

**THE ONLINE INFORMATION BULLETIN OF THE GLOBAL FOREST SCIENCE NETWORK**

## Forests, Bioenergy and Climate Change

By Mohammed Ellatifi, IUFRO General Board Member

An international conference on “Forests, Bioenergy and Climate Change” was held from 25-26 March 2008 in Casablanca, Morocco. The following issues were on the agenda: Forests and Development; Bioenergy; Climate Change; and Adaptation to Climate Change.

The Conference focused on the current state of knowledge of climate change conditions in different regions of the world, and the impacts of these conditions on forest management and conservation. It also discussed the topics of energy and bioenergy consumption, as well as the role of forests in the mitigation of global warming, through carbon sequestration.

In his keynote speech, Mohammed Ellatifi, Senior Forester, and Chair of the international NGO “Sylva-World for Development and the Protection of Forests and the Environment”, Morocco, gave an overview of deforestation in the world and its consequences on climate change. He noted that deforestation and forest degradation accounted for around 20% of global greenhouse emissions, having direct impact on the earth’s biodiversity and the millions of rural communities who live in, and around forests, and depend on them for their livelihood. He underlined that the most efficient and less costly way to curb climate change trends was to halt deforestation in developing countries, and added that, until there was a political will to preserve the forests and their destruction, deforestation would continue.

Keynote speaker Bernard Mallet from the French Institute of Agronomical Research for Development (CIRAD) centred his speech on the wood energy channels in the tropics, within the framework of climate change, putting emphasis on the role and prospects of carbon economy in resource sustainable management.



Photo (Fettah): Conference Opening Ceremony  
From left to right: Dr. Mohammed Ellatifi, Conference Chair; Mr. Adil Said, Forest Department; Mr. Mzabi, representative of the Wali of the Great Casablanca; Pr. Barkaoui, Chair of the University Hassan II – Ain Shock, Casablanca; Ms. Amal Haddouche, Director General of the Renewable Energies Centre, Marrakesh.

The conference received a [message](#) from Dr. Ahmed Djoghlaif, Executive Secretary of the Convention on Biological Diversity (CBD). In this message, Dr. Djoghlaif welcomed the Casablanca conference on “Forests, Bioenergy and Climate Change” and gave an overall description of the world situation of biodiversity and forests, within the framework of the actual situation of the climate change threat.

The programme with details of the speakers and the titles of the presentations can be found at the conference website <http://www.sylvaworld.fr.fm>. Selected conference papers will be published in specialized reviews.

The “Forests, Bioenergy and Climate Change” conference in Casablanca attracted 143 registrants from 25 countries from the five continents. Its organization was financially assisted by the University Hassan II - Ain Shock, of Casablanca, and CIRAD, France. The conference was co-sponsored by IUFRO Units [4.02.01](#), [7.01.00](#), [8.00.00](#), and the IUFRO [Task Force](#) on Forests and Carbon Sequestration.

The conference encompassed 8 sessions in which a total of 22 verbal presentations were delivered on a variety of topics, such as: Forests and carbon dioxide; bioenergy and food supply; contribution of forest management to the anticipation of climate change; strategy adaptation to climate change; disaster risk reduction; governance adaptation and policy to cope with climate change.

## Healthy and Productive Forests Mitigate Climate Change

Source: COST, Issue No 8, April 2008, published by the COST Office, office(at)cost.esf.org

Forests cover around one third of Europe's surface. They provide a multitude of economic and social functions and play a major role in nature conservation and environmental protection.

The COST Strategic workshop on the role of "Forest Ecosystems in a Changing Environment" brought together nearly 180 scientists from around 30 countries in Istanbul, Turkey, to identify future monitoring and research needs and to provide recommendations on forest ecosystem monitoring and research in Europe. [IUFRO Research Group 7.01.00](#) co-sponsored the event.

The workshop specifically tackled the fields of climate change and forests, ozone, atmospheric deposition and critical loads, biodiversity, as well as quality assurance in forest monitoring. Experts agreed that increased and joint efforts are necessary to understand combined climate change and air pollution effects on forests and to develop strategies for mitigation and adaptation.

**Biological effects of climate change need to be studied in more detail.** Increased support is necessary to study the biological response of forest ecosystems to climate change, including annual tree growth, mortality and its causes, tree condition, phenology, regeneration, and species composition. In addition, water budget models and techniques for interpolating meteorological data need to be further developed, harmonised and applied on a larger number of monitoring and research sites.

**Ozone risk assessment has to be improved.** It needs to be ensured that ozone impacts on vegetation are on the future agenda both in research and monitoring as well as in the field of clean air policies. This is urgently necessary, because ground level ozone can be directly toxic for humans, plants, and animals. In addition, it is one of the most important greenhouse gases. Future risk assessment needs to be based on the ozone flux into the plants rather than solely on the ambient ozone concentrations.

**A much more integrated view on different atmospheric pollutants is necessary.** Instead of focussing on single pollutants, support is needed for research activities, teasing out



Photo: Eddy-correlation tower for measuring canopy-level ozone flux in a Mediterranean forest (provided by IUFRO RG 7.01.00)

combined effects of pollutants and their interactions in the atmosphere and within the forest ecosystems. Dynamic modelling needs to be further developed to assess combined effects of air pollution and climate change on soils and vegetation. Effects of nitrogen deposition on carbon sequestration and on biological diversity need to remain on the monitoring and research agenda.

**A multifunctional European forest monitoring system needs to be sustained and further developed.**

The scientists agreed that the monitoring data collected under the UNECE Convention on Long-range Transboundary Air Pollution and the EU are

today one of the most important bases for evaluating results of environmental policy and to predict future responses of forests to climate change. Therefore, forest monitoring needs continuous financial and political support by the responsible authorities. At the same time it needs to be ensured that existing long-term monitoring is further developed and adapted specifically in the fields of climate change and biodiversity. A detailed programme for quality assurance needs to be further developed and implemented within the monitoring programme to ensure high quality data. Research programmes need to take much more benefit from the existing long term monitoring data. Scientists claimed that access to these data needs to be considerably simplified.

**Basic research, forest monitoring and modelling urgently need to be linked and integrated.**

The workshop provided excellent opportunities to establish links between basic research, forest monitoring and modelling. Such links need to be supported and intensified in the future because basic understanding of ecosystem processes, data provision as well as data extrapolation and evaluation rely on each other. The creation of well distributed core sites with a still larger number of parameters measured was recommended. These sites should ideally build on existing monitoring plots which need to be upgraded for intensified research and model development. Research and monitoring programmes should jointly use these sites.

The COST Strategic Workshop took place from 11 to 13 March in Istanbul, Turkey with COST Support. It was organized by the Institute for World Forestry ([www.worldforestry.de](http://www.worldforestry.de)) in Hamburg, the Turkish Ministry of Environment and Forestry ([www.ogm.gov.tr](http://www.ogm.gov.tr)), the International Union of Forest Research Organizations ([www.iufro.org](http://www.iufro.org)), the Joint Research Centre of the European Commission (<http://forest.jrc.it>) and the European Environment Agency ([www.eea.eu.int](http://www.eea.eu.int)).

More information: <http://www.cost.esf.org/events> or <http://www.costforest2008.org>

## Publications

### Forest Research Management in an Era of Globalization

Proceedings of the IUFRO Unit 6.06.00 Conference:  
April 18-21, 2007, Arlington, VA, USA  
<http://www.safnet.org/periodicals/iufro.cfm>

### IUFRO-UNRI Urban Forestry Research

Urban Forestry Update: 18 April 2008  
<http://unri.org/iufro/>

### CBD Technical Series No. 33

*Conservation and Use of Wildlife-based Resources:  
The Bushmeat Crisis*

By Nasi, R., Brown, D., Wilkie, D., Bennett, E., Tutin, C., van Tol, G., and Christopherson, T. (2008)

This document addresses the hunting of tropical forest wildlife for food (known as "bushmeat", "wildmeat", and/or "game meat"). It was prepared for the Secretariat of the Convention on Biological Diversity (CBD) under the coordination of CIFOR and in collaboration with the Liaison Group on Non-timber Forest Resources. (from: Introduction)

### CBD Technical Series No. 39

*Cross-sectoral Toolkit for the Conservation and Sustainable Management of Forest Biodiversity*

By Thompson, I. and Christopherson, T., eds. (2008)

Forest biodiversity has always been at the cross-roads of numerous political and economic interests. The Millennium Ecosystem Assessment reports that agricultural land is expanding in approximately 70 per cent of the countries examined. The pressures on forest biodiversity require a cross-sectoral approach towards the conservation and sustainable management of forests. This "toolkit" will help to identify policy responses to the growing pressure on forest resources from other sectors. (from: Foreword)

For further information on both CBD publications:  
Secretariat of the Convention on Biological Diversity,  
secretariat (at) cbd.int, <http://www.cbd.int>

### Geschichte der Forstpflanzenanzucht in Deutschland von ihren Anfängen bis zum Ausgang des 19. Jahrhunderts (in German)

Bernd Bendix. For information, contact:  
nkessel(at)web.de ; <http://www.verlagkessel.de/>

### Protection of biodiversity or more wood for bio-energy?

Recent study carried out at the European Forest Institute  
The full report "Impacts of biological and landscape diversity protection on the wood supply in Europe" by P.J. Verkerk, G. Zanchi and M. Lindner has been published as an EFI Technical Report and can be downloaded:  
[http://www.efi.int/attachments/publications/tr\\_27.pdf](http://www.efi.int/attachments/publications/tr_27.pdf)

Further information:  
Hans Verkerk; [firstname.lastname\(at\)efi.int](mailto:firstname.lastname(at)efi.int)

### Unasylva 229 – Forests and water

With an overview by I. Calder, T. Hofer, S. Vermont and P. Warren. Online at:  
<http://www.fao.org/forestry/site/8572/en/>

## IUFRO Meetings

### NOTE: The following list of meetings is just a selection!

For a full list of IUFRO events, please visit our online [calendar](#), or the [homepages](#) of IUFRO Units involved. Non-IUFRO meetings are also announced on the IUFRO [Noticeboard](#) on our web site.

28 May – 1 June 2006

### Eurodendro 2008: "The long history of wood utilization"

Hallstatt, Austria

IUFRO [5.01.07](#), [6.07.00](#), [BOKU](#)

Contact: Margaret Devall, [mdevall\(at\)fs.fed.us](mailto:mdevall(at)fs.fed.us)  
<http://www.eurodendro.org/>

15-20 June 2008

### IUFRO All Division 3 Conference: Pathways to Environmentally Sound Technologies for Natural Resource Use

Sapporo, Japan

Contact: Rin Sakurai, [JFESiufro\(at\)hatch.fr.a.u-tokyo.ac.jp](mailto:JFESiufro(at)hatch.fr.a.u-tokyo.ac.jp)  
<http://jfes.ac.affrc.go.jp/IUFRO2008.html>

5-8 August 2008

### Biodiversity in Forest Ecosystems and Landscapes

Kamloops, Canada

IUFRO [8.00.00](#), [8.02.00](#), [8.02.02](#), [1.01.05](#)

Contact: Jean-Michel Carnus, Jean-Michel.Carnus(at)pierroton.inra.fr  
<http://www.tru.ca/iufro.html>

25-28 August 2008

### IUFRO-CTIA 2008 Joint Meeting

Quebec, Canada

IUFRO [2.04.01](#), [2.04.10](#)

Contact: [info\(at\)iufro-ctia2008.ca](mailto:info(at)iufro-ctia2008.ca)  
<http://www.iufro-ctia2008.ca/>

25-28 August 2008

### IUFRO International Conference on Adaptation of Forests and Forest Management to Climate Change with Emphasis on Forest Health

SLU, IUFRO, FAO

Contact: Björn Hånell, [bjorn.hanell\(at\)ssko.slu.se](mailto:bjorn.hanell(at)ssko.slu.se)  
<http://www.forestadaptation2008.net/home/en/>

25-28 August 2008

### Joint session of IUFRO 4.02.07 and Swedish Heureka Research Programme

Umeå, Sweden

Contact: Tomas Lämås, [Tomas.Lamas\(at\)srh.slu.se](mailto:Tomas.Lamas(at)srh.slu.se)  
<http://www.forestadaptation2008.net/home/en/>

26-30 August 2008

### Toward the Establishment of the Multi-purpose and Long-term Forest Management Plans

Tsuruoka, Japan

IUFRO [4.02.02](#)

Contact: Yoshihiro Nobori, [ynobori\(at\)tds1.tr.yamagata-u.ac.jp](mailto:ynobori(at)tds1.tr.yamagata-u.ac.jp) ; <http://www.tr.yamagata-u.ac.jp/%7EYfi/JIM/>

18-20 September 2008

**IUFRO 4.02.00 Internal Session at the EFI Annual Conference 2008**

Orvieto, Italy

**Contact:** Marco Marchetti, marchettimarco(at)unimol.it

13-17 October 2008

**Advances in Forest Management and Inventory**

Chuncheon / Gangwon Province, South Korea

IUFRO 4.01.00, 4.02.00, 4.04.00

**Contact:** Marco Marchetti, marchettimarco(at)unimol.it  
<http://iufro.kangwon.ac.kr/>

23-25 October 2008

**Sustainable Forestry in a Changing Environment Forest Research and Management Institute (ICAS)**

75th anniversary of IUFRO Member Organization Bucharest, Romania

**Contact:** Violeta Tiron, office(at)icas.ro  
<http://www.icas.ro/Conf2008/default.htm>

10-14 November 2008

**Provoking Change: Strategies to Promote Forest Users in the Amazon**

Santa Cruz de la Sierra, Bolivia

IUFRO 6.06.01

**Contact:** Inka Montero, inka.montero(at)waldbau.uni-freiburg.de ; Becky R. Bittner, bbittner(at)fs.fed.us  
[http://www.waldbau.uni-freiburg.de/forlive/05\\_Events/sc.html](http://www.waldbau.uni-freiburg.de/forlive/05_Events/sc.html)

16-19 November 2008

**Gender Issues in Natural Resources Management – Perception and Experiences in Different Parts of the World**

Dehradun, India

IUFRO 6.08.02

**Contact:** Siegfried Lewark, siegfried.lewark(at)fobawi.uni-freiburg.de  
<http://www.iufro.org/science/divisions/division-6/60000/60800/60802/activities/>

11-16 May 2009

**Foliage, Shoot and Stem Diseases**

Isparta, Turkey

IUFRO 7.02.02

**Contact:** H. Tugba Dogmus Lehtijarvi, tugba(at)orman.sdu.edu.tr  
<http://www.iufro.org/science/divisions/division-7/70000/70200/70202/activities/>

## Other Meetings

8 May, 2008

**Seminar: A Future for the Tropical Forests. For Whom?**

Copenhagen, Denmark

Danish Centre for Forest, Landscape and Planning, University of Copenhagen,

**Contact:** Isabelle Skarvig Kafé, isk(at)life.ku.dk  
<http://en.sl.life.ku.dk/Forskning/DevelopmentEnvironment/About/Seminars.aspx>

19-21 May 2008

**Growing Towards the Future: Joint Innovation for Successful Forest-based Business in Europe**

5th Conference of the Forest-Based Sector Technology Platform (FTP)

Kranjska Gora, Slovenia

**Contact:** Andreas Kleinschmit von Lengefeld, andreas.kleinschmit(at)cei-bois.org  
<http://www.ftpc5.si/>

22-27 June 2008

**Forest Products Society's 62nd Int'l Convention and Int'l Conference on Nanotechnology**

St. Louis, Missouri, USA

**Contact:** conference(at)forestprod.org  
<http://www.forestprod.org/confic08.html>

18-20 September 2008

**Adaptation of Forest Landscape to Environmental Changes - Scientific Seminar**

in connection with the European Forest Institute's Annual Conference

Orvieto, Italy

<http://www.efi.int/portal/>

27-29 September

**IAWPS 2008: Wood Science and Technology**

Harbin, China

International Association of Wood Products Societies

**Contact:** iawps2008(at)yahoo.com.cn  
<http://iawps2008.woodlab.org/front.cfm>

5-9 October 2008

**Tropical Rainforests and Agroforests under Global Change**

Bali, Indonesia

**Contact:** info(at)globalchange-2008.org  
<http://www.globalchange-2008.org/>

14-19 October 2008

**4th International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas: Management for Protection and Development**

Montecatini Terme, Tuscany, Italy

National Research Council - Institute of Biometeorology

**Contact:** Sonia Trampetti, mmv4(at)ibimet.cnr.it  
<http://web.fi.ibimet.cnr.it/MMV4/>

24 November – 5 December 2008

**Training: 'Governance for forests, nature and people'**

Bogor, Indonesia

Wageningen International, Wageningen UR (The Netherlands) and CIFOR (Indonesia)

**Contact:** Esther Koopmanschap, [Esther.Koopmanschap@wur.nl](mailto:Esther.Koopmanschap@wur.nl)  
<http://portals.wi.wur.nl/forestpolicy>

11-13 May 2009

**Nondestructive Testing and Evaluation of Wood**

Beijing, China

Beijing Forestry University, USDA Forest Products Lab

**Contact:** Houjiang Zhang, ndt2009(at)bjfu.edu.edu ;  
<http://www.ndt2009.cn>