Project co-funded by the European Union and national funds of the participating countries


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| **Deliverable. 3.1.1** | **Creating social and economic drivers of forest conservation through the capitalization of biodiversity services: Methodological framework** |

**BIOPROSPECT:** Conservation and sustainable capitalization of biodiversity in forested areas

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**FOREWORD**

This document was developed within the framework of the project “Conservation and sustainable capitalization of biodiversity in forested areas - BIOPROSPECT’’ (BMP1/2.1/2336/2017) implemented under Interreg V-B "Balkan-Mediterranean 2014-2020" Transnational Cooperation Programme. The document is the Deliverable 3.1.1 of WP3 and provides the identification and classification framework of direct and indirect drivers affecting forest change and promoting conservation forest conservation through the capitalization of biodiversity services.

*Proposed citation*

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## EXECUTIVE SUMMARY

Aim of Deliverable 3.1.1 is to provide the identification and classification framework of direct and indirect drivers affecting forest change and promoting conservation forest conservation through the capitalization of biodiversity services.

The first chapter provides a global overview regarding the main change drivers of forest biodiversity in relation to ecosystem services. Conversion of forests into agricultural lands, overexploitation, climate change, and invasive species, all cause great stress on forest ecosystems. Conscious of the negative effects of human activities, society has responded by increasing the area of forest being protected and well-managed, and by incorporating management of trees and forest patches into management of agricultural landscapes. Still, most of natural forests and agricultural landscapes are not well-managed and their existence continues to be threatened by the same drivers. The lack of reduction in the threats to biological diversity is, among other things, due to lack of addressing the subjacent causes of the threats. These are very much linked to level and form of economic development, and are often found outside the forest and environmental sectors.

The second chapter analyzes the EU perspective of forest ecosystem services as natural capital. While Europe has undoubtedly made progress in preserving and enhancing its natural capital in certain areas, overall degradation of ecosystems persists. In addition, abiotic resources and ecosystem capital are under significant pressure across the world and demographic and economic projections suggest that these pressures are likely to grow.

The third chapter is dedicated to the identification and classification framework of the direct and indirect drivers. A direct driver unequivocally influences forest ecosystem processes while indirect drivers operate more diffusely since they alter one or more direct drivers. The main categories of global driving forces are sociopolitical, demographic, economic, scientific-technological, cultural-religious as well as physical and biological. Drivers in all categories other than physical and biological are considered indirect. Important direct, i.e. physical and biological, drivers include changes in climate, land conversion, plant nutrient use, invasive species and diseases.

The fourth chapter identifies the main challenges and opportunities in forest management in relation to the identified drivers. These include: (a) Institutional challenges, (b) natural capital accounting, and (c) policy and management. Based on the drivers of change, the valuation of forest ecosystem services is of primary importance to policymakers, businesses and environmental organizations in that, by quantifying and making explicit the value of the environment in currently existing language: it helps to raise awareness of the benefits; it can target resources for forest ecosystem protection; and can rationalise the decision-making process.