FOREST4EU

ITHub 3 - Sustainable Forest Management and Ecosystem Services

FOREST4EU partner: UNIFI
OG: FOR.TRACK
OG's country: Italy
Type of Innovation: Technological

Decisional Support System to support the revision of forest management plans

Introduction

The Common International Classification System of Ecosystem Services (CICES) categorizes ecosystem services into three primary groups: i) provisioning, ii) regulation and maintenance, and iii) cultural, and they can be evaluated both in terms of their physical attributes and their economic value.

A physical assessment relies on biophysical models of ecosystem services that take into account the functions and processes of ecosystems necessary to provide the specific service. Within the GO-FORTRACK, were employed various spatial approaches to quantify physical aspects related to some ecosystem services. Specifically, we developed maps for carbon, biomass, and forest types, which can be associated with ecosystem services related to prediction, regulation, and maintenance. These maps were then integrated into a simple decision support system within the project's test areas, enabling forest managers to access this information at the individual forest parcel scale.

It was decided to derive this information at the forest parcel scale because, in the context of Italian forestry laws, which require that a forest management plan be approved by the relevant public authority, it is always necessary to describe each individual parcel and provide quantitative data. This system can help maintain parcel records and automatically generate the parcel cards/reports required by law.

Lessons learned

This straightforward report automation tool allows forest managers to save time on report and plan writing, which can then be allocated to other forest management-related activities. It can significantly reduce the costs associated with the drafting and development of a forest management plan.

Additionally, the availability of various maps within the system aids in the analysis of plan objectives and interventions, providing a more detailed knowledge framework.

For further information contact

Francesca Giannetti, Assistant Professor, University of Florence, Italy, e-mail: francesca.giannetti@unifi.i

The information presented in this factsheet was developed by the FOREST4EU partner, drawing on the innovations and knowledge generated by the indicated operational group with their explicit authorization.

Further information

https://fortrack.it/

Funded by the European Union

Funded by the European Union (Grant n. 101086216). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or REA. Neither the European Union nor the granting authority can be held responsible for them.