Summary

State of the World's Forests – now in its sixth edition – presents a global picture of the forest sector, providing the latest information on activities and developments. Contributions from non-governmental organizations (NGOs), individuals in their personal capacity and FAO highlight challenges and opportunities related to some of today's key emerging issues. The theme of the 2005 edition – "realizing the economic benefits from forests" – recognizes that the economic viability of the forest sector is a prerequisite to safeguarding the environmental, social and cultural functions of the resource.

SITUATION AND DEVELOPMENTS IN THE FOREST SECTOR

Forest resources

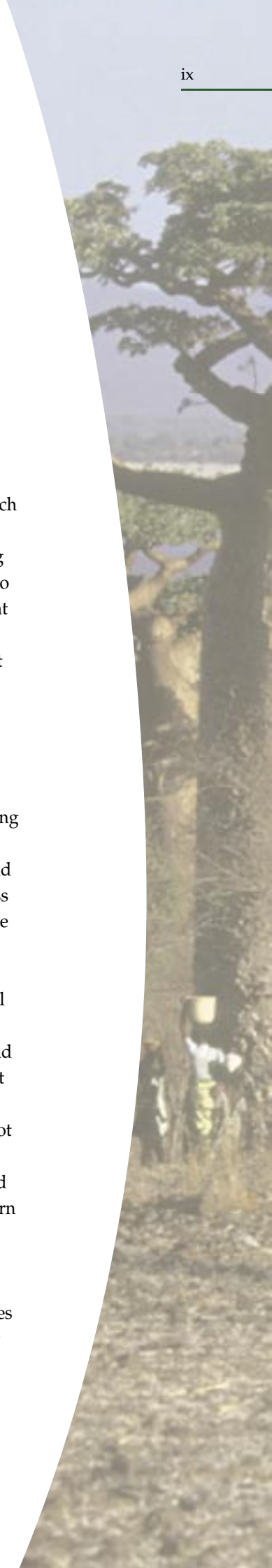
Global Forest Resources Assessment update 2005. FAO will publish the main report of the Global Forest Resources Assessment update for 2005 (FRA 2005) in the latter part of the year. The assessment focuses on key trends and builds on the thematic elements of sustainable forest management drawn from regional and ecoregional criteria and indicators processes as a reporting framework. With recent emphasis on rural livelihoods, benefit sharing, food security and how forests contribute to achieving these goals, FAO has expanded FRA reports to include social and environmental dimensions of the resource, as well as economic aspects.

Estimating carbon stock changes in forests. Developments in international discussions on climate change may alter the scope, techniques and importance of forest inventories worldwide. *State of the World's Forests 2005* notes that all Parties to the United Nations Framework Convention on Climate Change (UNFCCC) must estimate and report carbon stock changes in their forests; that the Kyoto Protocol establishes additional rules to monitor and account for carbon stocks; and that, under special provisions for sequestration projects of Joint Implementation or the Clean Development Mechanism (CDM) of the protocol, carbon in forestry projects must be monitored in order to realize credits.

Secondary forests in tropical regions. Although figures vary according to the definition used, degraded forests and secondary forests in tropical Africa, America and Asia covered an estimated 850 million hectares in 2002. The value of secondary forests (defined here as forests regenerating largely through natural processes after significant disturbance of the original forest vegetation) for their capacity to reduce poverty, enhance food security and provide environmental services would be better recognized if foresters and decision-makers would highlight their importance to a greater extent than is now the case.

Forests and trees in small island developing states. Forests in small island developing states (SIDS) cover an estimated 75 million hectares, or 63 percent of combined land area, but forest cover differs greatly among states. Although deforestation appears to have slowed in the past decade, the average annual rate is still high in many SIDS. The main causes include conversion of forested land for agriculture and for infrastructure such as roads, ports, housing and tourism development. On the other hand, some states registered an increase in forest cover from 1990 to 2000, mainly because of afforestation. *State of the World's Forests 2005* outlines the challenges to achieving sustainable forest management in SIDS and identifies opportunities for future development of the sector.

Asia's innovative sources of raw material for industries. Plantations of rubber, coconut,



bamboo and oil-palm as well as agricultural residues are providing new sources of raw material for industries in Asia. In Malaysia, for example, exports of rubberwood products are valued at about US$1.1 billion annually. Although commercial processing of the fibres from coconut palms is still mostly for local consumption, speciality products are finding their way into niche markets and new technologies are expanding the range of items available. In recent years, strong demand and high prices for palm oil and palm kernels to make foods, soaps and cosmetics have stimulated a boom in planting of oil-palm in Asia. Technological developments have cleared the way for using bamboo in innovative ways, such as in reconstituted panel and board products. Straw, especially wheat and rice straw, is the non-wood fibre used most widely in pulp and paper manufacturing.

International trade in non-wood forest products. *State of the World's Forests 2005* presents the latest results of an ongoing FAO study on the value, trends and flows in international trade in non-wood forest products (NWFPs). It notes the problems in collecting, compiling and analysing trade data because, for example, there is no agreement among countries, agencies or authors on terminology, and NWFPs enter the market as ingredients in composite products, making them difficult to identify. From 1992 to 2002, the value of global trade in NWFPs increased 1.5 times. Before the commercialization of NWFPs can be promoted as a strategy to alleviate poverty, a number of issues need to be carefully considered, including the equitable sharing of benefits.

Management, conservation and sustainable development of forests

Sustainable forest management and the ecosystem approach. Recent international forest discussions have focused on the extent to which sustainable forest management, as outlined by the "Forest Principles" adopted by the United Nations Conference on Environment and Development (UNCED), and the ecosystem approach, as defined by the Convention on Biological Diversity (CBD) and as applied to forests, are similar, where they differ and how they could be integrated. A comparison of the underlying principles of the two concepts reveals few differences other than that sustainable forest management deals largely with only one kind of ecosystem – forests – whereas the ecosystem approach addresses a range of ecosystems. Integrating sustainable forest management and the ecosystem approach could lead to using the same indicators to monitor and report progress, thereby reducing the reporting burden on countries. It could also result in more coordinated policy development and planning as well as better sharing of information and experiences to improve forest practices. Rather than continue the debate, efforts should now focus on implementation, building upon best practices and tools and monitoring progress.

Forest landscape restoration. There is a growing realization that in addition to conventional approaches to the sustainable management and conservation of forests to minimize further loss of the resource, restoring degraded lands at the landscape level is also necessary to guarantee a healthy, productive and biologically rich forest estate for the long term. Since the Global Partnership on Forest Landscape Restoration was launched in March 2003, organizations and governments have been exploring this concept as a complement to the management and protection of forest resources. Although it is not a new idea, its novelty lies in addressing and balancing trade-offs at the landscape level, and its pragmatic rejection of the insistence to return modified forest landscapes to their original pristine state. Forest landscape restoration is carried out under the assumption that improving the flow of forest goods and services requires balancing livelihoods with protecting nature, and that this is best achieved within dynamic, multifunctional landscapes.

Forestry and ecotourism. Much of nature tourism and ecotourism focuses on forests –

from bird-watching to canopy walks, forest treks and wildlife viewing – and can deliver significant benefits at the local and national levels. Nature tourism and ecotourism provide an incentive to protect forests and wildlife and a means by which people can generate income without extracting resources. If managed properly, ecotourism creates employment for rural communities faced with few alternative livelihood opportunities. Recent studies indicate, however, that some ecotourism previously thought to be benign stresses wildlife, disrupts breeding patterns and changes the behaviour of wild animals. *State of the World's Forests 2005* outlines some of the environmental, economic, social and cultural aspects of the industry and suggests that the recent boom will provide new challenges and opportunities for sustainable forest management around the world.

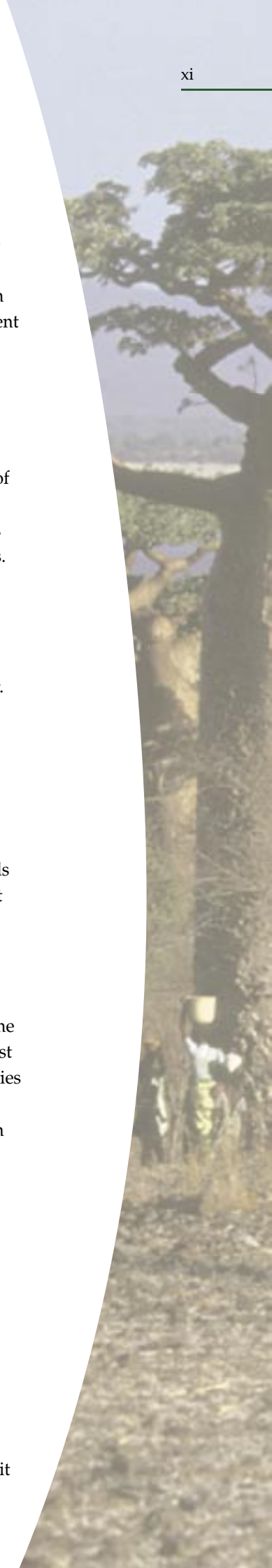
Biosecurity and invasive forest tree species. Concern over the potentially negative impact of the introduction of new species, breeding and genetic modification has increased attention on the need to develop regulatory frameworks and policies to manage risks. Introduced forest tree species can help sustain national and local economies and be of significant value to the environment and to society. However, when insufficient consideration is given prior to use and when on-site management is neglected, some species may invade adjacent areas, giving rise to a number of problems. Moreover, with global trade increasing, greater movement of people and overstretched quarantine services, the number of accidental introductions is expected to grow. Reliable information and better knowledge of economic and environmental effects are critically important for evaluating risks.

Biotechnology in forestry. Most public research in forest biotechnology is on the biology and diversity of forest tree species, populations and individuals or on propagation, rather than on genetic modification. More than two-thirds of activities on genetic diversity and marker-assisted selection are carried out in Europe and North America, while 38 percent of research programmes using advanced propagation technology are in Asia. Most research on genetic modification in forest trees takes place in developed countries. While the tools for genetic modification in forestry are mostly the same as those in agriculture, perceptions and applications differ where forest trees are concerned because of the social, cultural and environmental aspects of forests and the fact that forest trees have only recently been domesticated, in contrast to most agricultural crop species. To improve information, FAO is now carrying out the first global review on biotechnology in forestry.

Wildland fires. Uncontrolled fires in forests, other wooded lands and other lands – generally referred to as wildland fires – continue to claim lives, destroy valuable assets and emit compounds that affect the composition and functioning of the atmosphere. Between 300 and 400 million hectares burn annually worldwide, much of it in Africa. Although the responsibility to suppress fires resides with countries and national fire authorities, the key to dealing more effectively with emergencies lies in putting agreements into place between and among states. To enhance this type of collaboration, FAO and partners are working with countries to develop bilateral or multilateral instruments.

Institutional issues

Trends in privatization in the forest sector. Governments often use privatization measures to improve economic performance, especially since the end of the 1970s. Forests, however, were not among the first assets to be privatized, partly because of the sensitivities surrounding sovereignty, a growing recognition of their importance in protecting the environment and in providing services to society, and perceived high risks or low returns. Since the 1990s, water, land and forests have become more frequent targets for privatization. This trend is less marked for natural forests than for planted forests, except in Central and Eastern Europe, where forest land is being returned to former owners. In addition,



private entities and NGOs are increasingly purchasing forest areas and acquiring land through concession contracts for protection and conservation purposes. *State of the World's Forests 2005* describes the latest trends in privatization of forest resources.

Trends in forestry administration. Responding to public demand for greater accountability, more participatory decision-making and better delivery of goods and services, central forestry administrations are delegating more functions to local government. Modern reforms are changing the ways in which forests and other natural resource sectors are managed, increasing the urgency to establish partnerships, share information and coordinate activities. New technologies such as satellite imagery and detection, as well as spatial information and decision-support systems, are improving how administrations operate. In the process, staff must be taught to deal with new realities and to master emerging technologies. Steps must also be taken to ensure that all levels of authority have access to the knowledge and skills they require to perform their tasks.

Forest law compliance. Governments, with the help of international organizations, NGOs and the private sector, are continuing their efforts to improve law compliance in the forest sector. Most initiatives are built on the premise that, although important, compliance strategies can no longer rely on policing alone but must include efforts to streamline policy and legal frameworks; to provide incentives to comply with regulations; to improve employment conditions of enforcement officers; to conduct public education and awareness programmes; and to use national and international market measures to limit opportunities for trading illegally sourced wood. *State of the World's Forests 2005* describes major undertakings to date.

Forests and the Kyoto Protocol. Rules under which developed countries must measure and report their use of forests and wood products to meet commitments to mitigate climate change under UNFCCC and the Kyoto Protocol are complicated and costly to administer. Between now and 2008 – the start of the first commitment period – countries face three major tasks with regard to implementation: putting general commitments into practice; monitoring and reporting forest carbon stock changes; and translating global commitments to mitigate climate change into law after entry into force of the Kyoto Protocol. *State of the World's Forests 2005* delves into core issues such as who owns the carbon in forests, trees and wood products.

International forest policy dialogue

Countries have been discussing international forest policy issues within the United Nations system since the end of the Second World War. Since then, the forest sector has undergone many changes. More recently, there is better recognition of the contributions that forests make to sustainable development; improved cooperation on a range of complex issues; and more participation of civil society in decision-making. However, the growing number of calls to enhance efforts to achieve sustainable forest management is overwhelming implementing agencies and many developing countries. Governments are also concerned with the number and duplication of requests for reporting to international processes. Despite the positive developments, deforestation and forest degradation continue, and illegal forest activities remain problematic, making it imperative for forest practitioners and policy-makers to reach out to other sectors to find lasting solutions. Any future international dialogue on forests should establish a broader base of experts on which to draw, including those in agriculture, infrastructure development and the energy, mining and transportation sectors. Some 13 years after UNCED, countries must either decide to give the United Nations Forum on Forests (UNFF) process a new mandate and working modalities or decide that the Ad Hoc Intergovernmental Panel on Forests (IPF)/ Intergovernmental Forum on Forests (IFF)/ UNFF dialogue has yielded all it can and that it

is time for other fora, instruments and processes to fill the void.

XII World Forestry Congress. In co-sponsorship with FAO, the Government of Canada hosted and organized the XII World Forestry Congress in Québec City in September 2003. Some 4 000 participants from approximately 140 countries considered topics under the theme "Forests, source of life", which was divided into three areas: forests for people; forests for the planet; and people and forests in harmony. *State of the World's Forests 2005* outlines the key outcome of the congress – a Final Statement that contains a vision, strategies and actions to achieve sustainable forest management worldwide. It calls on countries and organizations to pursue the objectives stated therein and promote them in other sectors.

SELECTED CURRENT ISSUES IN THE FOREST SECTOR

Enhancing economic benefits from forests: changing opportunities and challenges

Awareness of the economic, social, cultural and environmental contributions of forests and forestry has risen considerably in recent years, yet low investment and low incomes continue to plague the sector. Given its relatively small share of employment and national income, decision-makers give forestry a low priority in the face of competing demands for limited budgets. In response, attempts are being made to assess the value of all products and services, especially those pertaining to the environment. Efforts are also being made to develop innovative financing mechanisms and to create markets for services in order to enhance income and encourage investment in sustainable forest management. *State of the World's Forests 2005* describes ways in which communities, governments and the private sector are enhancing economic benefits from forests. It also identifies issues that must be addressed to make sustainable forest management economically viable.

Realizing the economic benefits of agroforestry

Cultivating trees in combination with crops and livestock is an ancient practice, but several factors have contributed to a growing interest in agroforestry since the 1970s: the deteriorating economic situation in many parts of the developing world; increased tropical deforestation; degradation and scarcity of land caused by population pressures; and growing interest in farming systems, intercropping and the environment. *State of the World's Forests 2005* outlines the advantages of using various agroforestry practices, describes some of the benefits to farmers and society and identifies factors that affect performance. It notes that more research is needed to quantify returns fully, to promote its wider use and to assess the effects and trade-offs of different policies. Determining which practices are most suited to women and poor people needs greater attention, as does finding ways to replicate successful interventions on a larger scale to reach more households.

Economics of wood energy

In the past decade, policies to encourage the use of renewable energy have become more important to help reduce dependence on non-renewable energy sources such as fossil fuels and as part of strategies to address global warming. Wood energy remains the most important source of energy for more than two billion people in developing countries. Wood energy is also likely to gain in popularity in developed countries over the next 20 years as part of efforts to promote the use of renewable energy. *State of the World's Forests 2005* identifies key considerations for the development of future programmes and policies, including the need to take into account the complex economic forces that influence wood energy consumption and production. In addition, it describes how countries might develop the wood energy sector to meet broad policy goals and objectives.

Tariffs and non-tariff measures in trade of forest products

Concerns over forest degradation and loss of forest cover are heightening pressure on governments, the private sector and

international institutions to address the impact and interaction between trade and the environment, and specifically their relation to sustainable forest management. Although global trade in forest products is expanding, it is influenced by trade measures that vary considerably by product, region and country, including import tariffs, export restrictions, technical product standards, sanitary and phytosanitary measures and environmental and social standards – for example, certification and product labelling. Recent international discussions have noted that trade can have both a positive and negative impact on sustainable forest management and thus have recommended that countries monitor the effects of trade policies more closely. In attempting to diversify their forest products, developing countries and countries with economies in transition need to identify national incentives, drawing upon successful experiences elsewhere in developing domestic policies yet complying with trade rules at the same time. Schemes related to certification of forest management and to labelling of forest products are improving the interaction between trade and forest management, even though complaints continue over market access and market shares, particularly of forest products from tropical regions. Trade measures are being changed and adjusted to respond to specific production and market situations, with most staying within the boundaries of global and regional trade agreements. Those that stem from concerns over sustainability in the forest sector will continue to be evaluated against special trade obligations in multilateral environmental agreements and against global and regional trade rules.

Forests and war, forests and peace

Recognizing major clashes that have taken place in Africa, Latin America and South and Southeast Asia, *State of the World's Forests 2005* examines why many violent conflicts occur in forested regions. It identifies the characteristics of recent armed disputes, looks at the links to forests, explores issues related to post-conflict situations and presents a strategy for action.

Forests offer secluded places where insurgents can hide and use valuable natural resources to finance their activities. Rebels may also engage in lucrative illegal activities such as cultivating illicit crops and smuggling. People may use violence to gain control over natural resources or because they feel neglected or mistreated. Often, reasons shift over time and combine political, religious or ethnic aspects with personal incentives such as a desire for income, wealth, status, revenge or security or loyalty to specific individuals. Efforts to promote peace in forested regions must start with removing the motives for conflict before it breaks out. Armed hostilities can have both negative and positive effects on forests. However, post-conflict situations in countries with significant forests almost always pose an acute danger for this resource. Peace requires investment in better governance and improvement of livelihoods in remote forested and mountainous regions to prevent them from serving as breeding grounds for violence. Only then can forests assume their rightful importance for the social, cultural, economic and environmental contributions they make to the lives of all who depend on them. ◆