

## **Report of the Team of Specialists on Forest Sector Outlook**

### *Summary*

According to its mandate, the Team of Specialists is expected to report on its activities to the Working Party. This document provides information about the Team of Specialists activities and on plans for the future. It draws the Working Party's attention to specific issues where guidance is needed.

*The Working Party is requested to review the issues presented and to:*

- *advise the secretariat on contacts of experts on forest sector outlook, and on related climate change and biodiversity issues, as well as options for seconding or funding such experts*
- *advise on options for funding a future outlook study with its various components*
- *express its views on the possible organization of regional workshops to review and improve data and scenarios*
- *authorize the secretariat to approach countries with requests for nominations for outlook correspondents*
- *discuss cooperation with the ToS on Forest Products Marketing and Sustainable Forest Management, and usage of the different datasets available.*

1. This document is produced in accordance with the requirement to report "Once a year to the Joint FAO/UNECE Working Party on Forest Economics and Statistics" as stated in the terms of reference of the Team of Specialists as approved by the Timber Committee and European Forestry Commission in the Strategic Plan of the Integrated Programme of Work in ECE/TIM/2008/7.

### **Period covered**

October 2008 to March 2009

### **Team officers**

Mr. Mart-Jan Schelhaas, Leader (Netherlands)

Mr. Jeff Prestemon, Deputy Leader (United States)

Ms. Tatyana Yakusheva, Deputy Leader (Russian Federation)

### **Secretariat**

Ms. Franziska Hirsch, UNECE/FAO Timber Section

### **I. Team members**

2. The Team of Specialists (ToS) on Forest Sector Outlook was constituted through the Strategic Plan 2008-13 of the UNECE/FAO Integrated Programme of Work on Timber and Forestry, approved by the Timber Committee and European Forestry Commission at their joint session in October 2008. Through the process of strategic review, a significant emphasis was placed on reconstituting this Team. A previous ToS on Outlook contributed to the development of the previous outlook study issued in 2005.
3. Through the Strategic Review, countries and stakeholders placed a priority on an updated outlook study to take account of developments as regards bioenergy and climate change, including interactions between these developments and the outlook for existing wood using industries. This should comprise analysis of potential wood supply, as well as the factors linked to its mobilization. The Bureaux and the joint session of the TC and EFC at the European Forest Week

endorsed the approach of a new outlook study to be developed with a reinforced Team of Specialists, whilst the secretariat, in the absence of a permanent post dedicated to this task full-time, can assure coordination of the study and will maintain the responsibility for the quality of the outputs.

4. Following a call for nominations of team members launched in August 2008, as of March 2009, experts have been nominated by 25 countries. In addition, the secretariat invited experts from the research community, non-governmental organizations and the private sector to attend, to provide advice on the development of a new forest sector outlook study. All members of the Task Force on Wood Availability and Demand have been invited to attend the meeting and to be associated to the Outlook ToS, in view of the Team's role to provide advice on wood availability and demands. All nominated experts and invited members of the Team are listed in Annex 1.

## **II. Meetings held**

5. The Team of Specialists held its inaugural meeting on 4-5 February 2009. 31 experts attended the meeting. These comprised team members nominated officially by heads of delegations and experts invited by the secretariat.

## **Outputs during the period**

6. The main output of the newly constituted Team was to **advise on methods, analysis and conduct of forest sector outlook studies (expected output 1, mandate objective 1)** during the first meeting. The Team reviewed the European Forest Sector Outlook Study (EFSOS) and identified a number of issues which would merit improvements in a new study, notably:
  - closer link between the analysis and the policy recommendations,
  - better linkage between equations and analysis of forest resource, incl. material balance
  - Need to determine resources early from major funding sources, and to attract more resources, to allow for improvements of the study
  - Closer work with partners (internal & external), in particular between the Outlook ToS and the ToS on Forest Product Marketing and on Monitoring Sustainable Forest Management
  - Design questions early, then adapt methods and analysis
  - Improve transparency, and involve national correspondents for data improvements and reviews. More intense consultation with national level and with industry groups before finalization.
  - Inclusion of Russia only if the methods are sound enough (which was not the case in the past). Otherwise, develop separate studies for Europe, Russia, North America and link to each-other (possibly three linked studies which together provide outlook for entire region)
  - Include a global dimension, taking account of developments and trends such as the economic crisis, changes in trade patterns, and the concern with the UNECE region's footprint. Take into account the next FAO State of the World's Forests linked to global and regional outlook studies.
  - Issue the study also in Russian; possibly organize workshops with Russian-speaking correspondents linked to the outlook study and its review.
7. On the basis of a first outline for a future outlook study discussed during the meeting (attached in Annex 2), the Team identified that following priority issues, which should be reflected in a next outlook study:
  - Climate change mitigation and adaptation: finding the right mix of strategies
  - Potential wood supply and mobilization strategies
  - Biodiversity protection and achieving longer term sustainability, including related ecosystem targets (biodiversity loss, watershed protection, and others) and the social/livelihood dimensions of forests.
  - Structural long term changes arising from the economic crisis, within and outside of the UNECE region.

8. The Team also reviewed UNECE/FAO data and information by partners which need consideration in the next outlook study. It discussed the scope of the study, the analytical tools to be used and decided on a time frame (see expected outputs below). More detailed information is available in the final meeting report: <http://timber.unece.org/fileadmin/DAM/report-tos-outlook-feb-2009.pdf>

### Expected outputs

9. The Team's main future activity will focus on continuing to **provide guidance on methods, analysis and conduct of outlook studies (expected major output 1)**. A core group set up, as agreed at the first Team meeting, will meet in May 2009 to decide on the usage of the tools for the development of the scenarios underlying the study (market equations/models, EFISCEN, wood resource balance, possibly others), determine responsibilities, further research and resource need.
10. At its next meeting foreseen to be held in November 2009, the Team will review these proposals and decide on the methods to be used and the final roadmap for the development of the study, on the basis of available resources. Through these activities, the Team will also provide **guidance on wood availability, demands and mobilization (objective 4)**, as well as potential wood supply, a basic issue of consideration in the next study. All members of the Task Force on Wood Availability and Demands which provided guidance to the secretariat during the past two years on the development of studies and wood availability and potential wood supply, have been invited by the secretariat to contribute as experts to the Outlook Team. In a separate meeting of Task Force members following the inaugural Team meeting, it was decided that the Task Force meet in future on ad hoc basis, should separate advice on a specific issues be required.
11. Following the second ToS meeting in November 2009, work on developing the scenarios should start, to be able to present first results of the quantitative analysis for review at the third Team meeting foreseen for November 2010 by Team members as well as the network of outlook correspondents (notably for countries who have not nominated a member of the Team). In advance of and follow-up to the third meeting, Team members and correspondents are expected to review and comments on the results of the **scenarios for production and consumption of goods and services of the sector, and for wood supply, taking into consideration all influencing factors (expected major output 3)**. The need for a greater involvement of national correspondents in this outlook study is crucial to ensure its reliability and quality. Ground for this should be laid with the workshop on potential wood supply to be held back-to-back with the Working Party session on 30 March 2009. If possible and if funding allows, regional workshops could be organized to review and comments on the 1<sup>st</sup> results. It is foreseen that in spring 2011, the results of the revision of the 1<sup>st</sup> scenarios would then become available.
12. With the final results of the analysis, and on the basis of additional research, the final study should be drafted by designated authors, members of the core group and the Team. Team members are requested to take an active role in **conducting research on the topic area, in support of forest sector outlook studies and other relevant policy making (expected major output 4)**. Responsibilities for the different chapters of the study and adequate funding are, at this stage, unclear and not decided (please see issues listed below). To be able to launch the study at the 6<sup>th</sup> Ministerial Conference on the Protection of Forests in Europe, the exact timing of which yet remains to be decided, a first draft would need to be available by summer 2011. Findings of the study could subsequently be discussed during the Spring 2012 session of the FAO European Forestry Commission.
13. In addition to guiding the development of the next outlook study, the Team is also expected to

provide **advice on wood-energy related publications and products (expected major output 2) and on the implementation of the ECE/FAO/EU/IEA Joint Wood Energy Enquiry (expected major output 5)**. While, at its inaugural meeting, the Team has been briefed of the work on wood energy, the Working Party has, for the last five years, been giving guidance on the wood energy work and will review the results of 2008 JWEE as they have just become available. The secretariat therefore proposes that the Team be briefed at its November 2009 meeting of these results and follow-up activities and discuss related policy issues, and that the Working Party continue to be involved directly with the guidance of the JWEE and other wood-energy work. The ToS on Forest Sector Outlook should primarily focus on the development of the next outlook study, of which wood energy will be an integral, important part. In this context, the Team will continue to **“monitor and analyse policy aspects of use of wood for energy generation and material use and the implications for the forest sector” (objective 2) and “monitor the use of wood for energy” (objective 3)**. The question of potential wood supply being an integral part of the next outlook study, the Team will thus **also contribute to the implementation of Warsaw Resolution W1 “Forests wood and energy (objective 5)**.

#### **Comments, lessons learned**

14. Please see issues below.

#### **Issues for attention of the Working Party**

15. Please review the following issues:

- (a) To be able to implement the improvements suggested by the Team of Specialists for a new forest sector outlook study, and to provide decision making with a quality analysis of possible scenarios, accompanying policy options and recommendations, additional resources are needed, in particular :
  - to improve the quantitative analysis and models used for scenario construction, which should ideally link several variable to a greater extent than in the past
  - to construct the scenarios/run the models
  - to assist in research
  - to remunerate authors of the different parts/chapters for the study
  - to assist in the project management function related to the development of the study, in particular in the time period end-2009 to mid-2011.

***Working Party members are requested to consider whether they could loan expertise to the secretariat, for the conduct of these tasks, and to advise on possible sources of funding.*** In addition to the preparation of the study, funding could also be allocated to separate chapters of the study.

- (b) As reflected in the Strategic Plan 2008-13, on the basis of the outcome of the strategic review, an updated outlook study should take account of developments as regards bioenergy and climate change, including interactions between these developments and the outlook for existing wood using industries. With existing methodologies and on the basis of past work, there is expertise, in particular in the core group, related to an analysis of potential wood supply, as well as the actors linked to its mobilisation. Climate change mitigation options in the forestry sector have been subject of study already for a while, but adaptation to climate change has received less attention until now. Expected impacts of climate change include changes in growth rates, changes in tree species distribution and changes in natural disturbance regimes. Uncertainty ranges are large, both due to uncertainties in tree growth models and in climate projections. Changes in growth rates can probably be included quantitatively in the outlook study, but should be accompanied by uncertainty estimates. Changes in distribution patterns, natural disturbance regimes and other climate change impacts should be reflected in quantitative analysis. It was agreed during the inaugural meeting that one of the priority issues to be addressed in the study should be *“climate change mitigation and adaptation: finding the right mix of strategies.”* ***Working Party members are requested to advise the secretariat on relevant forest-***

*climate change expertise and contacts which could be associated as well as possible funding options.*

- (c) *The Working Party is invited to advise on the establishment of a network of national correspondents to review and improve data which serves as an input to the models to be used, as well as first results of the modelling exercises.* This would comprise data on potential wood supply, along with national forest inventory data to be used for EFISCEN, forest product market statistics, and other sources. *The secretariat requests the Working Party to authorize it to approach countries and ToS members with requests for nominating national correspondents for a future outlook study.*
- (d) *The Working Party is also invited to express its views on the idea of holding regional workshops for reviewing and improving scenario results, and to discuss options for funding such an exercise.*
- (e) Another priority issue to be considered in the next outlook study is “*biodiversity protection and achieving longer term sustainability, including related ecosystem targets (biodiversity loss, watershed protection, and others) and the social/livelihood dimensions of forests.*” Implications of the 2010<sup>1</sup> and other biodiversity targets should be reflected in the models in view of their limitations of potential wood supply, and also need to be discussed qualitatively. *The Working Party is invited to provide advice on relevant expertise and contacts, notably related to possibilities for a quantification of the biodiversity targets established under the Convention on Biological Diversity.*
- (f) *The Working Party is invited to suggest any additional contacts of experts who could be associated to a future outlook study, based on the topics suggested in the initial outline (Annex 2), as well as options for seconding or funding such experts.*
- (g) The Outlook ToS recognized the need for close cooperation with the ToS on Forest Products Marketing and Forest Resources. At this stage, it has not yet been decided which form this cooperation could take. In addition to the contribution of the responsible secretariat members to the core group and the Team, a sub-group of the Forest Resource and Marketing Teams could review the results of the market and EFISCEN models and also parts of the study. Possibly, members of these teams could also contribute to writing parts of the studies. *The Working Party is requested to provide advice on possible contributions of the Marketing and Forest Resources ToS to a new outlook study and to propose modalities for cooperation. In this context, the Working Party is invited to discuss how the different datasets could be put to best use in the outlook study, and if and how they could be linked.* This question concerns in particular data collected through the FRA and the MCPFE quantitative indicators and its link with national forest inventory data which are used to construct the EFISCEN model.

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<sup>1</sup> to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level.

## Annex 1 Members of the ToS on Forest Sector Outlook 2008-13

Country	Last Name	First Name	Organization
Austria	Hangler	Johannes	Federal Ministry of Agriculture, Forestry, Environment and Water Management
Austria	Schwarzbauer	Peter	University of Natural Resources and Applied Life Sciences
Azerbaijan	Salmanov	Sadig	Ministry of Ecology and Natural Resources of Azerbaijan
Belarus	Rodinov	Sergei Lvovich	Republican Forest Industry Association
Bulgaria	Stoyanov	Nickola	University of Forestry
Bulgaria	Pandeva	Denista	State Forestry Agency
Canada	Booth	Darcie	Natural Resources Canada
Croatia	Juricic	Srecko	Ministry of Regional Development, Forestry and Water Management
Czech Republic	Synek	Michal	Forest Management Institute (UHUL) - Branch Olomuc
Estonia	Valgepea	Mati	Center of Forest Protection and Silviculture, Estonia
Estonia	Denks	Taivo	Ministry of Environment
Finland	Paavilainen	Leena	Finnish Forest Research Institute
France	Thivolle-Cazat	Alain	Institut Technique Forêt Cellulose Bois-construction Ameublement (FCBA)
Germany	Dieter	Matthias	Federal Research Institute for Rural Areas, Forestry, and Fisheries
Germany	Weimar	Holger	(von Thünen Institut) Bundesforschungsinstitut für Ländliche Räume, Wald und Fischerei (von Thünen Institut)
Ireland	O'Donovan	Christopher	Dep. Of Agriculture, Fisheries and Food
Lithuania	Kuliesis	Andrius	Lithuanian State Forest Survey Service
Luxembourg	Wagner	Marc	Direction des Eaux et Forêts
Luxembourg	Wolter	Frank	Forest Administration of Luxembourg
Poland	Strykowski	Wladyslaw	Wood Technology Institute
Poland	Grygier	Piotr	POLAND - STATE FORESTS
Russian Federation	Yakusheva	Tatyana	Russian Federal Forest Agency
Serbia	Jovic	Dusan	Ministry of Agriculture, Forestry and Water Management
Slovakia	Oravec	Milan	National Forest Centre - Forest Research Intitute ZVOLEN
Slovenia	Golob	Aleksander	Ministry of Agriculture, Forestry and Food
Spain	Vallejo Bombin	Roberto	Ministry of Environment, Spain
Spain	Fernandez Centeno	Guillermo	Ministry of Environment
Spain	Viejo Tellez	Cristina	Ministry of Environment
Sweden	Westin	Mikael	Swedish Wood Preservation Institute
Sweden	Baudin	Anders	Växjö University
Sweden	Loman	Jan-Olof	Swedish Forest Agency
Sweden	Dumevo	Karl	Swedish Forest Agency (Government of Sweden)

Turkey	Bali	Ramazan	Ministry of Environment and Forestry
Turkey	Kaplan	Erdem	Ministry of Environment and Forestry
Turkey	DOGAN	Ramazan	Ministry of Environment & Forestry
Ukraine	Kornienko	Victor P.	State Forestry Committee of Ukraine
Ukraine	Tkach	Viktor	Ukrainian Research Institute of Forestry and Forest Melioration
Ukraine	Kornienko	Victor	State Forestry Committee
United Kingdom	Snowdon	Patrick	Forestry Commission
United Kingdom	Ward	Sheila	Forestry Commission
United States of America	Prestemon	Jeffrey	USDA Forest Service
	Beck	Roland	European Commission
	Bucki	Michael	European Commission
	de Galembert	Bernard	Confederation of European Paper Industries (CEPI)
	Dees	Matthias	University of Freiburg
	Fonseca	Matthew	United Nations Economic Commission for Europe (UNECE)
	Hamalainen	Jarmo	Metsäteho Oy
	Hendrickx	Bénédicte	European Panel Federation
	Herkendell	Josef	European Environment Agency
	Higuero	Ivonne	UNEP Regional Office for Europe
	Hirsch	Franziska	United Nations Economic Commission for Europe (UNECE)
	Hubert	Michel	Ministère de l'Agriculture et de la Pêche
	Kosenkranius	Erik	European State Forest Association
	Lobovikov	Maxim	Food and Agricultural Organization of the United Nations
	Maginnis	Stewart	The World Conservation Union
	Mantau	Udo	University of Hamburg
	Nabuurs	Gert-Jan	European Forest Institute
	Peck	Tim J.	European Forest Institute
	Prins	Christopher	United Nations Economic Commission for Europe (UNECE)
	Rakonczay	Zoltán	European Commission
	Rosen	Kaj	EFORWOOD
	San Miguel Ayanz	Jesus	Joint Research Centre of the European Commission
	Schelhaas	Mart-Jan	Alterra
	Schuck	Andreas	European Forest Institute
	Schulte	Ernst	European Commission, DG Environment
	Steierer	Florian	United Nations Economic Commission for Europe (UNECE)
	Thoroe	Morten	Confederation of European Forest Owners
	Tissari	Jukka	Food and Agriculture Organization of the United Nations
	Van Brusselen	Jo	European Forest Institute
	Van de Velde	Joost	European Commission
	Wall	Jeremy	European Commission
	Whiteman	Adrian	Food and Agriculture Organization of the United Nations

**Annex 2 First draft outline of a next Forest Sector Outlook Study,  
prepared by the secretariat as a basis of discussion at the inaugural meeting of the ToS,  
4-6 February 2009**

European Forest Sector Outlook Study, 2011  
Proposed structure and outline of main issues/questions

	<b>Method</b>	<b>Possible partner/author</b>
1. Introduction		
a. Objectives of the study (1 page)		
b. Main challenges to the sector (5 pages)	Draft early to shape analysis	Core team
i. Supplying renewable energy		
ii. Mitigating climate change		
iii. Adapting to climate change and protecting the forest		
iv. Supplying renewable and competitive forest products, to Europe and the world		
v. Reversing the loss of biodiversity		UNEP, IUCN
vi. Finding forests' place in society and landscape (including NWFPs, employment, livelihood functions functions)		
vii. Achieving and demonstrating true sustainability		
2. Europe's forest sector in 2008: an overview (10 pages)	Base on SOEF, FPAMR etc. purely descriptive	Core team
3. Future demand for wood raw material (40 pages)	Present results of econometric models using similar methodology to earlier studies	Jonsson modelling, core team writing
a. Drivers of demand for forest products (GDP, price, performance)		
b. Outlook for demand: will forest products		

maintain their place?		
c.Outlook for trade: Europe on world forest products markets		
d.Outlook for production: Can Europe's industries remain competitive?		
e.How much wood from Europe's forests is needed for raw material?		
4.Future demand for wood energy (30 pages)		
a.Renewable energy policies and targets	Base on Hetsch work on potential wood supply	
b.Technological options: wood based fuels	Draw on external work e.g. IEA	Steierer
c.Potential and constraints for trade in biomass energy	Draw on external work	
d.How much wood (from Europe's forests and elsewhere) is needed for energy?	Will be a wide range, as supply constraints not included at this stage	
5. Climate change, forests and wood (20 pages)		
a.Background: forest relevant carbon flows, international commitments etc.	FRA and MCPFE data supplemented with further information	
b.Forest as carbon sinks: potential, policies		
c.Forest products and wood energy: substitution, storage in harvested wood products		
d.Adaptation: new strategies to manage risk		EFI
e.Finding the best combination of climate change strategies, and consequences for wood availability, biodiversity		
6. Forest biodiversity (20 pages)		
a. Trends and policies for forest biodiversity	Base on EEA study, plus possible UNEP and IUCN data (tbc)	
b. Outlook for forest biodiversity: new protected areas, new management		

systems, external threats		
c. Influence of biodiversity on wood supply	CEPI and EEA study, treat with caution!	
7. The European forest resource (40 pages)		
a. Status and trends (area, NAI, GS)		
b. Baseline scenario	Special enquiry	
c. Alternative scenarios (maximum mobilisation, priority to sink function, biodiversity etc.)	EFISCEN	
d. Mobilisation strategies	Base on workshops/forums, UNECE/FAO private forest ownership data	
8. Wood and fibre from outside the forest (10 pages)		
a. Residues, trees outside the forest etc.		
b. Recovered wood and fibre		
9. Will there be enough wood? (40 pages)		
a. Concept of wood resource balance	Base on Mantau et al	
b. Baseline scenario (quantities, price implications, policy assumptions etc.)		
c. Alternative scenarios for the resource balance		
10. Policies and Institutions: How will they need to adapt, in light of the challenges facing the sector?		
11. Conclusions		
12. Policy messages		

**Scope:** Europe (with Ukraine, Belarus, Moldova, Turkey, Balkans, but not Russia)

Periods Base 2005/8, scenarios for (2010), 2015, 2020, 2025, 2030

Calculations by country, presentations by standard country groups.

**Accompanying outputs:**

Complete data set, including all scenarios wood resource balances

Production and trade scenarios with equations, coefficients etc.

**Analytical tools:**

Market equations/models

EFISCEN

Wood resources balance,

Ideally calibrated with other information sources, e.g. data available through the State of Europe's Forests report, and/or by checking data inputs and assumptions with national correspondents. Global outlook models developed by FAO should be taken into account.