

ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA (ESCWA)

WORLD ENVIRONMENT DAY

5 June 2011

Forests: Nature at Your Service

World Environment Day

- World Environment Day has been celebrated as an annual event since 1972. It has grown to become one of the foremost ways in which the United Nations stimulates worldwide environmental awareness;
- World Environment Day encourages political attention and action by personalizing environmental issues and encouraging everyone to realize their responsibilities and their power to become agents for change;
- World Environment Day will be celebrated Sunday 5 June 2011. The theme of this year, Forests: Nature at Your Service, underscores the links between quality of life and the health of forests and forest ecosystems.

2011 International Year of Forests

The United Nations General Assembly has declared 2011 as the International Year of Forests, reaffirming its commitment to Agenda 21, adopted at the United Nations Conference on Environment and Development in 1992, the United Nations Millennium Declaration adopted at the Millennium Summit in 2000, the Johannesburg Declaration on Sustainable Development (2002) and the Plan of Implementation of the World Summit on Sustainable Development. The United Nations Convention to Combat Desertification and the Convention on Biological Diversity also recognize the need to address forest issues. The protection and sustainable management of forests contributes significantly to the achievement of the Millennium Development Goals (MDGs), alleviating poverty and supporting biodiversity. The challenge of eradicating poverty and hunger (MDG1) is exacerbated by deforestation and its knock-on effects on desertification and climate change. Using and securing forest resources in a properly managed way contributes significantly toward ensuring environmental sustainability while building a global partnership for development (MDGs 7 and 8).

Benefits of forests

As a resource, forests provide such important natural materials as timber, fuel, rubber, paper and medicinal plants while helping sustain the quality and availability of our supply of freshwater. According to the United Nations Environment Programme World Environment Day website:¹

- More than three quarters of the accessible freshwater in the world comes from forested catchments. Water quality declines with worsening forest conditions and with decreased forest cover. Natural hazards such as floods, landslides and soil erosion have larger impact;
- Forests play a key role in our battle against climate change: storing carbon, sucking in carbon dioxide from the atmosphere and locking it into their biomass;

- Forests are essential to every aspect of life: by regulating water for many of the rivers of the world, they help secure water quality. They also lessen the effects of storms and floods and help to control erosion;
- As the most biologically diverse ecosystems on land, forests worldwide are home to more than half of all terrestrial species, from the great apes to the smallest of creatures;
- They also provide homes, security and livelihoods for 60 million indigenous peoples, whilst contributing to the livelihoods of 1.6 billion people worldwide;
- Forests are knowledge banks for biodiversity and education, provide inspiration and recreation and instil aesthetic and religious values.

Forests of the ESCWA region

In the Economic and Social Commission for Western Asia (ESCWA) region forest resources are generally limited and their importance, therefore, often overlooked. However, the contribution of forestry to natural resource and environmental management and water catchment is significant and should not be underestimated. Most of the forests in the area are in fact considered to be of international importance and critically endangered from the point of view of biodiversity. They are well represented in Global 200 Ecoregions² which include Mediterranean Forests, Woodlands and Scrub; Arabian Highland Woodlands and Shrublands; Sudanian Savannas and Sudd-Sahelian Flooded Grasslands and Savannas. Many forest plants in North Africa and the Middle East are included on the 2010 International Union for the Conservation of Nature Red List of Threatened Species.³

A rich resource

The Food and Agriculture Organization of the United Nations (FAO)⁴ describes the forests of the region as being home to a variety of economically important plants; wild relatives of such crops as wheat, rye and barley and nuts and fruits, including pistachio, olives, walnuts, chestnuts, almonds, apricots, pears and apples. *Boswellia papyrifera*, the source of frankincense, is an important species from both economic and ecological perspectives in Yemen and the Sudan.

The Mediterranean Forests, Woodlands and Scrub ecoregion has the highest global rate of plant endemism⁵ after the Andes, with about 12,000 different endemic species and with even higher rates found in the surviving forested areas of Mount Lebanon.

Forests in the region shelter both Palaearctic species such as brown bear, lynx, chamois and wolf and more subtropical species, including mountain gazelle, several subspecies of leopard, the striped hyena and jackal.

Forests are also important to significant numbers of breeding bird species and millions of birds pass through on major migration routes.

Riparian forests, adjacent to water bodies, regulate water flow, maintain water quality and help to minimize damage resulting from fast-floods, especially in dry regions where there is high risk of erosion.

Main types of forests in the ESCWA region

- Evergreen broadleaf and conifer trees grow in the Mediterranean forests of North Africa and the Levant.⁶ Carob (*Ceratonia siliqua*), wild olive (*Olea africana*), araar (*Tetraclinis articulata*), Aleppo Pine (*Pinus halepensis*), Holly Oak (*Quercus coccifera*), juniper (*Juniperus phoenicea*) and pistacia trees (*Pistacia atlantica*) are found in coastal areas and dry lowlands. A mix of oak and conifers grow higher up. These include the evergreen oak (*Quercus ilex*) and several

deciduous species as well as conifers including Turkish Pine (*Pinus brutia*), Stone Pine (*Pinus pinea*), the source of edible pine nuts and the Mediterranean Cypress (*Cupressus sempervirens*). The famous cedar of Lebanon (*Cedrus libani*), is one of several relic endemic conifers with a narrow distribution in the high mountain forests;

- *Acacia* and other scattered trees dot the desert and semi-desert lands. The date palm (*Phoenix dactylifera*) is the dominant tree of oases;
- In the mountains of the southern Arabian Peninsula, deciduous woodlands of *Acacia* and *Commiphora* grow at lower elevations where the tree bearing frankincense is also found. Mid-altitudes have woodlands hosting wild olive and Camphor bush (*Tarchonanthus camphorates*) while juniper forests (*Juniperus procera*) grow at the higher altitudes and *Aloe* species take hold on dry, barren slopes;
- The Sudan is home to high rainfall savannah woodlands where African mahogany (*Khaya senegalensis*) and bush willow (*Combretum hartmannianum*) grow. Other species include the African Locust (*Parkia Africana*), *Daniellia oliveri*, *Isoberlinia doka* and *Anogeissus leiocarpus*;
- Mangrove forests are found in some areas along the Red Sea coast of Egypt and the Sudan, the Arabian Peninsula and Kuwait, but are increasingly threatened by coastal development. There are narrow stands of *Avicennia marina* or *Rhizophora mucronata* in tidal areas, seasonal river mouths and offshore islands.

Country	Land area (1,000 ha)	Forest, 2010			
		Forests (1,000 ha)	Percentage of land area (%)	Forest plantations (‘000 ha)	Forest cover annual rate of change, 1990-2010 (%)
Bahrain	71	1	1	1	4.6
Egypt	100 145	70	--	70	2.4
Iraq	43 832	825	2	15	0
Jordan	8 878	98	1	47	0
Kuwait	1 782	6	--	6	3.0
Lebanon	1 040	137	13	11	0.2
Oman	30 950	2	--	2	0
Palestine	621	9	2	--	--
Qatar	1 100	0	0	0	--
Saudi Arabia	200 000	977	--	0	--
Sudan	250 581	69 949	29	6 068	0.6
Syrian Arab Republic	18 518	491	3	294	2.6
United Arab Emirates	8 360	317	4	317	1.3
Yemen	52 797	549	1	0	--
ESCWA	718 675	73 431	19	6 831	1.0

Source: State of the World's Forests 2011, Food and Agriculture Organization of the United Nations, Rome, 2011.

The challenges facing our forest heritage

The absence of adequate management and unsustainable use of their natural resources has serious impact on forests of the ESCWA region which today are mainly found in mountain areas. The Food and Agriculture Organization has pointed out that:⁷

- Illegal logging and the unsustainable collection of wood for fuel and forage, together with increased settlement of people and livestock in mountain areas, are a major cause of land degradation;
- The abandonment of traditional conservation systems like the *hamiyaat* and *hima* in West Asia, protected areas from which livestock are excluded, has increased grazing pressure and further loss of habitats;

- High population growth, poverty and rapid urbanization are putting enormous pressure on remaining forests which are still being destroyed at unprecedented levels;
- Virtually every country in the region has failed to reverse the loss of forest cover and, as a result, the total Arab forest cover dropped from 7.2 per cent in 1990 to 6.4 per cent in 2007;⁸
- Lebanon, the major regional source of timber from ancient times, now has only 13.3 per cent of forest cover left. The Sudan, with 28.4 per cent, is the only other country in the region where forest cover exceeds 10 per cent of the area of the country. Other member countries have little forest remaining.

Recommended action areas for the region

Action is urgently needed in the ESCWA region to rehabilitate existing forests and to create new ones:

- The surviving forests of the region are a vital green resource for the environment. They help to counter erosion and desertification, provide protection from flash floods and hold moisture and supply freshwater;
- Both timber and non-timber forest products can provide steady employment in rural areas;
- Forests are a unique and fragile resource for the people of the region, for ecotourism and for preserving biodiversity;
- More trees are urgently needed to counter desertification through the planting and replanting of forested areas, for windbreaks and shelter belts;
- Communities need encouragement to plant tree crops near villages, for firewood and as cash crops. Agricultural practices must reintroduce shade trees and under planting;
- Traditional forest management systems have largely died out and effective sustainable practices must be reinitiated;
- The shortage of tree nurseries in the region must be remedied, facilitating the reintroduction of native species;
- The entire region suffers from a chronic shortage of wood: an incentive to all to plant more trees.

Effective solutions to stop and reverse the loss of forest cover will only be possible if Governments develop visionary policies and legal frameworks that address communal management systems and property regimes in the context of current socio-economic and political realities. Greater public awareness of the value of forests must be fostered by Governments and all concerned agencies. Extensive land areas exposed to erosion fall within the domain of Governments and their Forest Services. The complex problems of afforestation, soil and water conservation should be studied together, as these are fundamental challenges for the ESCWA region.

ESCWA is actively working with member countries on broad issues that promote better stewardship of the environment and forests. These include the following initiatives:

- Coordination meetings with the United Nations Convention on Biological Diversity and the United Nations Convention to Combat Desertification to facilitate agreement between member countries and the exchange of experience on related national and regional strategies;
- Helping the United Nations Collaborative Programme on reducing Emissions from Deforestation and Forest Degradation (UN-REDD)⁹ to assist developing countries prepare and implement national strategies. The Sudan is a partner country;
- ESCWA is also coordinating with the Secretariat of the United Nations Forum on Forests at the United Nations Department of Economic and Social Affairs to create awareness of *Forests 2011* and World Environment Day and is urging member countries to do likewise.

¹ Information in this section based on: <http://www.pnuma.org/english/wed/Forests.php>.

² As highlighted by the Worldwide Fund for Nature at: <http://www.worldwildlife.org/science/ecoregions/global200.html>.

³ Food and Agriculture Organization of the United Nations (FAO), (2010) *Forests and Climate Change in the Near East Region*. Working paper 9. Rome: FAO.

⁴ Information in this section based on FAO (2010) op. cit.

⁵ Plant diversity belonging to a specific region.

⁶ Information in this section based on FAO (2010) op. cit.

⁷ Information in this section based on FAO (2010) op. cit.

⁸ <http://data.worldbank.org>.

⁹ The programme is run by FAO, the United Nations Development Programme and the United Nations Environment Programme.