



COMMITTEE ON FORESTRY

TWENTY-FIFTH SESSION

5 - 9 October 2020

STATE OF THE WORLD'S FORESTS 2020 - KEY MESSAGES

Executive Summary

The State of the World's Forests 2020: Forests, Biodiversity and People examines the contributions of forests, and of the people who use and manage them, to the conservation and sustainable use of biodiversity. It assesses progress to date in meeting global targets and goals and illustrates the effectiveness of policies, actions and approaches, in terms of both conservation and sustainable development outcomes, through a series of case studies aimed at identifying innovative practices, success factors and win-win solutions.

It calls for bold actions to prevent, halt and reverse the loss of forests and their biodiversity, for the benefit of current and future generations.

Suggested action by the Committee on Forestry

The Committee may wish to invite countries to:

- Take note of the key findings of *SOFO 2020* and ensure that the post 2020 biodiversity framework take these into consideration and adequately reflect the critical role that forests play in the conservation and sustainable use of biodiversity;

The Committee may wish to request FAO to:

- Raise awareness on the drivers of forest biodiversity loss and how to address these;
- Step up actions to halt deforestation, forest degradation and loss of forest biodiversity and support countries in their efforts;
- Support countries with tools and methodologies for generating better evidence of forests' contribution to the conservation of biodiversity and strengthen countries' capacity to monitor biodiversity outcomes;
- Continue to demonstrate that solutions that balance conservation and sustainable use of forest biodiversity are possible through sharing best practices;
- Strengthen efforts to improve information on forest-dependent people and on the socio-economic benefits of forest biodiversity.

Queries on the substantive content of the document may be addressed to:

Ms Mette L. Wilkie
Director
Forestry Division
Mette.Wilkie@fao.org

(Please copy: COFO-2020@fao.org)

I. Introduction

1. As the United Nations Decade on Biodiversity 2011–2020 comes to a close and countries prepare to adopt a post-2020 global biodiversity framework, this edition of *The State of the World's Forests (SOFO)* takes the opportunity to examine the contributions of forests, and of the people who use and manage them, to the conservation and sustainable use of biodiversity. It assesses progress to date in meeting global targets and goals and illustrates the effectiveness of policies, actions and approaches, in terms of both conservation and sustainable development outcomes, through a series of case studies aimed at identifying innovative practices, success factors and win–win solutions.

2. *SOFO 2020* does not aim to be a comprehensive treatise on the subject of forest biodiversity, but rather to provide an update on its current state and a summary of its importance for humanity. It is intended to complement *The State of the World's Biodiversity for Food and Agriculture*, released by FAO in February 2019; the *Global Assessment Report on Biodiversity and Ecosystem Services* of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the draft of which was released in 2019; and the *Global Biodiversity Outlook 5* of the Convention on Biological Diversity (CBD), also to be released in 2020.

3. For the first time, this edition of *SOFO* is a joint effort between two United Nations entities: FAO and the United Nations Environment Programme (UNEP). Building on the comparative advantages of the two organization, *SOFO 2020* brings together new information generated by FAO's Global Forest Resources Assessment 2020 combined with new insights on the representativeness of protected areas and on changes in the protection status of forests over time based on an analysis undertaken by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC). Progress towards goals and targets related to forests and their biodiversity was assessed based on existing literature and commissioned studies. A series of case studies were compiled to provide practical examples of the conservation and sustainable use of forest biodiversity from around the world.

4. *The State of the World's Forests 2020* was initially scheduled to be launched during the meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the Convention on Biological Diversity in May 2020. Whilst this meeting was postponed, FAO decided to maintain the timing of the launch and presented the findings of the report at a webinar held on 22 May - the International Day for Biological Diversity. The key findings and messages of *SOFO 2020* are listed below.

II. The state of forest ecosystems

5. **Forests cover 31 percent of the global land area but are not equally distributed around the globe.** Almost half the forest area is relatively intact, and more than one-third is primary forest. More than half of the world's forests are found in only five countries (Brazil, Canada, China, Russian Federation and United States of America). Almost half the forest area (49 percent) is relatively intact,

while 9 percent is found in fragments with little or no connectivity. Tropical rainforests and boreal coniferous forests are the least fragmented, whereas subtropical dry forest and temperate oceanic forests are among the most fragmented. Roughly 80 percent of the world's forest area is found in patches larger than 1 million hectares. The remaining 20 percent is located in more than 34 million patches across the world – the vast majority less than 1 000 hectares in size.

6. More than one-third (34 percent) of the world's forests are primary forests, defined as naturally regenerated forests of native tree species where there are no clearly visible indications of human activity and the ecological processes are not significantly disturbed.

7. **Deforestation and forest degradation continue to take place at alarming rates, which contributes significantly to the ongoing loss of biodiversity.** Since 1990, it is estimated that some 420 million hectares of forest have been lost through conversion to other land uses, although the rate of deforestation has decreased over the past three decades. Between 2015 and 2020, the rate of deforestation was estimated at 10 million hectares per year, down from 16 million hectares per year in the 1990s. The area of primary forest worldwide has decreased by over 80 million hectares since 1990. More than 100 million hectares of forests are adversely affected by forest fires, pests, diseases, invasive species drought and adverse weather events.

8. The net loss of forest area decreased from 7.8 million hectares per year in the 1990s to 4.7 million hectares per year during 2010–2020. While deforestation is taking place in some areas, new forests are being established through natural expansion or deliberate efforts in others. As a result, the net loss of forest area is less than the rate of deforestation. In absolute terms, the global forest area decreased by 178 million hectares between 1990 and 2020, which is an area about the size of Libya. **The world is thus not on track to meet the target of the United Nations Strategic Plan for Forests to increase forest area by 3 percent worldwide by 2030.**

III. Forest species and genetic diversity

9. **Forests harbour most of Earth's terrestrial biodiversity.** The conservation of the world's biodiversity is thus utterly dependent on the way in which we interact with and use the world's forests. Forests provide habitats for 80 percent of amphibian species, 75 percent of bird species and 68 percent of mammal species. About 60 percent of all vascular plants are found in tropical forests. Along tropical coasts, mangroves provide breeding grounds and nurseries for numerous species of fish and shellfish and help trap sediments that might otherwise adversely affect seagrass beds and coral reefs, which are habitats for many more marine species.

10. **The biodiversity of forests varies considerably according to factors such as forest type, geography, climate and soils – in addition to human pressure.** Most forest habitats in temperate regions support relatively few animal and tree species and species that tend to have large geographical distributions, while the montane forests of Africa, South America and Southeast Asia and lowland forests of Australia, coastal Brazil, the Caribbean islands, Central America and insular Southeast Asia have many species with small geographical distributions. Areas with dense human populations and intense agricultural land use, such as Europe, parts of Bangladesh, China, India and North America, are less intact in terms of their biodiversity. Northern Africa, southern Australia, coastal Brazil, Madagascar and South Africa, are also identified as areas with striking losses in biodiversity intactness.

11. **Progress on preventing the extinction of known threatened species and improving their conservation status has been slow.** More than 60 000 different tree species are known, more than 20 000 of which have been included in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species, and more than 8 000 of these are assessed as globally threatened (Critically Endangered, Endangered or Vulnerable). More than 1 400 tree species are assessed as critically endangered and in urgent need of conservation action. Some 8 percent of assessed forest

plants, 5 percent of forest animals and 5 percent of fungi found in forests are currently listed as critically endangered.

12. The forest-specialist index, based on 455 monitored populations of 268 forest mammals, amphibians, reptiles and birds, fell by 53 percent between 1970 and 2014, an annual rate of decline of 1.7 percent. This highlights the increased risk of these species becoming vulnerable to extinction.

13. On a positive note, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization has been ratified by 122 contracting Parties (an increase of 74 percent from 2016) and 146 Parties have ratified the International Treaty on Plant Genetic Resources for Food and Agriculture.

IV. People, biodiversity and forests

14. **All people depend upon forests and their biodiversity, some more than others.** Forests provide more than 86 million green jobs and support the livelihoods of many more people. An estimated 880 million people worldwide spend part of their time collecting fuelwood or producing charcoal, many of them women. Human populations tend to be low in areas of low-income countries with high forest cover and high forest biodiversity, but poverty rates in these areas tend to be high. Some 252 million people living in forests and savannahs have incomes of less than USD 1.25 per day.

15. **Feeding humanity and conserving and sustainably using ecosystems are complementary and closely interdependent goals.** Forests supply water, mitigate climate change and provide habitats for many pollinators, which are essential for sustainable food production. It is estimated that 75 percent of the world's leading food crops, representing 35 percent of global food production, benefit from animal pollination for fruit, vegetable or seed production.

16. Worldwide, around 1 billion people depend to some extent on wild foods such as wild meat, edible insects, edible plant products, mushrooms and fish, which often contain high levels of key micronutrients. The value of forest foods as a nutritional resource is not limited to low- and middle-income countries; more than 100 million people in the European Union (EU) regularly consume wild food. Some 2.4 billion people – in both urban and rural settings – use wood-based energy for cooking.

17. **Human health and well-being are closely associated with forests.** More than 28 000 plant species are currently recorded as being of medicinal use and many of them are found in forest ecosystems. Visits to forest environments can have positive impacts on human physical and mental health and many people have a deep spiritual relationship to forests. Yet, forests also pose health risks. Forest-associated diseases include malaria, Chagas disease (also known as American trypanosomiasis), African trypanosomiasis (sleeping sickness), leishmaniasis, Lyme disease, HIV and Ebola. The majority of new infectious diseases affecting humans are zoonotic and their emergence may be linked to habitat loss due to forest area change and the expansion of human populations into forest areas, which both increase human exposure to wildlife.

V. Reversing deforestation and forest degradation

18. **Agricultural expansion continues to be the main driver of deforestation and forest fragmentation and the associated loss of forest biodiversity.** Large-scale commercial agriculture (primarily cattle ranching and cultivation of soya bean and oil palm) accounted for 40 percent of tropical deforestation between 2000 and 2010, and local subsistence agriculture for another 33 percent. Yet, the resilience of human food systems and their capacity to adapt to future change depends on that very biodiversity – including dryland-adapted shrub and tree species that help combat desertification, forest-dwelling insects, bats and bird species that pollinate crops, trees with extensive root systems in mountain ecosystems that prevent soil erosion, and mangrove species that provide resilience against flooding in coastal areas. With climate change exacerbating the risks to food systems, the role of

forests in capturing and storing carbon and mitigating climate change is of ever-increasing importance for the agricultural sector.

19. **Actions to combat deforestation and illegal logging have gathered pace over the past decade – as have international agreements and result-based payments.** So far, seven countries have reported reduced deforestation to the United Nations Framework Convention on Climate Change (UNFCCC) and countries are now accessing payments based on reducing emissions from deforestation and forest degradation from the Green Climate Fund and similar financing mechanisms. Efforts to address illegal logging are spearheaded by trade regulations in consumer countries that require importers to demonstrate that timber has been harvested legally. Many tropical timber-producing countries are making corresponding efforts to strengthen legal compliance and verification. Fifteen of them are developing national systems to assure legality of timber operations under the EU Forest Law Enforcement, Governance and Trade mechanism. As part of this mechanism, countries are required to also implement measures to prevent illegal hunting.

20. **Large-scale forest restoration is needed to meet the SDGs and to prevent, halt and reverse the loss of biodiversity.** While 61 countries have, together, pledged to restore 170 million hectares of degraded forest lands under the Bonn Challenge, progress to date is slow. Forest restoration, when implemented appropriately, helps restore habitats and ecosystems, create jobs and income and is an effective nature-based solution to climate change. The United Nations Decade on Ecosystem Restoration 2021–2030, announced in March 2019, aims to accelerate ecosystem restoration action worldwide.

VI. Conservation and sustainable use of forests and forest biodiversity

21. **Aichi Biodiversity Target 11 (to protect at least 17 percent of terrestrial area by 2020) has been exceeded for forest ecosystems as a whole.** However, protected areas alone are not sufficient to conserve biodiversity. Globally, 18 percent of the world's forest area, or more than 700 million hectares, fall within legally established protected areas such as national parks, conservation areas and game reserves (IUCN categories I–IV). However, these areas are not yet fully representative of the diversity of forest ecosystems. A special study conducted for SOFO 2020 on trends in protected forest area by global ecological zones (GEZs) between 1992 and 2015 found that more than 30 percent of tropical rainforests, subtropical dry forests and temperate oceanic forests were within legally protected areas (IUCN categories I–VI) in 2015. The study also found that subtropical humid forest, temperate steppe and boreal coniferous forest should be given priority in future decisions to establish new protected areas since less than 10 percent of these forests are currently protected. Areas with high values for both biodiversity significance and intactness, for example the northern Andes and Central America, Southeastern Brazil, parts of the Congo Basin, southern Japan, the Himalayas and various parts of Southeast Asia and New Guinea, should likewise be given high priority.

22. Limited progress has been made to date on classifying specific forest areas as other effective area-based conservation measures, but guidance on this category is being developed and has significant potential for forests.

23. **Aichi Biodiversity Target 7 (by 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation) has not been met for forests, but the management of the world's forests is improving.** The area of forest under long-term management plans has increased significantly – from 1.76 billion hectares in 1990 to an estimated 1.99 billion hectares in 2020, equivalent to half the global forest area.

24. **Current negative trends in biodiversity and ecosystems will undermine progress towards the Sustainable Development Goals (SDGs).** The world's biodiversity underpins life on Earth, but despite some positive trends, the loss of biodiversity continues at a rapid rate. Transformational change is needed in the way we manage our forests and their biodiversity, produce and consume our food and interact with nature. It is imperative that we decouple environmental degradation and

unsustainable resource use from economic growth and associated production and consumption patterns and that land-use decisions take the true value of forests into account.

VII. Towards balanced solutions

25. **Solutions that balance conservation and sustainable use of forest biodiversity are critical – and possible.** Not all human impacts on biodiversity are negative, as shown by the many concrete examples in SOFO 2020 of recent successful initiatives to manage, conserve, restore and sustainably use forest biodiversity.

26. **Ensuring positive outcomes for both biodiversity and people requires a careful balance between conservation goals and demands for resources that support livelihoods.** There is an urgent need to ensure that biodiversity conservation be mainstreamed into forest management practices in all forest types. To do so, a realistic balance must be struck between conservation goals and local needs and demands for resources that support livelihoods, food security and human well-being. Sustainable pathways require effective governance; policy alignment between sectors and administrative levels; land-tenure security; respect for the rights and knowledge of local communities and indigenous peoples; and enhanced capacity for monitoring of biodiversity outcomes. It also requires innovative financing modalities.

27. **We need to transform our food systems to halt deforestation and the loss of biodiversity.** The biggest transformational change is needed in the way in which we produce and consume food. We must move away from the current situation where the demand for food is resulting in inappropriate agricultural practices that drive large-scale conversion of forests to agricultural production and the loss of forest-related biodiversity. Adopting agroforestry and sustainable production practices, restoring the productivity of degraded agricultural lands, embracing healthier diets and reducing food loss and waste are all actions that urgently need to be scaled up. Agribusinesses must meet their commitments to deforestation-free commodity chains and companies that have not made zero-deforestation commitments should do so. Commodity investors should adopt business models that are environmentally and socially responsible. These actions will, in many cases, require a revision of current policies – in particular fiscal policies – and regulatory frameworks.

28. Forests are increasingly recognized for their role as a nature-based solution to many sustainable development challenges, as manifest in strengthened political will and a series of commitments to reduce rates of deforestation and to restore degraded forest ecosystems. **We must build on this momentum to catalyse bold actions to prevent, halt and reverse the loss of forests and their biodiversity, for the benefit of current and future generations.**

VIII. Implications for FAO's work

29. *The State of the World's Forests 2020* highlights the need to protect, manage and restore the world's forests. To help respond to this call for action, the Forestry Division is building on existing programmes and on established strategic partnerships with other forest-related organizations. In keeping with the SDGs, the Global Forest Goals, the Paris Agreement, the Aichi Biodiversity Targets and previous guidance provided by COFO, activities are clustered around three key areas of work: halting deforestation and forest degradation; the sustainable management and use of forest resources to enhance forest-based livelihoods; and forest restoration, reforestation and afforestation (See also FO:COFO/2020/5; FO:COFO/2020/7.1; FO:COFO/2020/7.2; FO:COFO/2020/9.1 and FO:COFO/2020/9.4.)

30. Large-scale field programmes and initiatives focusing on those key areas of work include: UN-REDD Programme; Forest Law Enforcement, Governance and Trade; Forest and Farm Facility; Sustainable Wildlife Management Programme; Sustainable Wood for a Sustainable World; Forest Landscape Restoration Mechanism and Action Against Desertification.

31. Although recent literature and commissioned studies provided additional insights, this edition of *SOFI* also highlighted important data gaps related to estimates of forest-dependent people, trends in populations of forest-related species and assessment of the socio-economic benefits of forest biodiversity.