

FAO flagship publication looks to the future

State of the World's Forests 2009. 2009. Rome, FAO. ISBN 978-92-5-106057-5.

State of the World's Forests, published biennially, provides a global overview of major developments affecting forests. The 2009 edition, with the theme "Society, forests and forestry: adapting for the future", addresses how the forest sector will be affected by larger changes outside the sector and how it will face the challenges.

Part 1, based on the most recent FAO forest sector outlook studies, examines the collective impact of demographic, economic, institutional and technological changes on forests and forestry in all regions of the world, and outlines emerging scenarios. Important factors that will influence supply and demand of forest products and services include shifts in land dependence, income growth, high food and energy prices and bioenergy production.

Part 2 explores how forestry will have to adapt for the future, with chapters on global demand for wood products and for environmental services, the changing institutional environment for forestry and developments in forest science and technology, including the increasingly recognized role of indigenous knowledge and the need to adapt to challenges of climate change.

The forest sector, like all others, will be affected by the economic crisis that began to unfold as *State of the World's Forests 2009* went to press in late 2008. A postscript entitled "Challenges and opportunities in turbulent times" describes how the slump in demand (especially due to the collapse of the housing sector) and credit squeeze have led to drastic declines in production, consumption and trade of wood products and consequent mill closures and growing unemployment. Even carbon markets have been affected by the downturn. The economic slowdown affects almost all countries, transforming previously upbeat economic forecasts. Although the reduction in demand for some commodities may slow forest clearance, large-scale unemployment in the industrial and services sectors could have negative impacts on forests. On the other hand, the crisis may offer opportunities for sectoral renewal and for paving the way to a greener economy.

In addition to serving as a source of information to support policy and research, *State of the World's Forests 2009* will help to stimulate critical thinking and debate about the future of the world's forests and how the use of forests is shifting in response to larger changes. It will be of interest to forestry practitioners, students, researchers, the private sector and civil-society organizations. The analysis of key global trends and outlook is particularly relevant to policy-makers and planners. The publication is available in Arabic, Chinese, English, French, Russian and Spanish.

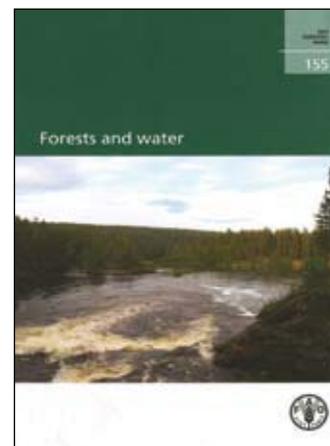
For further information and text downloads, see: www.fao.org/forestry/sofo

State of knowledge on forests and water

Forests and water. L.S. Hamilton, with contributions from N. Dudley, P. Greminger, N. Hassan, D. Lamb, S. Stolton & S. Tognetti. 2008. FAO Forestry Paper No. 155. Rome, FAO. ISBN 978-92-5-106090-2.

Forested catchments supply a high proportion of the water for domestic, agricultural, industrial and ecological needs in both upstream and downstream areas. A key challenge faced by land, forest and water managers is to maximize the benefits that forests provide without detriment to water resources and ecosystem function. There is an urgent need for a better understanding of the interface of forests and trees with water and for embedding this knowledge in policies.

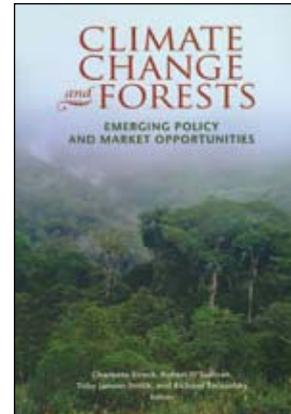
Forests and water, initiated in the context of the Global Forest Resources Assessment 2005, highlights the need for holistic management of complex watershed ecosystems, taking into account interactions among water, forest and other land uses as well as socio-economic factors. It also seeks to reverse some false or misleading generalizations about the impact of forest cover on downstream annual and seasonal flows. Until a few years ago, forest and water policies were based on the assumption that under any hydrological and ecological circumstances, forest is the best land cover for maximizing water yield, regulating seasonal flows



and ensuring high water quality. According to this assumption, conserving (or extending) forest cover in upstream watersheds was assumed always to be the most effective measure for enhancing water availability, as well as for preventing floods in downstream areas. The important role of upstream forest cover in ensuring the delivery of quality water has been confirmed, but in some situations, especially in arid or semi-arid ecosystems, forests may not be the best land cover for increasing downstream water yields.

This clear and informative publication explains the role of forests in the hydrological cycle and their influence on water quantity and quality. One chapter focuses on critical, "red flag" forest situations: mountain cloud or fog forests, swamp forests, forests on saline-susceptible soils, forests on steep sites with high landslip risk, riparian buffer zones, forests for municipal water supply, vernal pools and forests providing avalanche protection. Another chapter addresses the special case of mountainous small islands. Emerging systems of payment for watershed services are also addressed.

This state-of-knowledge publication will be of interest to a broad range of technical experts and scientists as well as policy- and decision-makers. *Forests and water* is also available online at: www.fao.org/forestry/publications



Climate change and forest opportunities

Climate change and forests: emerging policy and market opportunities. C. Streck, R. O'Sullivan, T. Janson-Smith & R. Tarasofsky, eds. 2008. London, UK, Chatham House & Washington, DC, USA, Brookings Institution Press. ISBN 978-0-8157-8192-9.

This up-to-date book provides an excellent overview of the legal, economic and environmental issues related to forests and climate change mitigation. It provides an overview of forest issues in the international climate change arena, addressing such issues as

Genetic improvement of forest plantation species in Australia and New Zealand

Australian Forestry, a journal issued by the Institute of Foresters of Australia (IFA), has over the past two years published a series of papers on experiences and achievements in the improvement of forest plantation species through the application of conventional and advanced tree improvement techniques.

The papers cover a number of native and introduced hardwood and softwood tree species planted in Australia and New Zealand by government institutions, private enterprise and smallholders for productive, protective and environmental uses. A number of the programmes described had already begun 60 years ago and these, together with more recent programmes, have generated a substantial amount of knowledge and expertise, resulting in innovative practices in plantation forestry and the improvement of traits such as growth and yield, stem form, wood properties, disease resistance and the ability to grow in conditions generally considered marginal or adverse to plant growth.

In addition to their scientific interest, the articles constitute excellent case studies which can potentially provide guidance and directions for programmes using the same or similar forest plantation species in other countries and regions of the world.

The full papers can be ordered through the IFA website (www.forestry.org.au) for 20 Australian dollars each (approximately US\$15). Abstracts of the papers can be found at: www.forestry.org.au/ifa/c/c2-ifa.asp

Achievements in forest tree genetic improvement in Australia and New Zealand – papers published in *Australian Forestry*, 2007 and 2008

1. *Eucalyptus pilularis* Smith tree improvement in Australia. M. Henson & H.J. Smith. 70(1), 2007.
2. Development of *Corymbia* species and hybrids for plantations in Eastern Australia. D.J. Lee. 70(1), 2007.
3. Tree improvement of *Eucalyptus dunnii* Maiden. H.J. Smith, & M. Henson. 70(1), 2007.
4. Tree improvement for low-rainfall farm forestry. C.E. Harwood, D.J. Bush, T. Butcher, R. Bird, M. Henson, R. Lott & S. Shaw. 70(1), 2007.
5. Genetic improvement of Douglas-fir in New Zealand. C.J.A. Shelbourne, C.B. Low, L.D. Gea & R.L. Knowles. 70(1), 2007.
6. Genetic improvement and conservation of *Araucaria cunninghamii* in Queensland. M.J. Dieters, D.G. Nikles, & M.G. Keys. 70(2), 2007.
7. Maritime pine and Brurian pine tree improvement programs in Western Australia. T.B. Butcher. 70(3), 2007.
8. Successful introduction and breeding of radiata pine in Australia. H.X. Wu, K.G. Eldridge, A.C. Matheson, M.P. Powell, T.A. McRae, T.B. Butcher & I.G. Johnson. 70(4), 2007.
9. Genetic improvement of *Eucalyptus nitens* in Australia. M. Hamilton, K. Joyce, D. Williams, G. Dutkowski & B. Potts. 71(2), 2008.
10. *Pinus radiata* in New Zealand. R.D. Burdon, M.J. Carson & C.J.A. Shelbourne. 71(4), 2008.

carbon trading and forestry projects under the Clean Development Mechanism. Avoided deforestation and voluntary carbon offsets are explored in depth. The remaining chapters provide description and analysis of the issues that shape the climate debate in the forest sector, including permanence, methodologies for measurement and monitoring, and legal issues. Eight case studies provide practical illustration.

More than 50 authors contributed the 21 chapters which address such topical issues as “How renewable is bioenergy?” and “Creating incentives for avoiding further deforestation: the nested approach”.

This is not light reading; it is a book for people who have some knowledge of the subject and are interested in learning more about the policy issues related to forests and climate change. For readers looking for an in-depth review of the most debated forest policy issues of the last few years (and probably the next few as well), this book is highly recommended.

Climate change and Mediterranean forests

Adapting to global change: Mediterranean forests. 2008. Gland, Switzerland & Malaga, Spain, International Union for Conservation of Nature (IUCN).

Forests are among the most important ecosystems of the Mediterranean. They are rich in biodiversity and provide a variety of environmental services. But poor management, overexploitation, pollution, rapid and abrupt land-use changes resulting from economic development and international market pressures are provoking the degradation of Mediterranean forests. Climate change, bringing extreme weather events such as heat waves, torrential rainfall, drought and windstorms, further aggravates these factors.

This multilingual publication (in English, French and Spanish) gives a good picture of the current state of Mediterranean forests and covers global warming trends, lessons from past climate changes, current and forecasted climate change impacts and measures for adapting to climate change in the region. It proposes strategies for dealing with specific issues such as genetic

resources conservation, landscape adaptation, capacity building and bolstering social resilience.

This book builds on discussions at the workshop Adaptation to Climate Change in Mediterranean Forest Conservation and Management, held by IUCN and the World Wide Fund for Nature (WWF) in Greece in April 2008. The statement of the participants, the Athens Statement on Adaptation to Climate Change in Mediterranean Forest Conservation and Management, is provided in an annex.

With editorial input provided by international organizations such as FAO and the United Nations Environment Programme (UNEP), governments, forest managers and users, research institutions and the private sector, *Adapting to global change* represents a first step for developing a joint programme of work and strategy on Mediterranean forest adaptation to climate change.

Using wood to mitigate climate change

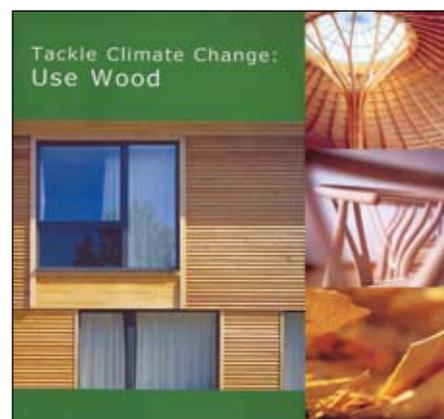
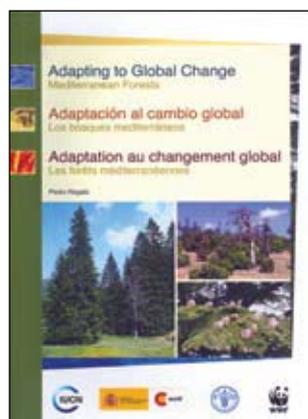
Tackle climate change: use wood. 2006. Brussels, Belgium, European Confederation of Woodworking Industries (CEI-Bois).

This beautifully illustrated publication lays out the environmental arguments for using wood as a means of mitigating the effects of climate change. It assesses the CO₂ impact of different materials and shows how much CO₂ can be saved by using wood. It reviews the eco-cycle of wood and wood-based products, with an emphasis on the environmental and socio-economic benefits of using wood in the European context. The context is established through background on Europe's forests and wood industry, supported with facts and figures.

The approach is pragmatic and forward thinking. CEI-Bois estimates that an annual 4 percent increase in Europe's wood consumption would sequester an additional 150 million tonnes of CO₂ per year and that the market value of this environmental service could equal about €1.8 billion a year.

The clearly written text is brought to life with over 60 colour photographs and easy to read graphs and tables. The back of the book includes definitions of terms and references to additional literature.

This high-quality product invites reading and is intended to



introduce a wide public to the environmental benefits of using wood. It will also be attractive to forest sector insiders looking for a concise and thorough overview.

Tackle climate change: use wood is also available online at: www.cei-bois.org

Verification issues in the timber trade

Legal timber: verification and governance in the forest sector. D. Brown, K. Schreckenberg, N. Bird, P. Cerutti, F. Del Gatto, C. Diaw, T. Fomété, C. Luttrell, G. Navarro, R. Oberndorf, H. Thiel & A. Wells. n.d. London, UK, Overseas Development Institute (ODI). ISBN 978-0-85003-889-7.

This book focuses on a topical issue in international forest policy: how to verify the legality of traded timber in ways that will satisfy both the commercial interest of producers and the social and environmental concerns of civil society and consumers. The issue is not just technical; verification raises questions involving the balance between the sovereign rights of producer States and the role of forests as vital public goods. Furthermore, these questions straddle national and international interests.

Legal timber is based on the findings of the VERIFOR project, an applied research collaboration involving partners in Europe, Africa, Latin America and Asia. After an introduction to the concept of verification and a review of how policy on illegal logging has evolved, the publication presents case studies of verification systems in a dozen countries: Brazil, Cambodia, Cameroon, Canada, Costa Rica, Ecuador, Ghana, Honduras, Indonesia, Malaysia, Nicaragua, and the Philippines.

The publication goes on to address issues such as ownership of verification systems, the legal basis for verification, independence, developmental impacts, the relation of certification and verification, and technologies and multistakeholder processes that can support improved forest governance. Finally, it proposes some principles for the design of effective forest verification systems.

The publication is the result of a collaborative effort between ODI and the Tropical Agricultural Research and Higher Education Center (CATIE), the Center for International Forestry Research

(CIFOR) and the Regional Community Forestry Training Centre for Asia and the Pacific (RECOFTC).

While the subject matter is specific to the forest sector, the questions raised by this publication cast light on much wider questions of governance reform. It will be of interest to those working on forest governance and the management of extractive resources, trade certification and labeling, environmental policy and participatory development.

Commercial potential of non-wood forest products

Commercialization of non-timber forest products: factors influencing success – lessons learned from Mexico and Bolivia and policy implications for decision-makers. E. Marshall, K. Schreckenberg & A.C. Newton. 2006. United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). ISBN 92-807-2677-3.

Non-wood forest products (NWFPs), including nuts, resins, fruits, oils and spices, are an important source of nutrition and income to many of the world's communities. This book, based on experiences in Mexico and Bolivia, looks at the process of commercialization of NWFPs. It examines market access, value chains and whether commercialization will contribute to sustainable forest management.

The book begins by explaining how qualitative and quantitative data were collected and integrated in the analysis.

The authors believe that NWFPs can be more than a safety net. They analyse how these products can improve income and living standards, offering a framework for commercialization. Suggestions are given for managing transaction costs, working with non-governmental organizations (NGOs) and conducting environmental impact assessments.

Produced through collaborative efforts by the Overseas Development Institute, UNEP-WCMC, Bournemouth University and partners in Mexico and Bolivia, *Commercialization of non-timber forest products: factors influencing success* assesses the viability, sustainability and poverty alleviation potential of commercialization projects and offers support tools for effective decision-making by NGOs and other actors.

