



Meeting of the ECE/FAO Team of Specialists on Forest Sector Outlook

Monday 16 June 2014

Concept Note on the next round of Forest Sector Outlook Studies

First draft as of 12 June 2014

Background

This document has been prepared by the secretariat at the request of the last meeting of the Team of Specialists on Forest Sector Outlook (ToS) held on 10 December 2013 in Rovaniemi, Finland with input from the current Team Leader. It will be reviewed for the first time by the Team at its meeting scheduled to take place in Geneva on 16 June 2014.

This draft is based on the results of an online survey on EFSOS and a telephone enquiry with the main actors working on outlook for the forest sector in the ECE region, both conducted in fall 2013. It is considered as the first step towards the next round of forest sector outlook studies in the ECE region. It is meant to be a living document that needs to and will be discussed and improved by the Team of Specialists, member States and other stakeholders as well as the secretariat.

At this early stage, it provides rather a series of issues for discussion than guidance for future work. Some issues should be addressed first to allow progress on others. At this stage, the discussion should focus on objectives and scope as well as policy issues, taking into account the constraints imposed by time, resources, possible methods and available data.

- Objectives
- Scope
- Policy issues and scenarios
- Data and modeling
- Timeline and process
- Fund raising and partnerships
- Desirable profile of national correspondents
- Regional/national approach

Objectives

The objectives of Forest Sector Outlook Studies can be of different nature (see box 1). In general, the main objective of those studies is to provide policy makers, analysts, as well as civil society and private sector decision makers with information and analysis about long-term trends in the sector, projections of future developments of forest sector, which can include the impact of relevant policy choices. A strong consensus on objectives is central as they influence the whole process that leads to an outlook study.

Box 1: Objectives

The North American Forest Sector Outlook Study (NAFSOS, ECE/FAO) was designed to examine possible futures of the forest sectors in the United States and Canada.

The main purpose of the Russian Federation Forest Sector Outlook Study (RUFOS, FAO) was to present an independent expert evaluation of the current state of the forest sector in the Russian Federation and possible alternatives for its development to the year 2030.

The European Forest Sector Outlook Study II (EFSOS, ECE/FAO) identified specific policy issues and focused the analysis on them, as opposed to a more general description of possible future, by:

- Analysing structural developments in the forest sector and project these trends into the future.
- Constructing scenarios projecting possible long term consequences of major policy choices.
- Supplying information and analysis to estimate whether policy choices will lead to the sustainable development of the forest sector.
- Providing information and analysis on the forest sector which may also be used by other sectors of for cross-sectoral analysis (examples include climate change, energy or land use).

The primary objectives of the Forestry Outlook Study for West and Central Asia (FOWECA, FAO) were:

- Provide a long-term perspective of the development of the forest sector, taking into account the overall economic, social, institutional and technological changes.
- Improve country capacity in strategic planning in the forest sector by providing a broader perspective of developments at the regional and global levels.
- Facilitate exchange of information and regional collaboration through networking.

Scope

Geographical scope

The UNECE region comprises 56 member countries from Europe, North America and the countries of the Caucasus and central Asia. However, the four recent outlook studies in the region have different objectives (see box 1), use different and independent approaches, different input data and models and provide, as a result, different types of information. While a single standard approach has obvious advantages (consistency, comprehensiveness, comparability and so on), it should be pointed out that there are also major disadvantages: the radically different nature of the circumstances and challenges in different sub-regions (ecological, economical, governance), which can lead to technically inappropriate solutions (e.g. a market-based model applied to a centrally planned economy), as well as huge differences in data quality and the capacity of countries to participate and contribute. The danger of a uniform approach is that it often generates a lowest-common-denominator analysis, unable to address the real points of interest.

When adopting their Integrated Programme of Work for 2014-2017 at Metsä2013, the UNECE Committee on Forests and the Forest Industry (COFFI) and the FAO European Forestry Commission (EFC) recommended that the outlook studies in the region be based on common methodologies and approaches and developed in cooperation with relevant partners. Nearly 60% of the respondents to the online survey were also in favour of “an approach that covers the whole region”, while 25% were not.

This recommendation can lead to different level of harmonization: from common objectives and/or a common baseline scenario to common policy issues, common input data for certain parameters, common modelling and comparable results. The feasibility and relevance of these different levels of harmonization need to be studied and will depend on the decisions made by partners who prepared the previous studies.

Box 2: Geographical scope(s)

Most of the ECE region has been covered by recent forest sector outlook studies with the publications in 2011 and 2012 of:

- EFSOS (UNECE/FAO, August 2011) covering UNECE members except Canada, the Caucasus and Central Asia, Israel, the Russian Federation and the United States,
- NAFSOS (UNECE/FAO, March 2012) covering North America (United States and Canada) and,
- RUFOS (FAO, September 2012) covering the Russian Federation.

The FOWECA (FAO, 2006) covered Central Asia and the Caucasus (Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan) as well as many non ECE countries.

Once more central questions are addressed, the subregional divisions should also be discussed, taking into account divisions used for other studies such as the State of Europe's Forests.

Time horizon

Forest sector outlook studies often have to use a 20-year time horizon because of the uncertainty of making assumptions on policies, technology and socio-economic variables as well as projections for a longer time period. The 20 years used in EFSOS II was a compromise between the 10 years period economic modellers wanted to adopt and the 50 years period forest resource modellers commonly use. In the evaluations of EFSOS II it was stressed by policy makers that the first 10 years were most important. However, developments in the forest resources take much more time to become really visible. Hence there is a conflict between short term approaches, favoured mostly by the economic/industry side, and long-term approach, useful from the sustainability perspective. The time horizon is also influenced by the aims of the analysis and the scenario under study. The economic type of scenarios will have a shorter time span of interest as scenarios aimed at adaptation to climate change.

Definition of the forest sector

EFSOS defines the forest sector as the forest resource, as well as the production, trade and consumption of forest products, including wood energy. Although the available data and tools are not sufficiently developed yet, the inclusion of forest non-wood products and ecosystem services should be considered, especially for those which requires more attention, since they are an integral part of the system. They play a significant role in the economic viability (e.g. cork) and in determining the current management in many parts of the region, may interfere with wood harvesting, and are aims for certain policies and can thus be important for the construction of the sector scenarios.

Policy issues and scenarios

The involvement of a broad range of relevant partners and stakeholders is key in order to get an overview for the current and future policy issues and to get broad ownership and participation in the outlook activity. The consultations on policy issues should be organized at an early stage of the process. Member States, the private sector and other relevant stakeholders crucial to could provide valuable input on questions and answers that are required from the perspectives of decision makers. They can take several forms: Working Party meetings, ToS (also other than Outlook) meetings, specific workshops, online surveys, written consultations etc.

First it is necessary to define the criteria for useful scenarios, which might be listed as follows: policy relevance (existence of real choice, or significant uncertainty), availability of methods and data to address the issues in an objective way, "readability" and visibility at the policy making level. Box 3 shows examples of policy issues and scenarios addressed in the most recent round of outlook studies.

The Team is invited to draw up a draft list for the next round. However, this draft list, emerging from an expert level meeting should be discussed at a higher policy level, to ensure that the choices are of interest to the main users of the studies: policy makers and their advisers.

The Integrated Programme of Work identifies a number of relevant issues:

- Forest policies, institutions and instruments.
- Regional and national coordination of forest and forest-related policies.
- Governance and policy making.
- Green economy and green jobs.
- Interaction with stakeholders and the private sector.
- Financing for, and investment in, the profitability and competitiveness of the forest sector.

- Structural developments in the forest sector and their policy impact and implications.
- Wood energy and its implications for renewable energy policies and land use.
- Role of biodiversity and wildlife in sustainable forest management.
- Adaptation of forests and the forest sector to climate change.

The Team may wish to consider which of these could be addressed by the next round of outlook studies (bearing in mind that a Study can only be focused on a limited number of issues (3 to 5)).

Once the list of issues to be addressed is established, consultation with member States should also be undertaken for the other phases of the process, for example once the results of models are known and once the main conclusions are drafted, so that national and sectorial experts can review them and provide input. Foresight methodologies (such as visioning and back-casting) could be considered as complementary to those already used in past outlook studies.

The selection of scenarios strongly depends on the aims of the study, and thus also determines what can be concluded from the analyses. NAFSOS used 3 “external” scenarios, where the differences between the scenarios originated from the IPCC scenarios, mainly focussing on GDP and population development. The results give an impression of the consequences for North America of low or high global economic growth, but say little on internal policies. On the contrary, EFSOS II used policy-driven scenarios, focussing on what would happen if policies in Europe would go in a certain direction. This was done against the assumption of a low GDP development, but originally it was foreseen to combine it with a high GDP scenario as well. GDP scenarios would be easier to harmonise over larger regions, since it will be rather unlikely to have the same forest policies in different parts of the global map.

Recently the new IPCC AR5 scenarios have been released, focussing more on CO₂ emission trajectories and climate targets than on storylines and GDP developments.

Box 3: Example of policy issues and scenarios

EFSOS:

Policy issues:

- Mitigating climate change;
- Supplying renewable energy;
- Adapting to climate change and protecting forests;
- Protecting and enhancing biodiversity;
- Supplying renewable and competitive forest products;
- Achieving and demonstrating sustainability;
- Developing appropriate policies and institutions.

Scenarios:

- Reference scenario
- Maximizing biomass carbon
- Priority to biodiversity
- Promoting wood energy
- Fostering innovation and competitiveness

All scenarios were considered as relevant by the respondents to the online survey, the wood energy and the innovation scenarios being ranked as highly relevant.

The following areas have been mentioned either during meetings or the online survey or the enquiry as possible issues to be also addressed:

- Climate change adaptation.
- Land use competition (urbanization, agriculture, infrastructures).
- Industrial scenario (increased demand for wood for construction, innovative products, biofuels), employment implications of scenario.

NAFSOS:

Three future scenarios were investigated: two IPCC-based scenarios assuming the rapid growth of wood-based energy, and one IPCC-based scenario without this assumption (A1B, B2, and A1B-Low Fuelwood).

RUFOS:

The study examined three scenarios: inertial, moderate and innovation.

FOWECA:

The main questions of the study were:

- What roles are forests and trees expected to play in the region?
- What changes are foreseen in the next 15 years in forest resources?
- How should the forest sector respond to such changes?
- How are the demands for goods and services likely to change in the next 15 years?
- What are the options available to improve the forest situation in the region?

Data and modeling

Once the scenarios are defined, data and modeling are at the heart of the outlook work. Ideally, specific models should be developed and/or existing models should be tailored to calculate the results of story lines to answer policy questions. A dedicated set of data should be collected/complemented to feed these models.

However, for obvious resource efficiency reasons, the recent studies used existing models and available data of diverse quality. Depending on the scenarios to be studied and the detail of the questions to be answered, one or several models could be used. The problem with the use of more than one model is the consistency between the models (some processes might overlap between models, but implemented differently), and an accumulation of uncertainties. Especially if models are not designed to work together, or have not been used together before, linking them might take a lot of time, and still results might not be optimal. A danger with the use of models is that they can be seen as a black box, and not trusted by the end users of the outlook study. EFSOS listed the selection criteria as following: Selection criteria used were robustness; transparency; ability to provide analysis at the country level within Europe; being based on validated data sets; and, the ability to address the stated policy challenges.

These issues must be addressed by specialists: modelers, data experts (role of the core group of EFSOS).

Box 4: Different modeling options

- EFSOS results are based on combined modelling approaches: econometric projections of production and consumption of forest products, the Wood Resource Balance, the European Forest Information Scenario model (EFISCEN), the Global Forest Sector Model (EFI-GTM), and a competitiveness analysis.
- NAFSOS projections were provided by the Global Forest Products Model (GFPM).
- RUFOS The forecast calculation model is based upon a multiple correlation equation in which the forest productivity indicator is the function of the following factors: the amount of forestry financing distributed by years and scenarios; climatic changes; and restrictive factors.
- In addition, there are models not so far used in the ECE/FAO context, including GLOBIOM/G4M (International Institute for Applied System Analysis), and the wood supply model being developed at the EC Joint Research Center.

Timeline and process

At the Working Party on Forest Statistics, Economics and Management (WPFSEM) meeting in April 2013, it was noted that there was a need for a study on emerging issues, to address structural changes in the sector. Outlook studies needed constant revision: from a methodological point of view to benefit from the latest data and modelling tools and approaches as they became available and also from a substantive point of view in order to address emerging issues affecting the forest sector.

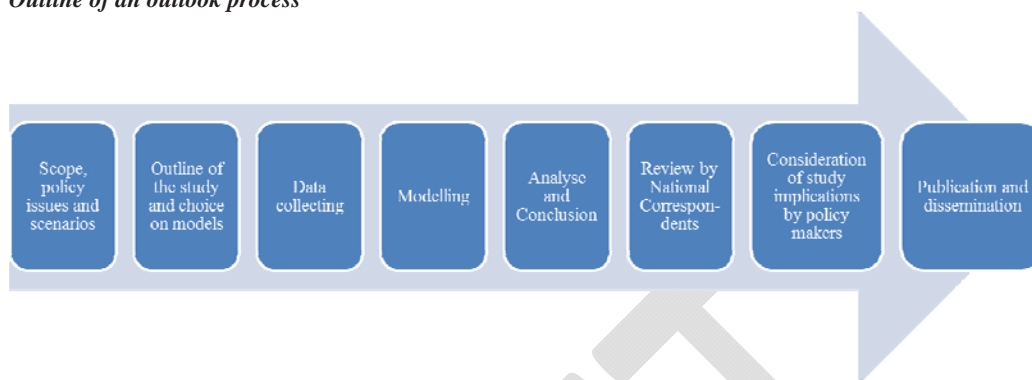
At its last meeting in December 2013, the ToS considered a 5 years process as appropriate (from starting the study planning to final publication). The Integrated Programme of Work for 2014-2017 adopted by COFFI and EFC includes a new round of outlook studies as output, which means that the next round/study would be published in 2017 or 2018.

One of the tasks of the ToS for 2014 is to propose a roadmap towards this next round. In general, the ToS identified the lack of time and resources as the main constraints for EFSOS II and stressed the importance of adequate work planning and fund raising.

Box 5: ETTS and EFSOS

Between 1950 and 1996, the UNECE and the FAO published five long-term studies under the name “European Timber Trends Studies”. The first European Forest Sector Outlook Study was prepared between 2000 and 2005, the second between 2008 and 2011.

Box 6: Outline of an outlook process



Fund raising and partnerships

As already stated, involving stakeholders (in particular policy-makers) at an early stage is essential. Engaging in addition possible donors will make sure that the study is relevant and will also attract funding.

The COFFI, the EFC, the WPFSEM and the ToS provide an institutional framework for the process of outlook studies. The secretariat is responsible for the coordination of the process, the editing and the publishing of the final studies. It is clear that the content of the studies relies on the national and international experts and researchers who are specialized in forest and forest products data, modeling, forest policy etc.

In 2012, the secretariat invited the “Friends of the Outlook” to meet in an informal setting, gathering major organizations involved in outlook in the pan-European region on an ad hoc basis to advise and discuss on strategic outlook issues. This includes the pooling of necessary human, financial and physical resources. Different organizations already confirmed their interest in participating in this group and contributing to the process through the provision of advice or in kind or financial support. There are also a number of ongoing relevant studies, which Team members are invited to present briefly to the meeting, to promote synergies and avoid duplications. The ToS remains the principal interface between the secretariat, international experts and member States. It will be discussed in due course the need for setting up a core group as it was the case for EFSOSII.

Desirable profile of national correspondents

In addition to the Team of Specialists, the network of the national correspondents on forest sector outlook studies needs to be established. The national correspondents’ role is to provide input for the definition of policy issues, relevant data and review the results of models for main outputs of the study once they are ready as well as update the ToS on national developments. Due to the wide set of expectations, the national correspondents are encouraged to coordinate relevant work at national level, making sure that national policy makers, data providers and modellers are informed about the regional work and can provide their feedback when appropriate. In most cases, countries designate their national correspondent as a ToS member but not necessarily.

At Metsä2013, COFFI and EFC encouraged member States and other relevant parties to support the outlook work by designating national correspondents and sharing data and modelling results of national outlook studies.

Regional/national/thematic approach

The text above applies to a regional approach. If enough resources are identified, it could be complemented through a bottom-up approach helping countries to prepare their own national studies, by capacity building in the field of outlook studies, and making available a sort of template” or standard approach which might be useful to those countries are not in a position to carry out their own¹.

The WPFSEM meeting in April 2013 suggested that the Team of Specialists, in addition to addressing the development of the next Outlook(s), might also broaden its perspective to develop more focused and sectorial studies. Some delegations also pointed out the need for producing results that were useful on a national as well as a regional scale. A complementary approach was, therefore, proposed whereby national experts, provided with a common methodology and taking national specificities and circumstances into account, would develop national outlooks to be integrated into a region-wide study. This would also respond to the call for greater involvement of national correspondents and experts.

¹ Long term plans for wood production, which almost all countries have, are different from an outlook study considering demand and trade, as well as policy choices, which are regularly produced in about ten ECE countries only.