

ITHub 3 - Sustainable Forest Management and Ecosystem Services



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FOREST4EU partner: UNIFI OG: SURF OG's country: Italy Type of Innovation: Technological

Keys for Forest Types Classification Schemes to support the reporting of Support Sustainable Forest Management Indicators in Various Contexts

Introduction

Tree species composition is a crucial indicator for sustainable forest management. It allows for the assessment of forest practices and ecosystem health. It provides valuable information on biodiversity, carbon sequestration, forest health, and social and economic benefits.

Tree species composition refers to the types and distribution of tree species within a forest area. It plays a vital role in determining forest structure, function, and ecosystem services. The composition of tree species directly impacts forest biodiversity, as different species provide habitats for various organisms. It also influences the productivity and resilience of the forest, as certain species may be better adapted to specific environmental conditions or exhibit different growth rates.

Understanding tree species composition is essential for promoting sustainable forest management. It helps identify potential threats, such as invasive species or imbalances in species diversity. It also informs decisions related to forest restoration, conservation, and the promotion of specific tree species for particular objectives, such as timber production, carbon sequestration, or habitat conservation.

However, when it comes to Sustainable Forest Management Indicators, different organizations may require different classification schemes for forest tree species. This can pose a challenge for forest managers when reporting data. Therefore, it is important to provide them with user-friendly tools, such as keys or tables, that facilitate the transition between different classification systems and make the process easier for them. GO-SURF, in response to this challenge identified by forest managers involved in forest management plans, has attempted to solve this issue in the Tuscany Region where four different forest types classification schemes are established. These include the European Forest Types classification scheme, the Tuscany Forest Types Classification Scheme, the National Forest Inventory Classification Scheme, and the Corine Land Cover Italy 4-level classification Scheme. In this context, GO-SURF has developed user-friendly tables in collaboration with experts to guide forest managers in classifying forest types according to the different nomenclature systems. This allows forest managers to use the forest types from one system to another. This facilitates the reporting of various Sustainable Forest Indicators in different contexts, such as at the European, national, and regional levels, as required by different authorities.

Lessons learned

In the context of the Tuscany region, the inconsistency of forest classification systems has been identified as a problem by forest managers, leading technicians to duplicate their work in classifying forests. This also sometimes results in the use of different systems that are not comparable. The initiative to develop keys for transitioning between different classification systems has been well received by managers involved in the OG, and these keys are now being utilized by others OG of the project, as they are made available on the GO-SURF website.

This issue has also been observed in other Italian contexts, including forest inventories, where different countries employ different classification systems. For biodiversity monitoring, GO-SURF has emphasized the need for standardization efforts, even through simple solutions such as transition tables.

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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.

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