Practice abstracts Interim – batch 1

D 5.9

Project Acronym	OptFor-EU
Project Name	OPTimising FORest management decisions for a low-carbon, climate resilient future in Europe
Project Coordinator	Meteo Romania
Project Duration	January 2023 – December 2026
Website	https://optforeu.eu/

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Lead beneficiary	UNIVERSITAET FUER BODENKULTUR WIEN (BOKU)
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About OptFor-EU

OptFor-EU wants to co-develop a Decision Support System (DSS) with forest managers and other forest stakeholders, that provides them with suitable climate adaptation and mitigation options for science-based optimising forest ecosystem services (FES) (including decarbonisation) and enhancing forest resilience and its capacities to mitigate climate change across Europe.

The project 'OPTimising FORest management decisions for a low-carbon, climate resilient future in Europe (OptFor-EU)' will build a Decision Support System (DSS) to provide forest managers and other relevant stakeholders with tailored options for optimising decarbonisation and other Forest Ecosystem Services (FES) across Europe.

Based on exploitation of existing data sources, use of novel Essential Forest Mitigation Indicators and relationships between climate drivers, forest responses and ecosystem services, OptFor-EU has five specific objectives:

- Provide an improved characterisation of the Forest-Climate Nexus and FES;
- Utilise end-user focused process modelling;
- Empower forest end-users to make informed decisions to enhance forest resilience and decarbonisation;
- Provide a novel DSS service; and
- Bridge different EU strategic priorities, robust science, and stakeholders in the forest and forest-based sectors.

Based on a supply-demand approach, the methodology combines an iterative process of data consolidation, modelling, and co-development of solutions alongside forest managers and other practice stakeholders in all European Forest Types. The DSS will be designed and tested at 8 case study areas, to provide a ready-to-use service, near to operational (TRL7) at European level, while a user adoption and up-take plan will maximise the societal and business impact.

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EXECUTIVE SUMMARY

This first batch of practice abstracts for OptFor-EU presents two practice abstracts from the project. The first practice abstract is about the European Forest Types map, based on D1.1 *Gridded Dataset of European Forest Types*. The second practice abstract summarizes D3.1 *Stakeholder Engagement Plan and Mapping*.

A second batch of Practice Abstracts is planned for [M46] (D5.10). The practice abstracts are split into two deliverables to cover a broader range of the OptFor-EU project outputs.

1. Introduction

The OptFor-Eu project plan requires the submission of at least three practice abstracts. D5.9 presents the first two, and at least one more will be presented in D5.10, to be delivered by [M46].

Here, we present practice abstracts based on D1.1 *Gridded Dataset of European Forest Types* and D3.1 *Stakeholder Engagement Plan and Mapping*. The decision to make practice abstracts for these two deliverables were taken after several discussions in the project team. The reasoning for selecting D1.1 is that the European Forest Types map is an essential underlying layer of the DSS, important for later deliverables such as D1.2 report on a Novel set of EFMIs (M24) and D2.3 – Report on land cover datasets (M24). The reasoning for selecting D3.1 is that stakeholder engagement and co-creation is central to the project as a whole and to the development of the DSS.

1.1. Practice abstracts – what and why?

European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) practice abstracts refer to a communication format defined by the EIP-AGRI. The main purpose of practice abstracts is to play a crucial role in fostering collaboration, sharing knowledge, and advancing sustainable agriculture and forest management within the EU.

The format was created to facilitate efficient knowledge exchange on innovative and practice-oriented projects throughout their lifecycle, from inception to completion https://ec.europa.eu/eip/agriculture/en/content/eip-agri-common-format.html(EIP-AGRI, n.d. a). The key points are as follows:

1) Purpose: The primary purpose of practice abstracts is to share practical information about projects, activities, and results. They serve as concise summaries that provide valuable insights for farmers, foresters, advisors, researchers, and other stakeholders.
2) Audience: Practice abstracts are intended for a wide audience, including those involved in agricultural innovation, such as farmers, advisors, and researchers.
3) Content: A practice abstract typically includes the following elements:
   a. Project Overview: A brief description of the project's objectives, context, and scope (included in "about OptForEU" above).
   b. Innovative Practices: Details about the innovative practices or approaches being implemented.
   c. Results and Impact: Information on project outcomes, lessons learned, and impact.

      d. Audio-Visual Material: Links to relevant audio-visual content (such as photos or videos) whenever possible.

4) Common Format: Both Operational Groups (regional or national practice-oriented innovation projects supported by rural development programs) and Horizon multi-actor projects (EU-level projects involving partners from at least three countries) use the common format for practice abstracts. This consistency ensures that stakeholders can easily access and understand the information across different projects.

5) Knowledge Exchange: By using the EIP-AGRI common format, stakeholders can exchange knowledge, learn from each other's experiences, and build partnerships. The practice abstracts contribute to a repository of practical knowledge across the EU, supporting the dissemination of results from interactive innovation projects.

[For more details, you can explore the EIP-AGRI Common Format guidelines](#) (EIP-AGRI, n.d. a). [Additionally, you can find practice abstracts in the EIP-AGRI project database](#) (EIP-AGRI, n.d. b). These abstracts provide valuable insights into various agricultural practices and innovations.

These practical abstracts will be uploaded to the CAP Network website (https://eu-cap-network.ec.europa.eu/projects_en) once the template for Horizon Europe projects becomes available.

2. Practice abstracts
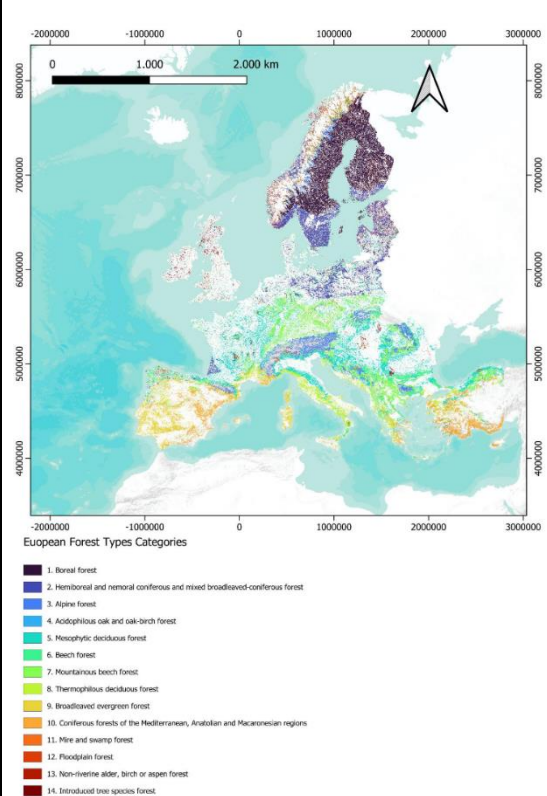
2.1.   European Forest Types Map

ENGLISH
European Forest Types Map

Having the ability to monitor forests using detailed classifications of forest types is important for monitoring the impacts of climate change on forests and biodiversity. Indeed, classification systems consisting of only three classes - conifers, broadleaves, and mixed - are not sufficient. In the OptFor-EU project, we have developed a raster-format map at a resolution of 100 meters that can be simply used in any GIS system.

To generate the map, we used a "rule-based expert system" algorithm that uses as input data the maps of relative presence of forest species developed by the JRC and other European open-access data. The map shows the 14 categories according to the European classification of forest types developed by the EU Environment Agency in 2006. The map represents the first example of consistent classification of European Forest Types and will be useful for various countries to report indicators of sustainable forest management and biodiversity indicators.

However, if there are more precise maps of the distribution of forest species in Europe, this map can be further improved by applying the algorithm to them again.

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Ill: Map of European Forest Types (full-size image in D2.1)

See also:

Infographic: categories of European Forest types

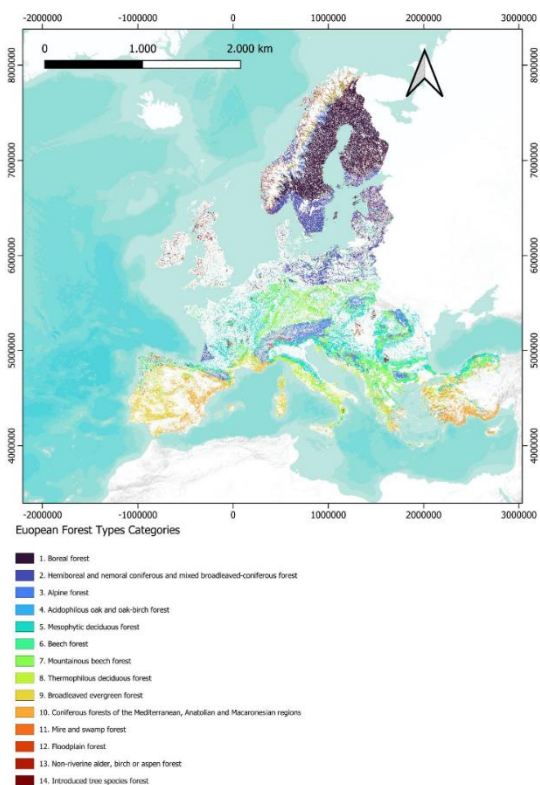Infographic: Percentage of European Forest Types in OptFor-EU case studies

Mappa delle tipologie Forestali Europee

Avere la possibilità di monitorare le foreste utilizzando classificazioni di dettaglio delle tipologie forestali è considerato importante per il monitoraggio degli impatti dei cambiamenti climatici sulle foreste e per il monitoraggio della biodiversità. Infatti, sistemi di classificazione fatti di sole tre classi conifere, latifoglie e misto, non sono sufficienti. In questo contesto nel progetto OptFor-EU abbiamo sviluppato una mappa in formato "raster" ad una risoluzione di 100 m che può essere utilizzata semplicemente in qualsiasi sistema GIS. Per generare la mappa è stato utilizzato un algoritmo "rule-based expert system" che utilizza come dati di input le mappe di presenza relativa delle specie forestali sviluppate dal JRC e altri dati open-access europei. La mappa riporta le 14 categorie secondo la classificazione Europea delle tipologie forestali sviluppata dall'EU environnement agency nel 2006. La mappa rappresenta il primo esempio di classificazione degli European Forest Type in modo consistente e sarà utile ai diversi paesi per riportare gli indicatori di gestione forestale sostenibile e gli indicatori di biodiversità. Tuttavia, qualora ci fossero delle mappe della distribuzione delle specie forestali in Europa più precisi questa mappa può essere ulteriormente migliorata applicando su queste di nuovo l'algoritmo.

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European Forest Types Categories

1. Boreal forest
2. Hemiboreal and nemoral coniferous and mixed broadleaved-coniferous forest
3. Alpine forest
4. Acidophilous oak and oak-birch forest
5. Mesophytic deciduous forest
6. Beech forest
7. Mountainous beech forest
8. Thermophilous deciduous forest
9. Broadleaved evergreen forest
10. Coniferous forests of the Mediterranean, Anatolian and Macaronesian regions
11. Mire and swamp forest
12. Floodplain forest
13. Non-riverine alder, birch or aspen forest
14. Introduced tree species forest

Ill: Mappa delle tipologie Forestali Europee
immagine a grandezza naturale, D2.1

Altre illustrazioni:

infografica: categories of European Forest types

infografica: Percentage of European Forest Types in OptFor-EU case studies

2.2. Stakeholder Engagement Plan

English
Stakeholder Engagement Plan

Collaborating with stakeholders improves research projects' outcomes. To ensure research's utility, provision of serviceable outputs and societal acceptance, stakeholders' involvement is crucial. This includes a bottom-up approach for consultative engagement and awareness-raising. Successful stakeholder engagement fosters shared understanding and project transparency.

In OptFor-EU, stakeholders are defined as individuals, organizations, or communities with a direct interest in project outcomes. Key stakeholders contribute to co-creation. Engagement activities encompass consulting, listening, communicating, influencing, and negotiating.

The stakeholder engagement plan comprises of five key elements:

1. Background, Context, and Purpose
2. Stakeholder Group Development Process
3. Principles of Stakeholder Engagement
4. Knowledge Co-creation Framework
5. Communication Strategy

In the stakeholder group development process, stakeholders from 8 different countries (all 14 European Forest Types) were identified. Each country liaised with its national stakeholders. Nine stakeholder types (including civil society, government, academia, and industry) were mapped using the quadruple Helix model. Key stakeholders were identified based on power and interest, and potential areas of conflict were explored.

For knowledge co-creation, workshops, interviews, and surveys were conducted in each case study area. The project aims to create a decision-support system (DSS) for sustainable forest management, with stakeholders input ensuring true co-creation. The communication strategy integrates guidelines for effective communication with stakeholders. Data collection includes socio-economic data, forest
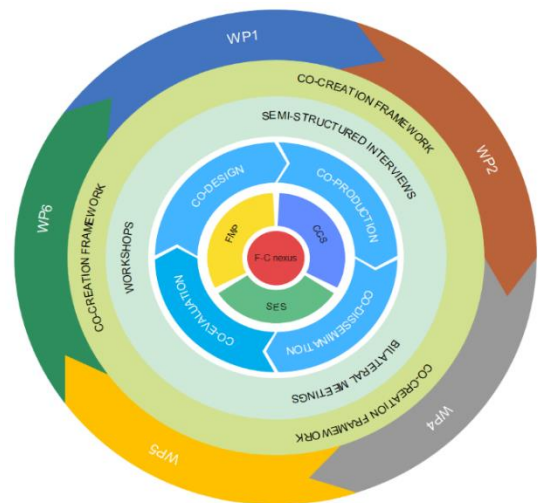
Ill: Co-Creation framework resulting from stakeholder engagement. From D3.1. (Full-size image in D3.1)

inventories, and impacts of forest management on climate.	

Plan for inkludering av interessenter

Samarbeid med interessenter forbedrer forskningsprosjekter. For å sikre forskningens nytteverdi og samfunnsaksept, er interessentinvolvering avgjørende. Dette omfatter både konsultativ deltakelse og bevisstgjøring. Vellykket interessentengasjement fremmer felles forståelse og prosjektets gjennomsiktighet.

I OptFor-EU defineres interessenter som enkeltpersoner, organisasjoner eller samfunn med direkte interesse for prosjektresultater. Nøkkelinteressenter bidrar til samskaping. Engasjementsaktiviteter omfatter konsultasjon, lytting, kommunikasjon, påvirkning og forhandlinger.
 Den interessentengasjementsplanen omfatter fem nøkkelelementer:

1.   Bakgrunn, kontekst og formål
2.   Prosess for utvikling av interessentgrupper
3.   Prinsipper for interessentengasjement
4.   Kunnskapssamskapingsrammeverk
5.   Kommunikasjonsstrategi

I prosessen med å utvikle interessentgrupper ble interessenter fra 8 forskjellige land (som dekker alle 14 europeiske skogtyper) identifisert. Hvert land samarbeidet med sine nasjonale interessenter. Ni interessenttyper (inkludert sivilsamfunn, myndigheter, akademia og industri) ble kartlagt ved hjelp av kvadrupel Helix-modellen. Nøkkelinteressenter ble identifisert basert på makt og interesse, og potensielle konfliktområder ble utforsket.

For kunnskapssamskaping ble det gjennomført workshops, intervjuer og undersøkelser i hvert case-studieområde. Prosjektet har som mål å skape et beslutningsstøttesystem (DSS) for bærekraftig skogforvaltning, der interessentenes bidrag sikrer ekte samskaping. Kommunikasjonsstrategien integrerer retningslinjer for effektiv kommunikasjon med
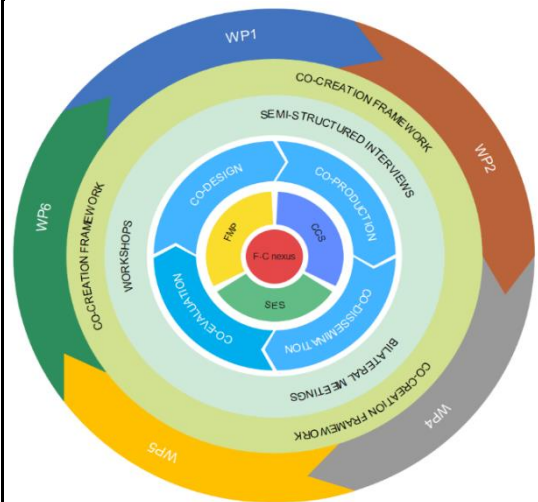
Ill: Rammeverk for samskaping. Hentet fra D3.1.
Se bildet i full størrelse i D3.1

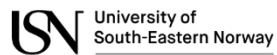| interessenter. Datainnsamling inkluderer sosioøkonomiske data, skogsinventar og virkninger av skogforvaltning på klimaet.	

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