

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

FORESTS

IN THE

ECE REGION

TRENDS AND CHALLENGES
IN ACHIEVING THE
GLOBAL OBJECTIVES ON FORESTS

EXECUTIVE SUMMARY



UNITED NATIONS



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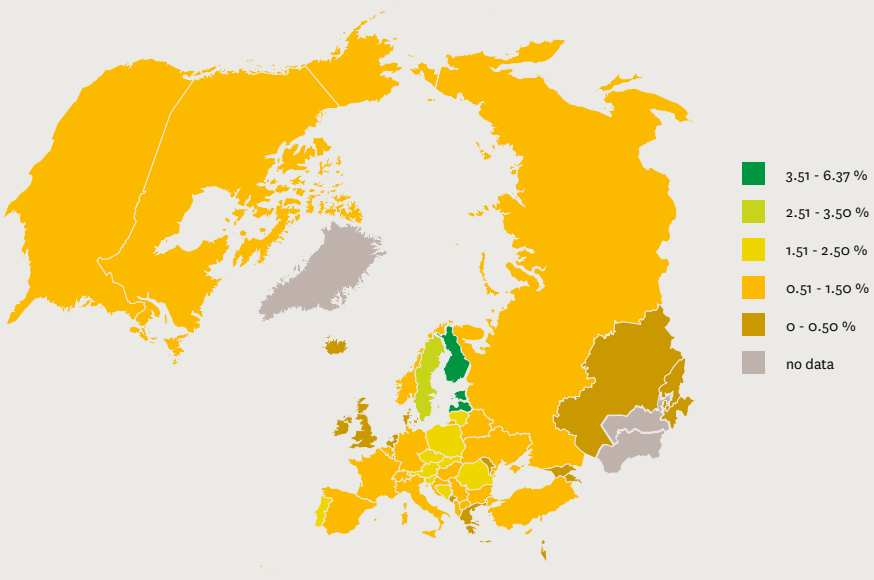
BACKGROUND AND PROCESS

In 2007, the General Assembly adopted the Non-Legally Binding Instrument on All Types of Forests (Forest Instrument), which includes four global objectives on forests that member States committed themselves to achieve. This study is the contribution of the UNECE Committee on Forests and the Forest Industry (COFFI) and the FAO European Forestry Commission (EFC) to the eleventh session of the United Nations Forum on Forests (UNFF), which will assess progress towards the global objectives as a part of the process of reviewing the International Arrangement on Forests. It has been prepared by the secretariat, using the best available international data. Countries have been consulted as regards the data; the study itself was discussed in draft form at a workshop organized by the joint UNECE/FAO Team of Specialists on Monitoring Sustainable Forest Management (21-22 October 2014 in Geneva, Switzerland) and at the 72nd session of the UNECE Committee on Forests and the Forest Industry (COFFI) held in Kazan, Russian Federation (18-21 November 2014). The final draft was circulated to countries for comment in December 2014 and those comments have been taken into account when preparing the final version.

The scope of the study is the ECE Region, which includes all members of COFFI and EFC (Figure 1).

Figure 1

ECE Region. Forest sector's percentage of gross value added, 2010



OVERVIEW OF PROGRESS TOWARDS THE GLOBAL OBJECTIVES ON FORESTS

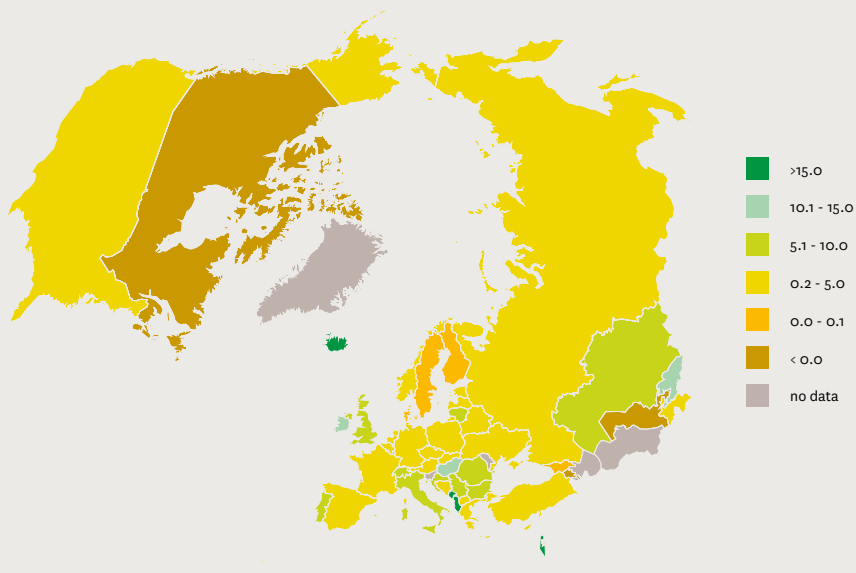
GLOBAL OBJECTIVE 1: REVERSE THE LOSS OF FOREST COVER WORLDWIDE THROUGH SUSTAINABLE FOREST MANAGEMENT, INCLUDING PROTECTION, RESTORATION, AFFORESTATION AND REFORESTATION, AND INCREASE EFFORTS TO PREVENT FOREST DEGRADATION

Has forest area in the ECE Region expanded or declined? What have been the contributions of afforestation and reforestation?

Forest area has been expanding in all parts of the region for several decades. The net increase between 2000 and 2015 was 28.1 million ha, or 1.5% of the total area of forest and other wooded land in 2000 (Figure 2). Natural expansion onto former agricultural land accounts for most of the increase, but afforestation in the context of public programmes has played a significant role in some countries.

Figure 2

Change in percentage of forest and other wooded land, 2000-2015





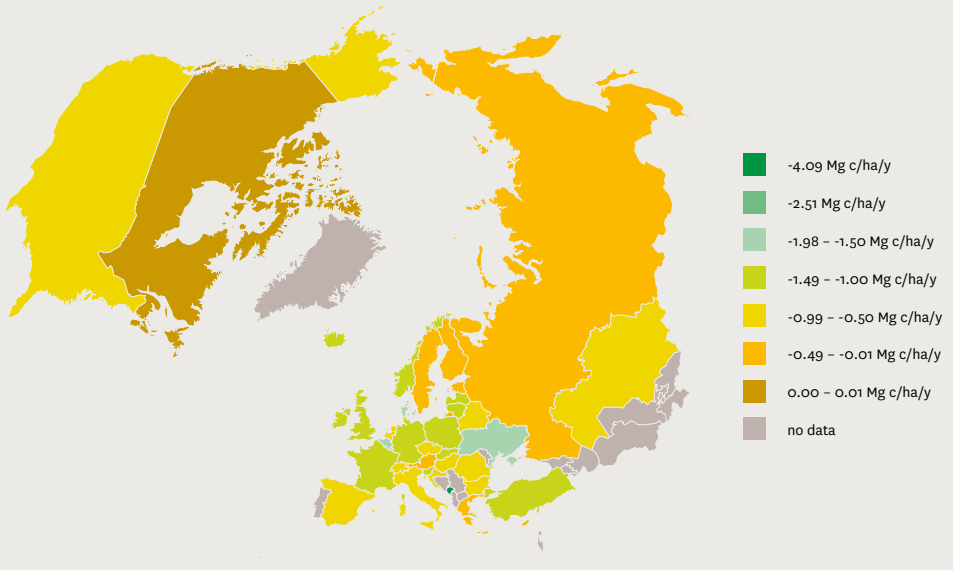
What are the major biomass and carbon stocks and flows connected to forests of the ECE Region, and what has been the role of forest management in their development?

The total stock of carbon in aboveground living biomass in the ECE member States amounts to 64.3 billion tonnes of carbon and in harvested wood products to over 5 billion tonnes. The total forest biomass carbon sink – the carbon sequestered each year by ECE Region forest ecosystems - is estimated at 255 million tonnes of carbon per year between 2005 and 2010 (Figure 3). However there is uncertainty over the exact size of the sink, and its underlying causes. Forest management has the possibility to continuously maintain a carbon stock over larger forest estates, while at the same time sustainably producing wood products and biomass for bioenergy. There is a risk of unintended carbon emissions through fire, insects, wind etc.

What is the area of sustainably managed forest in the ECE Region, and how fast is it increasing?

Three ways have been used to estimate the trends in area of sustainably managed forest: about 80 per cent of the ECE forests are already under forest management plans or equivalent. Between 2006 and 2013, the area of forests certified as sustainably managed in the ECE Region expanded by 45%. Almost all ECE member States are members of one or more regional processes of criteria

Figure 3
Per hectare annual carbon sink or source in living forest biomass in the countries of the ECE Region, 2012



Note: negative number denotes a sink

and indicators of sustainable forest management, notably the Montréal Process and FOREST EUROPE. Taken together these trends indicate that there are very significant areas of sustainably managed forest in the ECE Region, and that this share has been growing over the past two decades – or that there is a stronger ability and determination to demonstrate this trend.

How much forest degradation is taking place in the ECE Region, and what protection and restoration is being undertaken?

There is no objective information on forest degradation, as there are major problems of definition and measurement. It is clear, however, that in the ECE Region there are local or regional occurrences of forest degradation from a variety of causes including fire, insects and storms, but also fragmentation around urban areas, mining, radiation, land mines and other damage from war and conflict.

GLOBAL OBJECTIVE 2: ENHANCE FOREST-BASED ECONOMIC, SOCIAL AND ENVIRONMENTAL BENEFITS, INCLUDING BY IMPROVING THE LIVELIHOODS OF FOREST DEPENDENT PEOPLE

Have the economic benefits supplied by ECE Region forests increased or decreased?

The forest sector's contribution to GDP in the ECE Region has fallen in absolute terms, and its share in the Region's economy has declined from 1.2% to 0.8% over a decade. Employment in the forest sector has fallen as well, notably because of higher labour productivity. The recession which started in 2008 has also increased unemployment and economic hardship in forest dependent communities and regions.

Have the social benefits supplied by ECE Region forests increased or decreased?

There has probably been increased access to forests for recreation, as more people in urban areas use forests. Forest management planning increasingly recognises amenity and use values. However, forest fragmentation and degradation of forest health may be reducing the social benefits available in some areas. Safety and health of forest workers are a cause for concern.

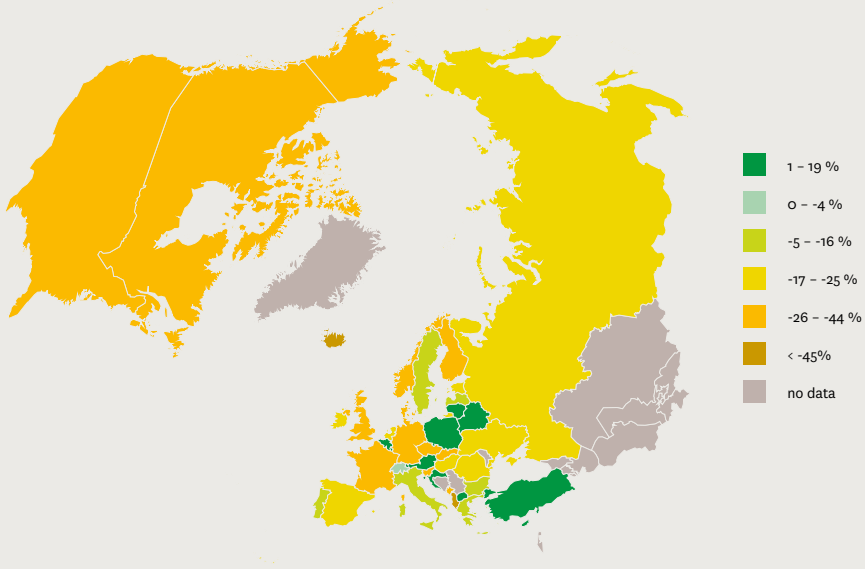
Have the environmental benefits supplied by ECE Region forests increased or decreased?

The area of protected forests has increased and supply of environmental benefits is increasingly considered in management strategies. Conservation credit exchanges and payment for environmental services are discussed a lot, but are still rare in practice. There is continuing pressure on forest habitats. Forest fragmentation, degradation and the conversion of primary forests to secondary or plantation forests will also reduce the supply of environmental benefits, particularly with regard to the conservation of native biodiversity.

Have the livelihoods of forest dependent people been improved?

This issue is being increasingly recognised in the ECE Region, but so far has been little analysed. Endemic poverty persists in many indigenous communities and other rural forested areas. Sharp declines in forest sector employment (Figure 4) have resulted in reduced livelihoods and caused hardship to unemployed workers and their communities, particularly in timber dependent areas.

Figure 4

Percent change in forest sector employment, 2000-2010**Does the forest sector in the ECE Region contribute to climate change mitigation?**

Forest ecosystems sequester carbon from the atmosphere, and store it over long periods in the forest ecosystem, and, after harvest, in forest products. In addition, the use of products and energy from sustainably managed forests to substitute for non-renewable materials and energy sources contributes to climate change mitigation. There is potential to further develop all these approaches, although, there are tradeoffs between these strategic objectives as well as with other forest management objectives.

GLOBAL OBJECTIVE 3: INCREASE SIGNIFICANTLY THE AREA OF PROTECTED FORESTS WORLDWIDE AND OTHER AREAS OF SUSTAINABLY MANAGED FORESTS, AS WELL AS THE PROPORTION OF FOREST PRODUCTS FROM SUSTAINABLY MANAGED FORESTS

Has the area of forests protected for conservation of biodiversity, including by active management, increased or decreased?

Integrated forest management approaches, emphasizing the biodiversity component, have expanded in the whole ECE Region during the last 20 years. The benefits for biodiversity can already be seen in the recorded increase of the dead wood component in commercially managed semi-natural forests. The area of forests protected for biodiversity has increased continually during the 20 years period in the whole ECE Region, to about 12% in 2015. In some ECE countries the international commitments on biodiversity, notably the Aichi biodiversity targets, are being implemented, although there is no authoritative progress report yet. In others, however, much remains to be done.

Has the share of consumption of products from sustainably managed forests increased?

There are many indications that the share of consumption of forest products from sustainably managed forest has increased significantly over the last decade. The potential supply of certified forest products increased by about 30% between 2007 and 2013 (Table 1). The number of “chain of custody” certificates grew even faster: the total was 3.5 times more in 2014 than in 2006. In addition, an increasing number of public sector initiatives, notably the US Lacey Act and the EU Timber Regulation, are promoting consumption of sustainably produced forest products and discouraging unsustainably produced forest products. Rules for green public procurement have been changed to allow, in some circumstances, preference for sustainably produced products.

Table 1
Estimated supply of industrial roundwood from certified forests in the ECE Region, 2007-2013

Estimated supply of wood from certified forests				
	2007 million m³	2013 million m³	Change %	Share, 2013 %
ECE West	210.1	244.2	16.2	49.8
ECE Central	166.4	236.1	41.9	48.1
ECE East	3.6	10.2	183.3	2.1
Total	380.1	490.5	29.0	100.0

Note: Estimated supply has been calculated based on the subregions’ annual roundwood production from “forests available for wood supply” which is multiplied by the percentage of the subregions’ certified forest area. There is no significant estimated wood supply from certified forests in ECE South East.



GLOBAL OBJECTIVE 4: REVERSE THE DECLINE IN OFFICIAL DEVELOPMENT ASSISTANCE FOR SUSTAINABLE FOREST MANAGEMENT AND MOBILIZE SIGNIFICANTLY INCREASED, NEW AND ADDITIONAL FINANCIAL RESOURCES FROM ALL SOURCES FOR THE IMPLEMENTATION OF SUSTAINABLE FOREST MANAGEMENT

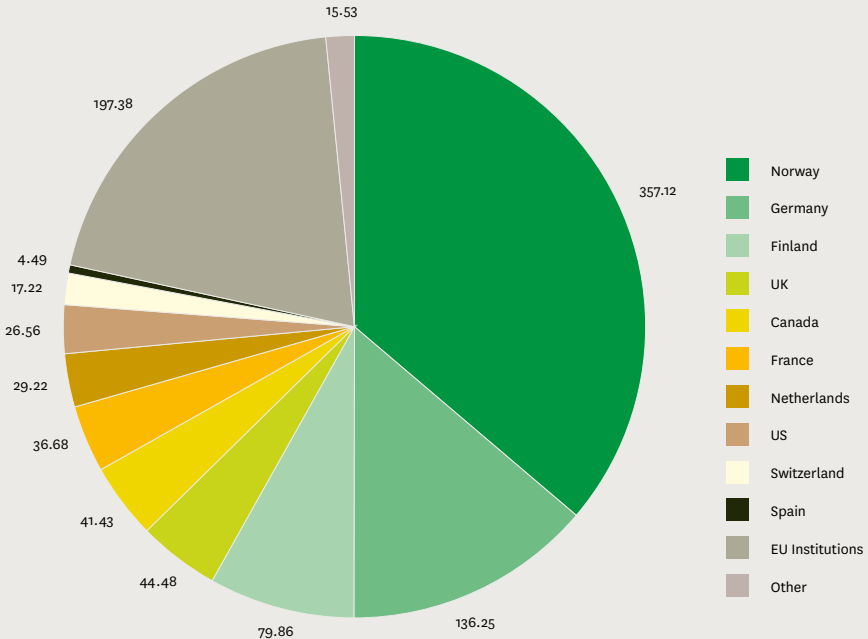
What are the trends for official development assistance for sustainable forest management?

The total annual bilateral ODA to forestry from the ECE countries in 2011-2012 was more than five times the volume in 2005-07 (Figure 5). In 2009-12 the ECE countries represented 75-80% of the total bilateral forestry ODA. The total amount of ODA for sustainable forest management is certainly higher, as ODA for forestry is also reported under other headings, such as climate change (e.g. REDD+), and the figures above do not include multilateral development assistance.

What financial resources from all sources have been supplied for the implementation of sustainable forest management inside the ECE Region?

Domestic public financing includes budgets for state forest organisations (when they are not self supporting), support to R&D and transfer payments to private owners. Payment for environmental and social services provided by forests is being developed slowly. Most private financing has come

Figure 5
Total forestry ODA from ECE countries, 2011-2012



from private forest owners, notably through wood sales revenue. However, investment by private financial institutions is rapidly growing in importance.

CHALLENGES AND OPPORTUNITIES FOR THE ECE REGION IN IMPLEMENTING THE GLOBAL OBJECTIVES

On the basis of the developments summarized above, as well as the outlook and policy commitments by ECE member States, a number of major challenges for the ECE Region forest sector were identified. They are presented below, in summary form. It should be stressed that these are challenges that are difficult yet desirable to achieve, even though they are not formal commitments by ECE Region governments or stakeholders.

1 Protect the forests

Governments and forest managers must act strategically to protect the forests of the ECE Region from all threats, notably those linked to climate change, and increase the resilience of forests faced by changes which are hard to predict at present. Strategies should be adaptive: their success or failure should be monitored, and the strategies changed, if necessary, in the light of experience.

2 Contribute to climate change mitigation through carbon sequestration and storage in forests and products, and through substitution.

The ECE Region forest sector is already contributing to climate change mitigation by carbon sequestration and storage in forests and products, and by substituting for non-renewable materials and energy. However, it is clear that the contribution could be significantly increased in all four areas. There are also challenges arising from tradeoffs between these four sequestration strategies, as well as between them and other forest functions, notably conservation of biodiversity.

3 Mobilise significantly more wood for energy, on a sustainable basis

To reach the renewable energy goals, the volume of wood supplied and used as a source of energy would have to increase significantly over a relatively short period. To achieve these ambitious goals some or all of the following would be needed: unprecedented wood mobilisation from private forests, using more of the tree biomass, even stumps; using all residues for raw material or energy; and improving the recovery of wood products after use. The policy challenge is to reconcile the objectives for renewable energy, sustainable forest management, wood products industries, and trade, which sometimes conflict and, if so decided, to make a significant investment of resources and political will to mobilise significant volumes of wood for energy, without unacceptable damage to other parts of the forest sector, or the environment, inside and outside the ECE Region.

4 Exclude all unsustainably produced forest products from ECE Region markets, while helping countries outside the region to fight illegal logging and other unsustainable practices

Over the past decade, significant progress has been made in fighting illegal logging, and other unsustainable practices, inside and outside the ECE Region. The challenges facing the region with regard to sustainably produced forest products are: to finish putting in place effective and fair market access regulations, removing all loopholes, continuing to help exporting countries in developing regions to achieve sustainable forest management (thereby gaining full access to ECE Region markets), and ensuring that wood based products do not face unfair restrictions on consumer markets because of the cost of achieving and demonstrating sustainable forest management.



5 Promote the consumption of sustainably produced forest products

Increased consumption of forest products from sustainable sources contributes to climate change mitigation, the economic sustainability of the forest sector, job creation or maintenance, and the development of the green economy, and should therefore be promoted. The promotion efforts should be devoted to communication and marketing, but also to regulatory questions.

6 Take the lead in developing the green economy, sharing experience with other sectors, and learning from them

The emerging “Green Economy” will necessitate new approaches in every sector to improve human well-being and social equity while significantly reducing environmental risks and ecological scarcities. The forest sector already displays many green characteristics. However, the sector should become more “green”; indeed take the lead in certain respects. The Rovaniemi Action Plan for the Forest Sector in a Green Economy suggests a wide range of activities by all parts of the forest sector, to be undertaken on a voluntary basis through *ad hoc* partnerships. The policy challenge is to implement the Rovaniemi Action Plan to a broad extent, with the active involvement of the private sector, civil society and all stakeholders.

7 Put the forest work force on a sustainable basis, dramatically improving safety and health of forest workers, and providing necessary skills for a changing world

The forest workforce in the ECE Region has significant problems with occupational safety and health. Forest workers often have lower than average wages, relatively low social prestige, and have to work in remote areas, in uncomfortable conditions. It has become difficult to recruit enough forest workers with appropriate skills for the changing forest work, the average age of the work force is growing and some forest managers may be uneasy in their changing roles. The challenges in developing a sustainable forest workforce are to make forest jobs more attractive, to adapt training and education to bring them into line with the changing requirements, to redesign forestry training to cover the new skills required by forest managers, and to work more closely with other disciplines.

8 Continue to help countries in other regions achieve sustainable forest management

Despite the recorded increase in bilateral ODA, and the many multilateral ODA and capacity building exercises, deforestation, illegal logging and other unsustainable practices continue in many regions. Reversing deforestation must be a priority, even in those regions, like the ECE Region, where forest area is stable or expanding. The challenge to Governments and the forest sector in the ECE Region is to support and facilitate the efforts to halt deforestation, through financial and technical assistance, sharing of experience and capacity building, increasing the effectiveness of the funds supplied, and in particular, to maintain or increase levels of funding, whether bilateral or multilateral ODA or private investment.

9 Seek mechanisms to finance forest functions on a fair and sustainable basis, for example through valuation of forest ecosystem services and payment for ecosystem services

The valuation of ecosystem services provided by forests, i.e. the benefits derived from the forest, should be promoted and applied so as to provide a basis for capturing these values. In so doing, the so far invisible benefits of forests are made visible, and measures to support and finance sustainable forest management through instruments such as payments for ecosystem services could then be put in place. The challenge facing ECE Region governments, forest owners and

forest stakeholders is to develop and establish, in an equitable and efficient way, a transparent and objective institutional and governance system to achieve this.

10 Build capacity throughout the ECE Region

The challenge for several ECE countries, mostly in the Balkans, around the Caucasus and in Central Asia is to put their forest sectors on the path to sustainable forest management, as they are threatened by factors including remoteness and lack of infrastructure, transition and changes in structures and society, including the need to improve governance, illegal logging, lack of and threat to protective functions because of low forest cover, and lack of priority for the forest sector in national development plans. The challenge for other ECE countries is to support them in this effort. A necessary first step is to ensure that national development plans recognise the importance of forest sector issues. Sustainable forest management should be addressed at the highest policy level, because of, not despite, the low forest cover in many of these countries.

11 Develop a culture of innovation, in the face of structural change

The actors of the forest sector must function in an increasingly competitive and rapidly changing political, economic and technological environment, sometimes dominated by large, extremely dynamic, enterprising with a culture of rapid and successful innovation. The policy challenge for the development of a culture of innovation is to put in place the necessary framework conditions, such as finance, skills and workforce, and to promote the necessary innovative spirit, while maintaining the commitment to sustainable forest management.

12 Address the social and economic problems of forest dependent people in the ECE Region – remote rural communities, indigenous peoples and forest owners

There are pockets of deprivation in forested areas of the ECE Region, particularly in the large forest areas of North America and Russia, where climate and geography exacerbate the problem. Low revenue from forestry and closures of local mills have made the situation worse. Many indigenous peoples, notably in North America, have unresolved ownership claims on large forest areas. Millions of private forest owners in the ECE Region have holdings which are below the critical size for economic management. The challenge is to ensure that the forest is part of the solution to the problems of isolated poor rural communities in forest areas, not a factor exacerbating their isolation and poverty.

13. Maintain and improve forest biodiversity, through protected areas and active management

There is still the potential to improve forest biodiversity in all parts of the region, by expanding protected areas, where necessary, and by expanding the use of integrated management in forests outside protected areas. The challenge with regard to biodiversity is to ensure that international commitments, notably the Aichi targets, are met, that all forest ecosystem types are properly covered in protected area networks, and that biodiversity is maintained and improved also on multi-functional forest land. The challenge is further exacerbated by the fact that dynamic forest disturbance processes in several countries pose a potential threat to native biodiversity. Global climate change may accelerate these processes. It is also a challenge to monitor progress with regard to forest biodiversity, and to base policies on a wide consensus of stakeholders, some of whom have contradictory interests, especially in a context of restrictions on public spending, which applies across the whole ECE Region.



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This Study is a contribution of the ECE Region to the Eleventh Session of the United Nations Forum on Forests. Using the best available data, it examines progress of the forest sector in the ECE Region towards the achievement of the four Global Objectives on Forests, adopted by the United Nations General Assembly in 2007. On the basis of this assessment as well as the forest sector outlooks and policy commitments by ECE member States, thirteen major challenges for the forest sector in the region are identified and analysed. The study provides policy recommendations for consideration in the discussions by UNFF.



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U.S. Department of Agriculture
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Palais des Nations
CH - 1211 Geneva 10, Switzerland
Telephone: +41 (0) 22 917 44 44
Fax: +41 (0) 22 917 05 05
E-mail: info.ece@unece.org
Website: www.unece.org