

LABORATORY DESCRIPTION

General Information

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Title of the Laboratory – Acronym

Laboratory of Forest Resource Management and Bioeconomy

Head of the Laboratory

Professor Vassiliki Kazana

Short Description

The activities of the Laboratory of Forest Resource Management and Bioeconomy include a) lectures, tutorials and lab exercises for the students attending the core modules of Forest Resource Planning & Management I, Forest Resource Planning and Management II, Forest Economics-Appraisal & Investment Evaluation, Evaluation & Assessment of Ecosystem Services, Forest-Environmental Policy, Forest Law and the optional modules of Spatial Analysis Applications for forest ecosystem management, Environmental Impact Assessment, Forest Energy Resource Management and Forest Products Marketing b) supervision of students' dissertations c) Students' internships d) Research activities through participation and/ or coordination of regional, national, bilateral and European competitive projects e) extension services f) Equipment supply and maintenance and g) networking with other laboratories and agencies with interests on forest research and practice.

Specifically, the research activities of the Laboratory of Forest Resource Management and Bioeconomy involve the following: 1) development of tools for assessing and monitoring forest management sustainability, 2) certification of sustainable forest management, 3) development of suitability/capability/impact models of renewable natural resources at suitable spatial scales and levels of detail in the context of sustainable forest management, 4) development of growth and yield models for the main commercial forest species of Greece, 5) optimization of production systems and woody biomass utilization in the context of sustainability, 6) decision-making tools, such as decision support systems and expert systems for development planning and sustainable management of renewable natural resource by using multi-criteria analysis and fuzzy logic, 7) development of tools for evaluating economic, social and institutional resources in the context of sustainable development and management of renewable natural resources, 8) assessment of ecosystem services and cost-benefit analyses, 9) development and operation of governance models and structures for sustainable development planning and management, 10) innovative development models for forest circular economy, 11) development of

educational material for students and other stakeholders on issues related to renewable natural resource management and bioeconomy.

Over the past 15 years, the members of the Laboratory of Forest Resource Management and Bioeconomy have coordinated and/or participated as main partners in research and pilot projects with a total budget of approximately 10,000,000 euros.

The Laboratory of Forest Resource Management and Bioeconomy is actively participating in international networks, such as EFI/EFIMED, EUROMONTANA and RURENER. The Laboratory also serves as the focal point for promotion of the MFRA-Mediterranean Forest Research Agenda 2009-2020 in Greece, the focal point of the RURENER Association for promotion of energy transition in rural and mountain areas and the focal point of the governance network for the bioclimatic and environmental upgrading of the city of Drama operating within the partnership of the Sustainable Urban Development Plan of Drama, Greece.