

MOTIVE: Models of Adaptive Forest Management

The project **MO**delS for **AdapTIVE** forest management (**MOTIVE**) is a large-scale integrated project in the 7th Framework Programme of the EU that develops tools to support decision-making in forestry in response to climate and land use change. The project focuses on a wide range of European forest types under different intensities of forest management. The development of adaptive forest management strategies under climate change is a key challenge for sustainable resource management in Europe.

Project objectives

The ultimate objective is to provide insights, data and tools to improve policymaking and adaptive forest resource management. An integrated assessment of forest management strategies is needed simultaneously considering multiple ecosystem goods and services. By adopting a regional case study approach, the project will consider a wide range of climatic and socio-economic conditions across Europe.

Methodology

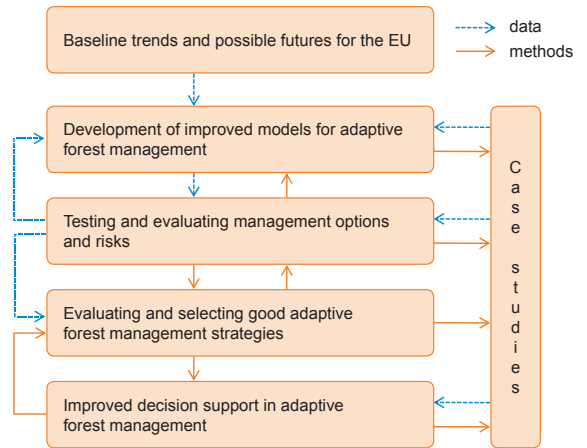
MOTIVE works with case studies representing major European forest types where generally valid process based models, as well as mainly regional empirical models, will be applied. The regional differences in adaptive forest management strategies will be upscaled to the European level using a large scale forest scenario model which will integrate region-specific management in simplified yet consistent form.

As MOTIVE is developing tools to support decision-making in adaptive forest management, it is essential that all relevant stakeholders are consulted and involved throughout the whole project. New methods for handling risks and uncertainties as well as socio-economic evaluation methods will be integrated into the adaptive management decision making.

Expected Results

Recently observed growth and productivity trends will be documented and synthesised with modelled growth trends in Europe. An overview of projected species shifts as well as a summary of climate change induced risks will be made. New silvicultural methods suitable for dealing with the changing climate will be developed. The individual results and improved methods will be integrated in a decision support tool box for adaptive forest management.

www.motive-project.net



Information flows in MOTIVE.

MOTIVE is a project that encompasses 20 partners from 14 European countries. It has an overall budget of almost 9 million euros, from which 7 million will be paid as EU contribution. The project is coordinated by the Forest Research Institute of Baden-Württemberg with duration of 4 years.

Project partners

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| Alterra Wageningen UR, NL | French National Institute for Agriculture Research, FR |
| Albert Ludwigs Universität Freiburg, DE | Technical University of Lisboa, PT |
| University of Natural Resources and Applied Life Sciences, AT | PENSOFT Publishers Ltd, BG |
| Center for Ecological Research and Forestry Applications, ES | Potsdam Institute for Climate Impact Research, DE |
| European Forest Institute, including Mediterranean Regional Office – EFIMED | Swedish University of Agricultural Sciences, SE |
| Swiss Federal Institute of Technology, CH | University of Copenhagen, Forest and Landscape, DK |
| FORECO Technologies, ES | University of Forestry, Sofia, BG |
| Forest Research, GB | University of Joensuu, FI |
| Forest Research Institute of Baden-Württemberg, DE | University Ștefan Cel Mare, Suceava, RO |
| Institute of Forest Ecosystem Research, CZ | Swiss Federal Research Institute, CH |



Insect damages will increase e.g. in Central European Norway spruce forests.



Drought and subsequent forest fires are major threats in the Mediterranean region.



Non-frozen soils in winter complicate timber harvesting in the North.