Adaptation of forests to climate change –

intergovernmental cooperation of countries in Europe

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FOREST EUROPE Ministerial Conference on the Protection of Forests in Europe

Provides platform for intergovernmental cooperation on policies related to forests in Europe

Cooperation among ministers/ministries responsible for forest and forest management

highest decission making body: Ministerial conference which defines topics of highest political relevance for cooperation in next 4-5 years

Rotating secretariat – in chairing country (currently Slovatore growing li

FOREST EUROPE Ministerial Conference on the Protection of Forests in Europe

First Ministerial Conference – 1990 in Strasbourg

Second Ministerial Conference - 1993 in Helsinki.

- Definition of Sustainable Forest Management

- Resolution on Adaptation of Forests in Europe to Climate Change



FOREST EUROPE Ministerial Conference on the Protection of Forests in Europe

Next Ministerial Conference – October 2020

One of the main topic – Adpatation of forests to climate change and disturbance risk management

To do preparatory work for the conference, FOREST EUROPE established its Expert Group on adaptation of forests to climate change



FOREST EUROPE Expert Group on adaptation of forests to CC

Survey on adaptation policies and development of knowledge

Workshop on agroforestry

Workshop on adaptation to climate change

Publication on integration of adaptation measures



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Two steps survey on adaptation policies and development of knowledge First survey:

- Which countries have adapation strategies and poliecies in place
- what are the adpatation measures (traditional, new specifically tailored)
- have been these measures already implemented and in what extent
- are these measures supported (is there any action plan, financial support etc.)

Second survey:

- how perception of climate change impacts evolved during the last to years
- was there any new knowledge developed how to tackle adaptation and forest disturbances within the last 10 years



- Preliminary working version only – need to be verified and updated
- Includes specific forest adaptation strategies as well as cross-sectoral strategies where forests are addresed (with different extent and detail)

• Almost every country have some kind of cross-sectoral or specific forest adaptation strategy, and even those, which reported not having an official strategy are implementing some kind of measures as a response to increasing risks of forest disturbancies associated with climate change

FOREST EUROPE Expert Group on adaptation of forests to CC

- Some strategies in place have relied on traditional measures enhancing stability and resilience as if under unchanged conditions,
- Other strategies apply more forward looking perspective as suggested by some recent research results and climate change models/scenarios (depending on revision cycles, legislative barriers etc.)



Contribution of Agroforestry to landscape resilience in Europe

October 2018 in Budapest

Cross- sectoral topic

Applicability of the particular agroforestry practices varies across Europe significantly, depending on several factors such as natural conditions, legislative framework regulating land use, cultural aspects etc.



Potential benefits of Adgroforestry for increasing landscape resilience in Europe

Silvopastoral systems in some forests may represent an important management option for reducing fire risk in fire-prone forests

Agroforestry components such as shelterbelts on agricultural land, riparian vegetation, short-rotation forestry and coppicing on abandoned agricultural land may have positive impacts on landscape resilience through increased biodiversity and reduced wind speed and soil erosion, improved water quality and increased carbon sequestration in agricultural land.

Potential benefits of Agroforestry for increasing landscape resilience in Europe

In the light of the rapidly progressing climate change on the one hand and the increasing demand for timber and food on the other hand, agroforestry systems could focus **on high-value timber production** as well as **diversification of products** and **ecosystem services**.

Although profit provided by agroforestry may vary at the plot and farm levels, at the global level the profit is considerable, especially when environmental services are taken into account.

be growing life

 Main barriers and drivers for the further development of agroforestry

acknowledged at the global level (e.g. 2030 Agenda for Sustainable development, UN Strategic Plan for forests 2017-2030) as well as adressed by EU policies

traditional heritage agricultural systems and the tradition in the families must be recognised as the main drivers for the farmers to implement agroforestry Promotion at all levels – states, farmers and other stakeholders Forest growing life

Pro-active management of forests to combat climate-change-driven risks

- adaptation of forests to climate change
- disturbance risk management

September 2019 in Istanbul



Recent development of climate and impacts of weather extremes suggest that the rate of climate change exceeds the natural migration and evolutional adaptation capacities of forest tree species.

Climate change will impact all the forests, including those in protected areas, and protective forests, which are under specific management requirements

Measures to enhance the adaptive capacity of natural forest ecosystems (e.g. by increasing genetic diversity in forest regeneration) and disturbance risk prevention should be complemented with planting / artificial regeneration to facilitate **assisted migration**

National and transnational guidelines, policies or regulations are putting restrictions on transfer of tree planting material between countries thus hampering assisted migration

International and national level legal frameworks and policies in other policy domains may also hamper the possibility of adapting sustainable forest management practices to the needs of the changing climatic conditions, e.g. proactive forest management, and use of non-native tree species



High game density may also hinder successful implementation of adaptation measures such as tree species conversion

Issues of technical capacities and infrastructure: there may be a need e.g. to improve capacities and development of the whole chain of forest reproductive material supply (seed collection, storage, transport, nurseries) to provide sufficient quantities of suitable forest reproductive materials that would enhance forest resilience and assisted migration



Collective leadership and participatory planning approaches should be promoted to ensure necessary cross-sectoral cooperation and consensus building. Bringing different policy stakeholders into a joint planning process supports the planning and setting priorities for future management which are crucial for successful implementation.



Next steps forward at FOREST EUROPE platform:

Adaptation to climate change should be brought to the attention of ministers at the Ministerial Conference on the Protection of Forests next year

There is a need to provide a broader framework for climate change adaptation and pro-active disturbance management based on solid scientific evidence that should be endorsed at policy level in **order to** promote their application at operational level.

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Ministerial Conference on the Protection of Forests in Europe

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