

# 2012

## State of the World's Forests



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# 2012

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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# Contents

<b>Foreword</b>	<b>v</b>
<b>Acknowledgements</b>	<b>vii</b>
<b>Acronyms and abbreviations</b>	<b>viii</b>
<b>Executive summary</b>	<b>ix</b>
<hr/>	
<b>1. <i>State of the World's Forests</i>: the first ten issues</b>	<b>1</b>
<hr/>	
<b>2. Forests and the evolution of the modern world</b>	<b>7</b>
Forests	8
Forestry	18
Sustainability: an enduring value	21
<hr/>	
<b>3. Forests, forestry and forest products for a sustainable future</b>	<b>23</b>
Forests and forest industries in a global economy	24
Turning the corner on how progress is perceived	26
Carving out a better future	30
Forest products in a sustainable future	33
Strategies for the future	37
<b>References</b>	<b>43</b>
<b>Figures</b>	
Figure 1: World population and cumulative deforestation, 1800 to 2010	9
Figure 2: Estimated deforestation, by type of forest and time period	9
Figure 3: Shares of total primary energy supply in 2008 (percent)	28
<b>Boxes</b>	
Box 1: The Agdal system of traditional resource management in Morocco	11
Box 2: Underlying causes of deforestation and forest degradation	17
Box 3: Alternative ways of measuring wealth and human well-being	27
Box 4: Is REDD a “game changer”?	29



# Foreword

**T**his tenth edition of *State of the World's Forests* elaborates on a fundamental truth: forests, forestry and forest products play a critical role in sustainable development. *State of the World's Forests* is published every two years.

The first chapter in this edition provides an overview of the main issues raised in the first ten editions of *State of the World's Forests*. One interesting trend observed is the growing recognition that forests and their use lie at the centre of any serious discussion of a sustainable future for planet earth. Forests play an essential role in mitigating climate change and providing products and ecosystem services that are essential to the prosperity of humankind. Forests and forestry played a central role in the development of modern civilization.

Chapter two, “Forests and the evolution of the modern world”, looks back at the successes and failures of past societies. Understanding ecological and economic history is an essential first step towards building a sustainable future.

Throughout history, deforestation has accompanied economic development. It was primarily in response to deforestation that the concept of sustainable development originated and evolved within forest science. The good news is that deforestation ceases to be a serious problem in most of the countries where economic development has progressed and sound forest practices, backed by political commitment, have been implemented. However, it must be clear that including forests at the core of a strategy for a sustainable future is not an option – it is mandatory.

Chapter three, “Forests, forestry and forest products for a sustainable future”, describes a world where economic output has more than doubled in the 20 years since the Rio Earth Summit; but this growth has been achieved at the expense of natural resources, including forests.

The world now needs to change its thinking about “progress” and develop new approaches for future economic success.

Photosynthesis – nature’s way of capturing solar energy and storing carbon – is necessary for the survival and prosperity of planet earth. Wood is produced by photosynthesis, and wood products continue to store carbon throughout their lifetimes. A sustainable global economy will use more wood for energy, shelter and an increasing array of products. To understand why “wood is good”, it is necessary to understand the entire life cycle of a forest. The same could be said of other forest products, such as bamboo and cork.

However, if wood products are produced from non-sustainable sources, the result will be deforestation or forest degradation, impeding sustainable development. In addition, not all forest products are positive in themselves. The forest practices that are collectively known as “sustainable forest management” must be used throughout the world for the global economy to become greener. At the core of sustainable forest management is the simple idea that as trees are used, they are replaced by new trees.

To the extent that “good wood” is used in the manufacture of higher percentages of buildings, infrastructure and other consumer products, the economy will become greener and more sustainable. Wood and charcoal are already the dominant form of renewable energy worldwide. In a greener economy, more wood will be used for energy as the use of fossil fuels declines. Net carbon dioxide in the atmosphere will decline as new trees are planted and nurtured to replace those that are used. Dealing with the increased demand for food, fodder, fibre, fuel and wood requires optimizing energy use, ambitious landscape restoration, intensive plantations where appropriate, imaginative agroforestry

activities, and coordination among all the activities present at the landscape level (such as agriculture, livestock, forestry, hunting, fisheries and biodiversity preservation).

A challenge for the forestry profession is to communicate the simple idea that the best way of saving a forest is to manage it sustainably and to benefit from its products and ecosystem services. If the principles of sustainable forest management are applied and forest products and ecosystem services play an increasing role, the global economy will become greener.

*State of the World's Forests 2012*, like its nine predecessors, is intended to serve as a reference source to support policy and research related to forests.

In addition, I hope that some of the ideas it advances will stimulate debate and lead to innovative approaches that help move the global economy in a greener direction.



**José Graziano da Silva**  
FAO Director-General



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# Acronyms and abbreviations

BCE	Before the Common Era
CIFOR	Center for International Forestry Research
CO <sub>2</sub>	carbon dioxide
COFO	Committee on Forestry
EU	European Union
FRA	Global Forest Resources Assessment
GDP	gross domestic product
GHG	greenhouse gas
HDI	Human Development Index
IFF	Intergovernmental Forum on Forests
IPF	Intergovernmental Panel on Forests
IUCN	International Union for Conservation of Nature
IUFRO	International Union of Forest Research Organizations
MEA	Millennium Ecosystem Assessment
NWFP	non-wood forest product
REDD	Reducing Emissions from Deforestation and Forest Degradation
SOFO	<i>State of the World's Forests</i>
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme

# Executive summary

**T**he 2012 edition of *State of the World's Forests* focuses on the critical role that forests play in sustainable production and consumption systems. In this milestone tenth edition, it is appropriate to take a look back to understand the important role that forests and forestry have played in shaping the world as it is today.

## Chapter 1: *State of the World's Forests*: the first ten editions

This is the tenth edition of FAO's flagship forestry publication, which has informed readers about the status and changes in the world's forests, forest products and ecosystem services, and forest policies since the series was introduced in 1995.

This chapter provides a brief overview of the key issues and events covered in each of the ten editions of *State of the World's Forests*, highlighting the major global trends over this period.

In the 1990s, there were serious divisions among the countries of the world regarding forest policies. These differences were starkly revealed at the first Earth Summit in Rio de Janeiro, Brazil, in 1992, when countries were sharply divided over the issue of a global forest convention. In an effort to address this division, an international forest policy dialogue was launched in 1995, starting with the Intergovernmental Panel on Forests, which was followed by the Intergovernmental Forum on Forests and, since 2000, the United Nations Forum on Forests. *State of the World's Forests* has followed the progress made at these venues.

Today, there is widespread agreement on the importance and key elements of sustainable forest management as an organizing principle for the world's forests. *State of the World's Forests* continues to monitor and report on progress towards sustainable forest management at the national, regional and global levels.

In addition, it analyses major economic trends, focusing on the critical role that forests play in the modern global economy and the global environment.

## Chapter 2: Forests and the evolution of the modern world

The history of humans is a story of forests and their use. Trees have provided the principal fuel and building material of human societies since prehistoric times. However, few societies have succeeded in managing their forests sustainably. As well as being a history of using forests to improve the quality of human life, the history of human civilization is also a history of deforestation.

This chapter traces the history of forests in the human era. In virtually every region of the world, wood has been the primary material used in economic development. Time and again, forest areas have declined as populations and economies have grown. Rapid economic development is often accompanied by high rates of deforestation. Fortunately, history suggests that as countries reach a certain level of economic development, they are generally able to stabilize or increase the area of their forests. There is reason for optimism in the longer term.

As human populations have expanded, forests have changed and evolved in different ways in different regions of the world. This chapter explores this evolution and considers both the impacts of forests on people and the impacts of people on forests.

The science and practice of forestry have evolved over the centuries. One of the most important contributions that forestry has made to human enlightenment is the concept of sustainability. Over a period of about 300 years, this concept has expanded, from focusing on the preservation of forest capital while ensuring the sustainable production of wood, to including a deeper understanding of sustainable development in a broad global context.

### Chapter 3: Forests, forestry and forest products for a sustainable future

In the two decades following the United Nations Conference on Environment and Development, the world economy has increased from USD 24 trillion to 70 trillion of annual production and consumption. This economic explosion has been led by developing countries. However, unprecedented growth has been achieved at the expense of natural resource sustainability, and economic benefits are unequally distributed.

There is growing awareness that an economy based on the continuously increasing depletion of natural resources is not sustainable. New ways of thinking about progress are needed, and agriculture and forestry will play central roles in this transition. The economy will become greener as more and more of the products consumed in mass quantities are based on photosynthesis. When plants are harvested for food, they are replaced by a new crop to grow more food for the next cycle. The same principle applies to forests. Production systems, including energy, must be based on sustainable processes, especially photosynthesis, if the world is to have a sustainable future.

Most people understand that forests could play a role in a green economy, but not many people realize that this role is not optional – for a sustainable world, it is mandatory. Without forests, the global ecosystem would collapse. The good news is that the global economy can be sustained indefinitely through the widespread use of renewable energy, including wood-based energy.

Forests provide resources for people, including a renewable source of energy. If the global economy is to be sustainable, the land-use principles, policies and practices that are collectively known as sustainable forest management must be used all over the world. Net carbon dioxide in the atmosphere will decline as long as new trees are planted to replace those that are used.

This chapter considers an important but often ignored segment of developing economies – the use of wood as the basic material for furniture, woodcarving, handicrafts and other small or medium enterprises. Increased investment in wood-based enterprises will generate additional employment, create real and durable assets, and help revitalize the lives of millions of poor people in rural areas. At a broader scale, this green economy approach (low-carbon, resource-efficient and socially inclusive) can expand the possibilities for disadvantaged segments of the global economy. Opportunities for rural people in emerging economies are especially high.

The chapter concludes with four broad strategies for a sustainable future:

- Plant trees and invest in ecosystem services.
- Promote small and medium forest-based enterprises, and gender equity.
- Use wood for energy; reuse and recycle wood products.
- Enhance communication, and coordinate development.