

## Expert Group on adaptation to climate change through sustainable forest management

### 1. Background

Following the outcomes of the Seventh Ministerial Conference (Madrid, Spain, 20-21 October 2015), the Expert Level Meeting held in Bratislava, Slovakia on 11-12 May 2016 approved FOREST EUROPE (FE) Work Programme (WP) for the period 2016-2020.

The FOREST EUROPE Expert Group (EG) on adaptation to climate change is established according to the FE WP Action/area 4.5 “*Protection of forests in a changing environment including their adaptation to climate change*” and its three activities 4.5.1 “*Continuing efforts to adapt forests to climate change through sustainable forest management*”; 4.5.2 and 4.5.3 “*Sharing expertise and experience on protection of forests in changing environments*”.

At the Madrid Conference, the ministers responsible for forests expressed their commitment to enhance the protection of forests and to this end strengthen cooperation in the region. In the Madrid Ministerial Resolution 2 “*Protection of forests in a changing environment*”, the ministers committed themselves to:

- *Further develop pan-European approaches to forest protection as an integral part of sustainable forest management to address new, varied challenges and threats posed to European forests, including climate change, and to further strengthen the role of sustainable forest management.*
- *Raise awareness on the vital role of sustainable forest management in protecting forests.*
- *Increase the work on adaptation of forests and forest management to climate change to prevent and mitigate damage caused by changing conditions at the local and regional scales in order to secure all functions of European forests, including their resilience to natural hazards and protection against human-induced threats, maintaining their productive and protective functions.*
- *Promote national implementation of strategies and guidelines for dynamic conservation and appropriate use of forest genetic resources under changing climate conditions.*
- *Continue pan-European collaboration on forest genetic resources through the European Forest Genetic Resources Programme (EUFORGEN).*
- *Share expertise in the region and reinforce the collaboration between countries on the prevention and fight against forest fires, storms, floods, avalanches, the spread of pests and diseases, as well as handling invasive species and combating desertification, erosion, natural hazards and any other threat of transboundary character.*
- *Exchange information on management experiences in maintaining the protective functions, taking stock of the particular experiences and solutions under different climatic conditions.*

- *Exchange experiences on restoration and rehabilitation of degraded forests.*
- *Promote interaction between research, policy and forest management about forest hazards.*

Furthermore, in the Madrid Ministerial Declaration "25 years together promoting Sustainable Forest Management in Europe," the ministers committed themselves to: "Continue efforts to adapt forests to climate change through sustainable forest management".

In the above-mentioned Resolution and Declaration, the ministers stated that they were aware of the changing climate and natural hazards such as erosion, forest fires, desertification, storms and damage caused by pests or pathogenic organisms, among others, which may represent transboundary threats to forest resources, as well as the pressure of human population and issues regarding land use change. They also expressed awareness that sustainably managed forests are more resilient and, therefore, reaffirmed the need to strengthen cooperation on the protection of European forests against the transboundary nature of threats and recognised the need to secure the protective functions of forests. Climate change and its associated effects, which include increasing temperatures, variability of rainfall, and more extreme events, such as storms, floods, fires, heat waves and droughts, is one of the most significant factors affecting forests on a global scale as well as forest ecosystems in Europe.

The ministers also recognised that European forests are vital in combating climate change and that adaptation of forests to climate change will be necessary to provide their mitigating effect. In this equation, in which forests play an active role in climate change mitigation and are simultaneously influenced by its effects, SFM can support the adaptation of forests to climate change thus maintaining their mitigating as well as productive and protective functions.

Therefore, the work on adaptation of forests and forest management to climate change, including their resilience to natural hazards and protection against human-induced threats, should be increased, further strengthening the role of SFM.

## 2. Detailed activities of the Expert Group

Detailed activities of the EG are based on the Action 4.5 of the approved FE WP:

Activity	Time frame	Related Goals & Targets
<b>Continuing efforts to adapt forests to climate change through SFM</b>		
<p>4.5.1.  <i>An expert group shall conduct a questionnaire survey to explore the current state of implementation of adaptation measures to climate change at national levels (how countries/signatories integrate adaptation measures into SFM). Based on the questionnaire survey, the expert group shall prepare a publication "Integration of adaptation measures into SFM in Europe" comprising knowledge base and work done in the region (serving also as a base for evaluation of relevant Goals &amp; 2020 Targets), approaches to adaptation of forests to climate change, identifying the best practices (and possible recommendations for the integration of adaptation measures into SFM) in the region.</i></p>	2016-2019	G3, G4 T5

<b>Sharing expertise and experience on protection of forests in changing environments</b>		
4.5.2. <i>A workshop shall be organized with the aim to share expertise and experience in the region on protection of forests against current and future natural hazards and human induced threats especially those of transboundary character and associated with climate change, e.g. drought, forest fires, storms, floods, avalanches, invasive pests, diseases and alien species, increasing effectiveness of phytosanitary/plant quarantine measures, etc.</i>	2018	G3, G5, G6 T5, T7
4.5.3. <i>A workshop shall be organised with the aim to explore and make recommendations for ELM for further work on agroforestry strategies for promoting adaptation to climate change and combating desertification, land degradation and drought, which affect large parts of Europe, and represent an increasing risk to forests and forestry. Agroforestry offers promising approaches for climate change adaptation and contributing to rehabilitation of degraded land while securing livelihood options for people. A state-of-the-art report with recommendations will be delivered by the workshop.</i>	2018	G3, G5, G6 T5, T7

### 3. Scope and objectives

Expert Group is an *ad hoc* mechanism established by Expert Level Meeting (ELM), with the purpose of advancing implementation of the Work Programme on specific subjects of technical and scientific nature. The EG on adaptation to climate change was endorsed and included into the FE WP 2016–2020 at the ELM held in Bratislava, in May 2016. It is an informal body created to share expertise, exchange experience and formulate policy oriented opinions on the thematic issues and challenges related to adaptation of forests to climate change through SFM. The EG provides policy and expert advice to the ELM and guidance to the Liaison Unit Bratislava (LUB) in their work related to the activities 4.5.1, 4.5.2 and 4.5.3 of the FE WP. More specifically, the EG will carry out the following tasks:

- Collect, analyze and make available existing resources such as project outcomes, surveys, databases pertinent to adaptation measures to climate change in SFM. This will comprise implementation reports of previous Ministerial Resolutions at regional and national level;
- Prepare and conduct a questionnaire survey on the current state of implementation of adaptation measures to climate change mainly at national level (*e.g.*, how signatory countries integrate adaptation measures into SFM);
- Prepare a publication „Integration of adaptation measures into SFM in Europe“ comprising available knowledge and work done in the region (serving also as a basis for evaluation of relevant Goals and 2020 Targets), approaches to adaptation of forests to climate change;
- Identify best practices and recommendations for the integration of adaptation measures into SFM in the region;
- Prepare a report to be presented at Expert Level Meeting;

- Participate and contribute to key international events on the topic of adaptation measures in forestry, as required;
- Guide and contribute to preparations for two workshops on “*Sharing expertise and experience on protection of forests in changing environments*” (Activities 4.5.2 and 4.5.3) to be held in 2017–2018.

Adaptation to climate change refers to adjustments in ecological, social and economic systems in response to the effects of changes in climate. An effective adaptation policy must be responsive to a wide variety of economic, social, environmental and political circumstances. In forestry, it is an inherent part of the concept of SFM that includes a climate change focus. The forestry community needs to evaluate the effects of climate change on forests and determine what adaptive action could be taken now and in the future to respond to this threat. Forest management has many options for mitigating the effects of climate change and supporting adaptation to that change. A high priority will be given to coping with and adapting to forest disturbance while maintaining the diversity and resilience of forest ecosystems. Adaptive actions are discussed in scientific literature and can generally be broken down into the following topics:

- Management and use of genetic resources including seed transfer regulations
- Forest protection
- Forest regeneration
- Silvicultural management
- Forest operations
- Management of non-timber resources

Prior to the Madrid Resolution 2 “*Protection of forests in a changing environment*”, adaptation to climate change had already been addressed in Helsinki Resolution 4 “*Strategies for a process of long-term adaptation of forests in Europe to climate change*” (1993) and Vienna Resolution 5 “*Climate change and sustainable forest management in Europe*”, and partially or indirectly also in other Resolutions, e.g.:

- Strasbourg Resolution 2 “*Conservation of forest genetic resources*”
- Strasbourg Resolution 4 “*Adapting the management of mountain forests to new environmental conditions*”
- Helsinki Resolution 1 “*General guidelines for the sustainable management of forests in Europe*”
- Helsinki Resolution 2 “*General guidelines for the conservation of the biodiversity of European forests*”
- Vienna Resolution 4 “*Conserving and enhancing forest biological diversity in Europe*”

#### **4. Composition of the EG**

The EG is composed of members -- experts nominated by the signatory countries and observer organizations. The EG will be open ended. Signatories and observers are invited to nominate experts for the EG according to interest and availability to contribute to the Action. In case of need, other relevant independent experts or organizations can be invited to provide inputs on specific subjects.

## 5. Mode of operation and outputs

Members of the Expert Group are nominated by signatories and observers according to established procedures.

The overarching thematic **focus of the EG and the two workshops (see below) is adaptation measures that enhance protection of forests against the diverse natural hazards and human induced threats associated with climate change** in the pan-European region.

Expected outputs of the EG:

- Collect, analyse and make available **existing resources**
- Conduct a **survey** on the current state of implementation of adaptation measures at national level
- **Publication** “Integration of adaptation measures into SFM in Europe“
- Identify **best practices and recommendations** for the integration of adaptation measures into SFM
- **Final report** to Expert Level Meeting

The EG will also guide and contribute to the preparation of **two workshops** (activities 4.5.2 and 4.5.3), to be held in 2018, namely:

- **Workshop on protection of forests against hazards and threats** -- Sharing expertise and experience on protection of forests against natural hazards and human induced threats associated with climate change (drought, forest fires, storms, floods, avalanches, invasive pests, diseases and alien species). Tentatively in early 2018.
- **Workshop on agroforestry strategies** -- Exploring current status and making recommendations on agroforestry strategies for promoting adaptation to climate change and combating desertification, land degradation. Tentatively in autumn 2018.

The EG is expected to meet twice, with continuous work between meetings *e.g.* analysis of documents, preparing drafts of documents, etc. If there is a need to discuss particular issues between the face-to-face meetings, an online consultation will be arranged. The EG will prepare and conduct a survey on the current state of implementation of adaptation measures to climate change at national level (*e.g.*, how signatory countries integrate adaptation measures into SFM) during 2017.

The first meeting of the EG will tentatively take place in September 2017, and the second meeting will be held in conjunction with the workshop on agroforestry strategies, which is scheduled for autumn 2018. Opportunities will be actively sought to organize the meetings in partnership with relevant international organizations working on the topic, and in conjunction with other events wherever possible.

Liaison Unit Bratislava serves as the secretariat and provides technical, administrative and logistics support to the Expert Group.