anecdotes, lavish photographs and illustrations. The book also includes a guide on how to choose trees for the garden and an A-to-Z listing of the most important and popular species and varieties. This book would be an excellent resource for gardeners, landscapers, botanists and anyone with a general interest in temperate-zone trees.





Connectivity conservation – theory and practice

Connectivity conservation management – A global guide. G.L. Worboys, W.L. Francis & M. Lockwood, eds. 2010. London, UK, Earthscan. ISBN 978-1-84407-604-8.

With rapid climate change, deforestation and habitat loss, it is now recognized that protected areas, as isolated pockets of wilderness, may not be enough to protect biodiversity. This book, written by leading conservation and protected area management specialists under the auspices of the World Commission on Protected Areas of the International Union for the Conservation of Nature (IUCN), is the first published guide to the theory and practice of connectivity conservation management at local, regional and continental scales.

Opening chapters provide a useful summary of the science of connectivity conservation and outline the magnitude of the challenge of successful conservation management. The following chapters draw on 25 case studies from six of the Earth's eight biogeographic realms to identify successes, lessons learned and priorities as well as outline a conceptual framework for management. Using this framework, the authors present the principal management actions needed for implementing 15 priority connectivity management tasks. This book is a comprehensive and practical guide for park managers, policy-makers and conservation researchers.

State of Commonwealth forests

Commonwealth forests 2010 – An overview of the forests and forestry sectors of the countries of the Commonwealth. 2010. Craven Arms, UK, Commonwealth Forestry Association. ISBN 978-095571131-2.

This succinct publication describes the present state of forests and forestry of the Commonwealth, an association of 54 independent countries containing 31 percent of the world's population. It covers not only the extent of forest cover, rates of forest loss and establishment of planted forests – using figures drawn from FAO's Global Forest Resources Assessment 2010 – but also the



adoption of sustainable forest management and the many benefits from forests. It also includes chapters on forest research, forest education and forest governance within the Commonwealth. The final chapter identifies the main challenges facing foresters and policy-makers and suggests opportunities for collaboration to find solutions.

Further information is available at: www.cfa-international.org

A calendar of celebrated days

JANUARY

- 1 Global Family Day/One Day of Peace and Sharing/World Day of Peace
- 27 International Day of Commemoration in memory of the victims of the Holocaust
- 3rd **Sunday**
World Religion Day

FEBRUARY

- 2 World Wetlands Day
- 20 World Day of Social Justice
- 21 International Mother Language Day

MARCH

- 8 International Women's Day and United Nations Day for Women's Rights and International Peace
- 14 International Day of Action for Rivers
- 15 World Consumer Rights Day
- 21 International Day for the Elimination of Racial Discrimination
- 21 World Poetry Day
- 22 World Water Day
- 23 World Meteorological Day
- 25 International Day of Remembrance of the Victims of Slavery and the Transatlantic Slave Trade
- 27 World Theatre Day

APRIL

- 2 World Autism Awareness Day
- 4 International Day for Mine Awareness and Assistance in Mine Action
- 7 World Health Day
- 16 World Entrepreneurship Day
- 21 World Creativity and Innovation Day
- 22 Earth Day
- 23 World Book and Copyright Day
- 25 World Malaria Day
- 26 World Intellectual Property Day
- 28 International Workers' Memorial Day
- 29 International Dance Day

MAY

- 1 Labour Day
- 3 World Press Freedom Day
- 4 International Firefighters Day
- 15 International Day of Families
- 17 World Information Society Day
- 18 International Museum Day
- 21 World Day for Cultural Diversity for Dialogue and Development
- 22 International Day for Biological Diversity
- 29 International Day of United Nations Peacekeepers
- 31 World No-Tobacco Day
- 1st **Tuesday**
World Asthma Day
- 2nd **Saturday**
World Fair Trade Day
- 2nd **weekend**
World Migratory Bird Day

JUNE

- 1 International Children's Day
- 4 International Day of Innocent Children Victims of Aggression
- 5 World Environment Day
- 8 World Ocean Day
- 12 World Day Against Child Labour
- 17 World Day to Combat Desertification and Drought
- 20 World Refugee Day
- 23 United Nations Public Service Day
- 23 International Day in Support of Victims of Torture
- 26 International Day Against Drug Abuse and Illicit Trafficking

JULY

- 11 World Population Day
- 1st **Saturday**
International Day of Cooperatives

AUGUST

- 9 International Day of the World's Indigenous People
- 12 International Youth Day
- 19 World Humanitarian Day
- 23 International Day for the Remembrance of the Slave Trade and its Abolition

SEPTEMBER

- 8 International Literacy Day
- 10 World Suicide Prevention Day
- 15 International Day of Democracy
- 16 International Day for the Preservation of the Ozone Layer
- 21 International Day of Peace
- 22 World Car Free Day
- 27 World Tourism Day
- During last week**
World Maritime Day

OCTOBER

- 1 International Day for Older Persons
- 2 International Day of Non-Violence
- 4 World Animal Day
- 5 World Teacher's Day
- 9 World Post Day
- 10 World Mental Health Day
- 14 World Standards Day
- 15 International Day of Rural Women
- 16 World Food Day
- 17 International Day for the Eradication of Poverty
- 20 World Statistics Day
- 24 United Nations Day
- 24 World Development Information Day
- 1st **Monday**
World Habitat Day
- 2nd **Wednesday**
International Day for Natural Disaster Reduction

NOVEMBER

- 6 International Day for Preventing the Exploitation of the Environment in War and Armed Conflict
- 10 World Immunization Day
- 14 World Diabetes Day
- 16 International Day of Tolerance
- 20 Africa Industrialization Day
- 21 World Television Day
- 25 International Day for the Elimination of Violence against Women
- 29 International Day of Solidarity with the Palestinian People
- 3rd **Sunday**
World Day of Remembrance for Road Traffic Victims
- 3rd **Thursday**
World Philosophy Day

DECEMBER

- 1 World AIDS Day
- 2 International Day for the Abolition of Slavery
- 3 International Day of Disabled Persons
- 5 International Volunteer Day for Economic and Social Development
- 7 International Civil Aviation Day
- 9 International Anti-Corruption Day
- 10 Human Rights Day
- 11 International Mountain Day
- 18 International Migrants Day
- 19 United Nations Day for South-South Cooperation
- 20 International Human Solidarity Day

