

The role of forest recovery from biotic and abiotic threats for risk resilient management

Madrid, 28 September 2022

Project name/website: FORECO

Project acronym: FORECO

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Project partners

Project partners:

- Technical University of Munich, Germany
- University of Ljubljana, Slovenia
- Lund University, Sweden
- European State Forest Association (EUSTAFOR)
- FSC International
- EIT Climate-KIC

Total project budget: 1.173.474 EUR

Project start and end date: 1st July 2022 (1st March/1st Sept)

Introduction

Objectives:

- Identify key evidence gaps for sustainable forest management with regard to biotic and abiotic threats and the role of forest recovery in Europe.
- Assess the role of forest structure and composition in modulating disturbance events.
- Attribute the driving disturbance agents to recent major disturbance events.
- Characterise recovery patterns after disturbance events and identify the influence of forest management strategies on recovery success and rate.
- Project management scenarios into the future and derive optimized management strategies.

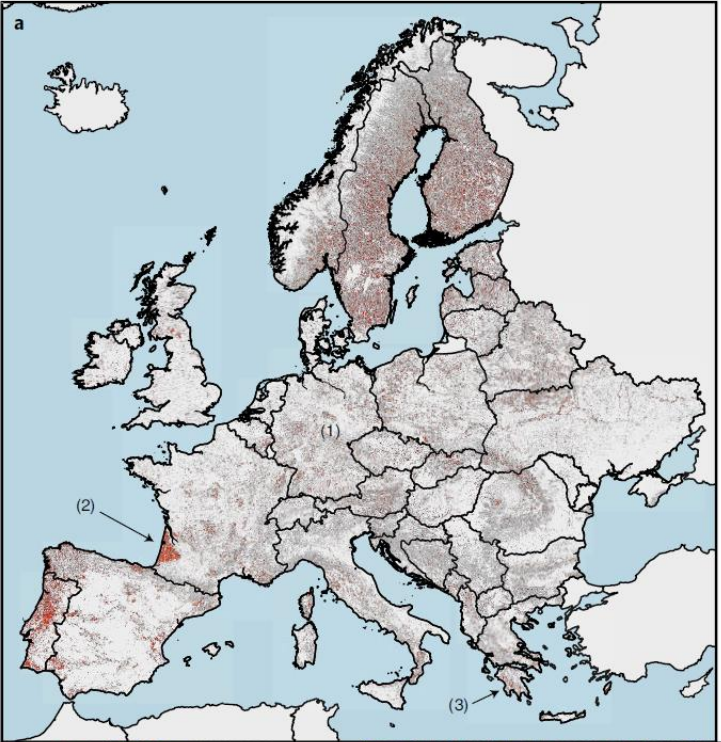
Results

- Explain general research steps that were done in the project. Please don't go into too much technical detail.
- Highlight the status of data management, communication strategy and Responsible Research and Innovation approach (if applicable), technology transfer and exploitation of results (see next slide)
- Remember that this is a public event and do not give confidential information/material.

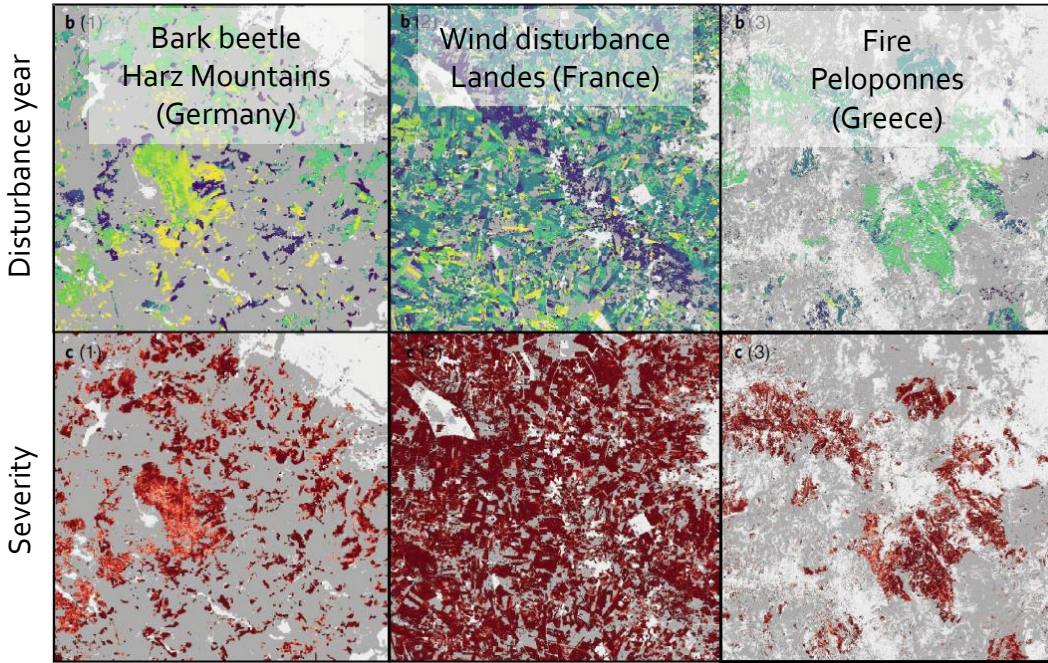
3 or 4 slides expected – please prefer schemes or pictures than long text



Results

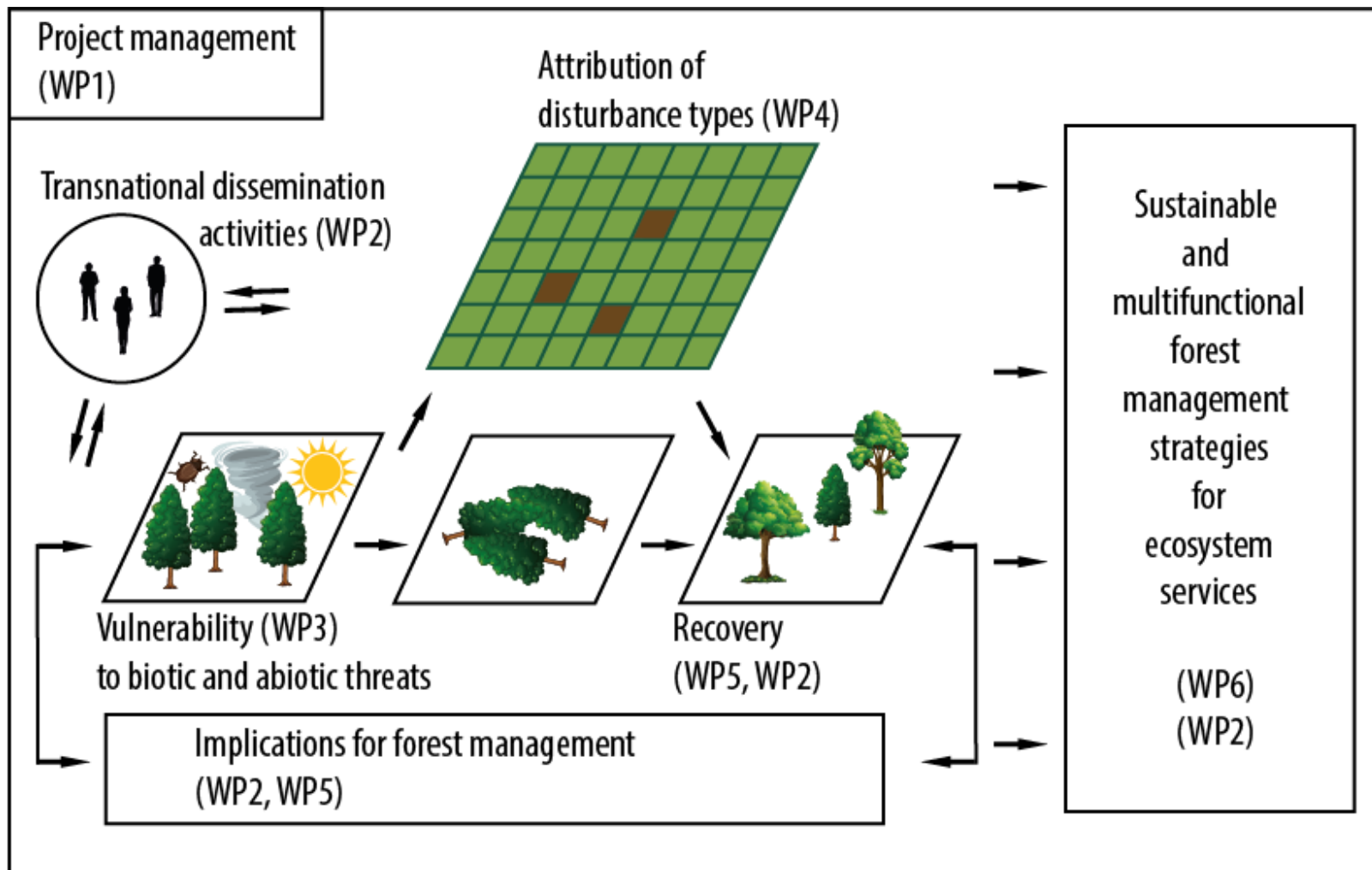


- a. Disturbance occurrence
 - Disturbed forest
 - Undisturbed forest
- b. Disturbance year
 - 1986
 - 1994
 - 2002
 - 2010
 - 2018
- c. Disturbance severity
 - 0.00
 - 0.25
 - 0.50
 - 0.75
 - 1.00



Forest disturbances in Europe 1986-2016
Based on Landsat

Results

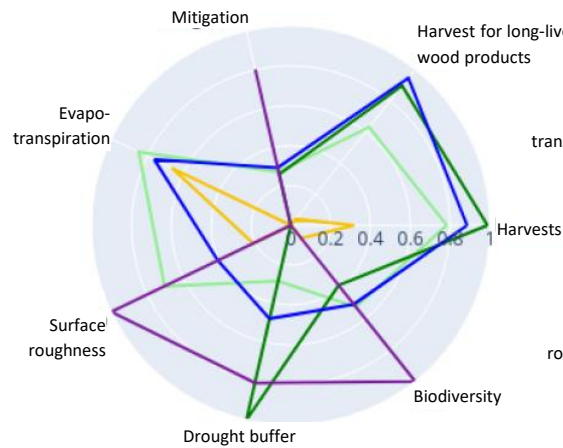


Results

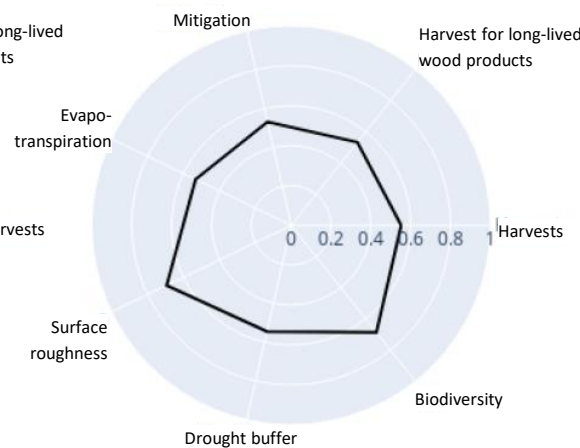
Optimal management portfolios considering multiple ecosystem services

Southern Germany (9.75, 49.75)

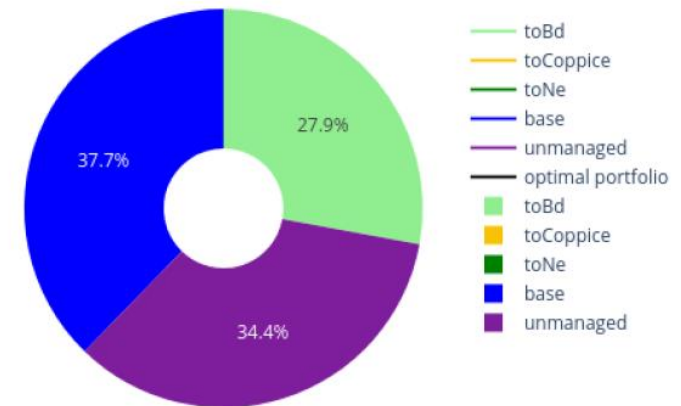
d) Single management options, 2100



e) Optimized Portfolio, 2100



f) Optimized Portfolio Shares



Impacts

Scientific impacts:

- Novel insights into the dynamics of forest responses to biotic and abiotic threats
- Accounting of biotic and abiotic threats in projections of forest management strategies
- Consider recovery patterns after disturbance in forest management projections
- Implications for sustainable management of forests and their contribution to the SDGs
- Dissemination to wider public

The value of scientific cooperation

- Building on existing research collaboration from other successful projects (ERA-NET Sumforest project “FOREXCLIM”, ERA-NET ForestValue project “NOBEL”).
- Excellent consortium for establishing empirically- and modelling-derived relations between biotic and abiotic threats, the modulation of forest structure, the role of recovery and economic relevance, including scenario-backed feedback discussion rounds with stakeholders.
- With Sweden, Slovenia and Germany, we have included important “forest” countries in Europe.

Unexpected peculiarities / barriers

- Delay due to late start of the project in Germany and Slovenia

Thank you!

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ForestValue

Website: <https://forestvalue.org/>

Twitter: <https://twitter.com/ForestValue2017>

LinkedIn: <https://www.linkedin.com/groups/12110816/>