



Managing forests for climate change

Climate change guidelines for forest managers. FAO 2013. FAO Forestry Paper No. 172. Rome. ISBN 978-92-5-107831-0 (print), E-ISBN 978-92-5-107832-7 (PDF).

The effects of climate change and climate variability on forest ecosystems are evident around the world and further impacts are unavoidable, at least in the short to medium term. Addressing the challenges posed by climate change will require adjustments to forest policies, management plans and practices.

These guidelines have been prepared to assist forest managers to better assess and respond to climate-change challenges and opportunities at the forest management unit level. The actions they propose are relevant to all kinds of forest manager – such as individual forest owners, private forest enterprises, public-sector agencies, indigenous groups and community forest organizations. They are applicable in all forest types and regions and for all management objectives.

Forest managers will find guidance on the issues they should consider in assessing climate-change vulnerability, risk and mitigation options, and a set of actions they can undertake to help adapt to and mitigate climate change. Forest managers will also find advice on the additional monitoring and evaluation they may need to undertake in their forests in the face of climate change.

This document complements a set of guidelines prepared by FAO in 2010 to support policy-makers in integrating climate-change concerns into new or existing forest policies and national forest programmes.

Also available online: <http://www.fao.org/docrep/018/i3383e/i3383e00.htm>.



More than timber in tropical forests

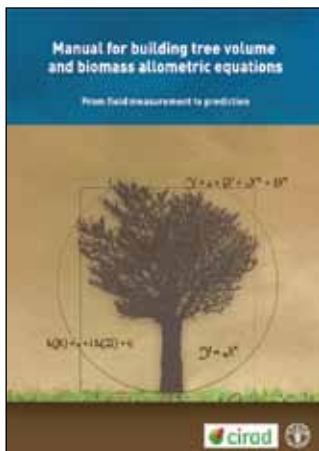
Multiple-use forest management in the humid tropics: opportunities and challenges for sustainable forest management. C. Sabogal, M.R. Guariguata, J. Broadhead, G. Lescuyer, S. Savilaakso, N. Essoungou & P. Sist. 2013. FAO Forestry Paper No. 173. Rome, FAO, and Bogor, Indonesia, Center for International Forestry Research. ISBN 978-92-5-107823-5 (print), E-ISBN 978-92-5-107824-2 (PDF).

The multiple-value nature of forests has long been appreciated and used by forest-dependent people in the tropics. Explicitly managing for some or all of these values – multiple-use forest management – is stipulated in the laws of many countries, but its formal implementation in the tropics is thought to be rare.

This paper reports on three regional assessments carried out to identify and draw lessons from on-the-ground initiatives in multiple-use forest management in the Amazon Basin, the Congo Basin and Southeast Asia. In all three regions, information was collected through interviews with country-based forestry experts, forest managers and technicians. A complementary, Web-based questionnaire further examined the reasons for the successes and failures of multiple-use forest management initiatives.

The paper concludes that forest managers need more support if they are to realize the potential of multiple-use forest management. Greater effort is needed to eliminate unfair competition from operators whose sole objective is to extract timber with little or no concern for multiple uses. In most countries, the demarcation of a permanent forest estate and development of national land-use plans would increase investment in multiple-use forest management. Improving the value of logged-over forest through silviculture would also increase the uptake of multiple-use approaches.

Also available online: <http://www.fao.org/docrep/018/i3378e/i3378e00.htm>.



Improving the accuracy of forest carbon stocks

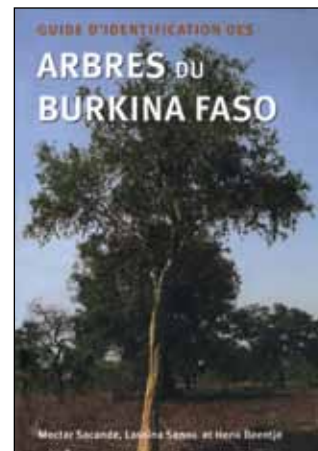
Manual for building tree volume and biomass allometric equations: from field measurement to prediction. N. Picard, L. Saint-André & M. Henry 2012. Rome, FAO, and Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Montpellier, France.

Under the United Nations Framework Convention on Climate Change, the benefits to accrue to non-Annex I parties will be based on results that must be measured, reported and verified. The precision of these results, therefore, has a major impact on potential financial compensation. The capacity to measure forest carbon stocks is of increasing importance for countries that plan to contribute to mitigating climate change through their forest activities.

Whatever the method used to measure carbon stocks, including remote sensing, ultimately trees must be measured in the field. Measurements of trees in the field enable the development of allometric equations, which can predict tree biomass from easy-to-measure dendrometric characteristics such as tree diameter and height (which may be obtained remotely). Allometric equations, therefore, are key factors in estimating the contribution made by forest ecosystems to the carbon cycle.

This manual covers all the steps in the construction of allometric equations, starting with the measurement of tree biomass in the field. It should therefore prove particularly useful in countries that are not yet in possession of measurements and equations that match their forests. It takes the form of a guide intended for students, technicians and researchers working to assess forest parameters such as volume, biomass and carbon stocks for commercial, bioenergy or climate-change mitigation purposes.

Also available online: http://foris.fao.org/static/allometric/Manual_EN_WEB.pdf.



Native trees in Burkina Faso

Guide d'identification des arbres du Burkina Faso. M. Sacande, L. Sanou & H. Beentje. 2012. 280 pages. Royal Botanic Gardens Kew, London, Kew Publishing. ISBN 978-1-84246-470-0.

This book is a product of the Millennium Seed Bank Partnership, which has worked for a decade to collect and conserve, in duplicates, seeds of more than 1 100 native plant species in Burkina Faso. To address a lack of knowledge of the region's rich flora, this field guide identifies 250 native tree species and provides valuable information on their habitats and distribution in Africa and elsewhere, their uses and physiology, the germination of their seeds, and their conservation status. The brief botanical descriptions, keys, local names and more than 500 fascinating photographs will help specialists and non-specialists to identify each species.

All these species are important for ecosystem functioning and most provide food, feed, energy, timber, traditional medicines, pesticides and insecticides, or are suitable for use as ornamentals. The information provided on seed germination and propagation techniques is aimed at helping the cultivation of these native trees, which grow readily in local conditions without the need for irrigation, fertilizers or pesticides. The guide also paves the way for the use of these tree species in habitat restoration. *Guide d'identification des arbres du Burkina Faso* is a useful document for a wide range of people, such as foresters, park managers, agronomists, horticulturists, environmentalists, tourists, teachers and students.



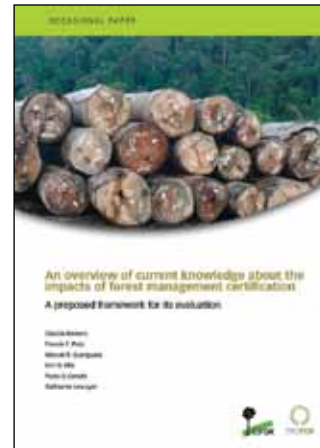
Surviving global economic turmoil

Riding out the storm: improving resilience of the tropical timber sector to the impacts of global and regional economic and financial crises. F. Maplesden, A. Attah, I. Tomaselli & N. Wong. ITTO Technical Series No. 41. Yokohama, Japan, International Tropical Timber Organization.

Consumer and producer member countries of the International Tropical Timber Organization (ITTO) were severely affected by the global financial and economic crisis that stemmed from the United States subprime mortgage crisis in 2007. The crisis triggered a plunge in housing starts and consumer demand for wood products in traditional markets, resulting in cancelled orders, depressed prices and a severe rationalization of the tropical timber processing industries in producer and consumer countries. The short-term impacts of the crisis included: difficulty among producer countries in accessing capital, a key source of growth, as domestic stimulus packages began to compete for global finance; a decline in foreign direct investment; a reduction in exports by ITTO producer countries as imports by developed countries fell; increased competition for export markets; an end to the recent commodity price boom; increased unemployment, particularly in emerging country export sectors; and reduced spending on research and development.

This report was produced in response to concerns expressed by ITTO producer member countries that the global financial and economic crisis had exposed the vulnerability and lack of preparedness of the tropical timber sector to manage future global and regional economic crises. It draws on a broad knowledge base and experiences in producer and consumer countries in addition to other wood and non-wood industries, and it recommends a number of measures to be adopted by ITTO, ITTO member countries, regional organizations and forest industry and trade associations to support the tropical timber sector's resilience to global economic shocks.

Also available online: www.itto.int/direct/topics/topics_pdf_download/topics_id=3351&no=1&disp=inline.



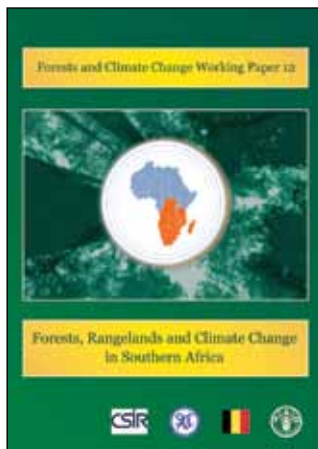
Evaluating certification

An overview of current knowledge about the impacts of forest management certification: a proposed framework for its evaluation. C. Romero, F.E. Putz, M.R. Guariguata, E.O. Sills, P.O. Cerutti & G. Lescuyer. 2013. Occasional Paper No. 91. Bogor, Indonesia, Center for International Forestry Research.

The often-claimed environmental and social benefits of forest certification remain to be empirically evaluated. Virtually all of the numerous publications on the impacts of tropical forest certification are based on secondary sources of information and not on field-based measurements.

This paper proposes an empirical research framework for a carefully designed field-based evaluation of the ecological, social, economic and political impacts of tropical forest management certification, taking into account location-specific contextual factors that shape certification outcomes. The paper suggests that solid methodological quantitative and qualitative approaches be used to build proper counterfactuals on which to base the comparisons for inferring impacts, all informed by a thorough theory of change and through processes that bring stakeholders together. The proposed research framework is a first step towards the design and future implementation of evaluation research in the context of tropical forest certification on a global basis. It is hoped that the proposed research framework will help in learning from past mistakes, building on lessons learned and improving decision-making towards the maintenance of forest values over the long term, for the benefit of society as a whole.

Also available online: www.cifor.org/online-library/browse/view-publication/publication/4188.html.



Climate change in southern Africa

Forests, rangelands and climate change in southern Africa. S. Naidoo, C. Davis, & E. Archer van Garderen. 2013. Forests and Climate Change Working Paper No. 12. Rome, FAO.

Forests and rangelands are vital for rural communities in southern Africa but they are under threat from climate change and other pressures. While many climate-change efforts under way in the forest sector in southern Africa are focusing on mitigation, countries recognize the urgent need to build resilience and facilitate adaptation in the sector.

Forests, rangelands and climate change in southern Africa investigates the implications of climate change for forests and rangelands in southern Africa, including their vulnerabilities and adaptation needs and options. Combined with an analysis of the economic and social roles of forests and rangelands and the drivers of change, this publication lays the foundation for stronger collaboration in this area among countries in southern Africa.

This publication is part of an initiative by FAO, in cooperation with the Southern African Development Community, on forests, rangelands and climate-change adaptation in southern Africa. The initiative was launched at a workshop in Johannesburg, South Africa, in June 2013 to take stock of countries' current efforts in this area, identify country priorities and potential areas of cooperative work, and define the scope of a programme for climate-change adaptation in the region's forest and rangeland sectors.

This report, which was prepared for the workshop, will be a valuable resource for specialists, policy-makers, forest managers, students and members of the public who want to know more about the crucial task of adapting forests and rangelands to climate change in southern Africa.



First textbook on forestry

Sylvicultura oeconomica. Transkription in das Deutsch der Gegenwart. H. Thomasius & B. Bendix. 2013. Remagen, Germany, Verlag Kessel. ISBN 978-3-941300-70-5.

The first textbook specifically about forestry, *Sylvicultura oeconomica*, also known as *Instructions about wild arboriculture* (Anweisung zur wilden Baumzucht), was published in 1713 by Hans Carl von Carlowitz, a Saxonian mining administrator (see *Unasylva* 240 for a detailed account of the influence of this book). Three reprint editions of the book have been published since 2000, and a scientific edition has also seen the light, although the latter was only a literal account of the original Baroque text in its Gothic script.

Now, two forest scientists, Professor Harald Thomasius (Tharandt) and Dr Bernd Bendix (Bad Schmiedeberg), have transcribed the original text into contemporary German with the aim of overcoming difficulties posed to contemporary readers by the elaborate Baroque language of the 18th century and its Gothic script.

The publisher and authors hope that this modern edition of *Sylvicultura oeconomica*, which is complemented by in-depth background information and a number of comprehensive indices, will make access to this 300-year-old publication as enjoyable and enriching as when it was first published.

Verlag Kessel publications in German: www.forstbuch.de (Verlag Kessel publications in English: www.forestrybooks.com)

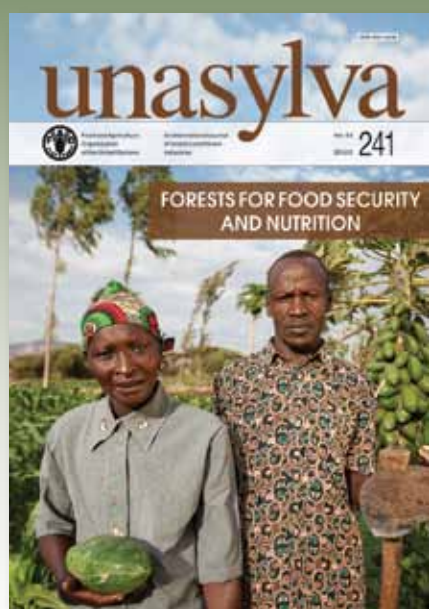
E-book on edible insects now available



The FAO Forestry Paper ***Edible insects: future prospects for food and feed security***, which achieved worldwide attention at its launch during the International Conference on Forests for Food Security and Nutrition, is also proving popular as an e-book.

Edible insects describes the contribution of insects to food security and shows the many traditional and potential uses of insects for human consumption. Download it – and other selected FAO titles – to your iPad, Kindle, Nook or Sony Reader and highlight interesting passages, bookmark pages, make notes and search the full-text content with one click.

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Unasylva reader survey

At FAO we believe that ***Unasylva*** plays an important role in articulating the ideas, practicalities and challenges of sustainable forest management. But we want to know what you think. Please help us by participating in a short Web-based survey. We will use your responses to improve ***Unasylva*** and increase its impact in the development of effective forest policy and practice.

The survey will take 5–10 minutes to complete. Check it out at the ***Unasylva*** webpage today!

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