

Small Forests - Big players: Valorising Small Scale Forestry for a Biobased Economy (ValoFor)



About 60% of the European forest area is managed by private forest owners, who have property smaller than 100 ha. They provide a large share of wood based raw materials for bio-based industries and manifold ecosystem services. With ongoing societal change across Europe, the values, beliefs and perception of these owners undergo significant changes with severe implication for forest management and timber provision. Moreover, across Europe, strong differences exist in the composition and size of forest properties as well as legal frameworks and incentive schemes.

The objective of the study is to understand the contribution of private forest owners in the transition to a wood-based bioeconomy by considering the perception and management strategies of the land owners. This includes analysing and comparing forest management strategies with respect to potential timber supply, ecosystem services and forest resilience in climate change. Our analysis includes 1) the evaluation of trade-offs between timber production, ecosystem services and forest resilience to climate change, 2) the identification of tipping points in management behaviour of small forest owners in relation to potential economic and socioeconomic descriptors using a survey and choice experiment, and 3) the modeling of timber supply and the provision of ecosystem services under three management strategies using inventory-based growth simulations, and 4) analysis of existing incentive and subsidy schemes and their effects on forest owners' behavior in five European countries. A thorough economic analysis will transfer timber outputs into economic projections for typical small forest enterprises considering European and national timber markets and framework conditions. This concept will allow new insights into the coupled human and natural system of managed forests and to quantify truly achievable contributions of small forest owners to the challenges of a biobased economy. Moreover, it will allow to identify constraints for the engagement of small forest owners and provide tools for involving them into active management.

To fulfil these aims, we have conducted a survey of private forest owners where their perceptions and motivations were asked. A part of the survey was also a choice experiment designed to measure the impact of different factors on forest owners' management choices. The survey and the experiment were carried out in all the participating European countries. In Finland, the survey was successful with a thousand of responses. The datasets are ready to be analyzed and are expected to provide original information on the management behaviour of small-scale forest owners as well as their views on bioeconomy and sustainable forest management. The survey results will be utilized also in the ensuing phases of the study

involving the designed scenario modeling, economic analysis, and multicriteria assessment framework.

Research consortium consists partners from Austria (Austrian Research Centre for Forests, BFW), Germany (Johann Heinrich von Thünen Institute (TI), Sweden (Umeå University), Slovenia (Slovenian Forest Institute, SFI), and Finland (Natural Resources Institute Finland (LUKE).

The progress of our work can be followed on our web pages (<http://www.valofor.si/>) and Twitter account (@ValoforP).

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