



AGRO FORESTRY PRACTICES IN WEST BALKAN
FOR SUSTAINABLE DEVELOPMENT:
WEAKNESSES AND STRENGTHS



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Report on defended Master thesis

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In September 20th 2024 at 11h, in accordance with the Procedure for the Preparation and Defense of a Master's Thesis at the University of Belgrade Faculty of Forestry, the BSC Jelena Mašić's master thesis defense began before three-member committee approved by Teaching-Scientific Council of the University of Belgrade Faculty of Forestry (no. 03-2820/3 from 11.04.2024):

1. Dr Sara Lukić, Faculty of Forestry, Belgrade – mentor
2. Dr Mirjana Todosijević, Faculty of Forestry, Belgrade
3. Dr Predrag Miljković, Faculty of Forestry, Belgrade.

The master's thesis, entitled "*Shelterbelts as an agroforestry practice in sustainable management*", spans 45 pages and is divided into six chapters. It includes five tables, nine figures, three photo tables, a comprehensive literature review, as well as an abstract with keywords and a summary in both Serbian and English. The thesis draws from 28 relevant literary sources, providing a robust foundation for the research.

This study explores the potential of shelterbelts in enhancing environmental quality in the Pančevo region, where wind erosion, intensive agriculture, and industrial activities have been identified as key environmental stressors. Additionally, the paper emphasizes the significance of raising environmental awareness among farmers and local communities regarding the critical role and functions of shelterbelts.

The research methodology was selected to align with the study's objective, which involved analyzing the area's sensitivity to wind erosion, the natural potential vegetation, and the current state of existing vegetation. Several key data sources were utilized, including the Vojvodina soils database (Živković et al., 1972), the EuroVeg database, and data from the AGFORWEB project database (2023). These data were processed using Geographic Information System (GIS) tools to generate the necessary insights.

The study produced a map illustrating the area's sensitivity to wind erosion in the area of Pančevo. Additional maps were created to depict soil types, potential natural vegetation, and the spatial distribution of existing shelterbelts in the area. One of the key outcomes of this research was a detailed overview of tree and shrub species suitable for establishing shelterbelts (and other types of the protective forest belts) in the area of Pančevo. Furthermore, the research highlighted the need for raising ecological awareness among the local community and for the recognition of protective forest belts as vital tools for improving environmental conditions in the area.

A special focus was placed on the importance of early education about ecological practices. Also, raising of the awareness among stakeholders, local and national government of the necessity for legal and planning reforms to facilitate the broader implementation of protective forest belts. Addressing these areas is crucial to overcoming the current barriers and promoting the widespread adoption of this sustainable agroforestry practice.