

Zone specific adapted management schemes for multi-objective planning of ecosystem services
Xiaoqian Xu, University of Eastern Finland, Finland

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Forest biomass provides the materials for timber use, energy market, pulp, and other industries. Several factors influence the biomass production, such as the soil and water conditions, the climatic situation (e.g. temperature, precipitation, solar radiation), fertilization, and harvesting. Besides, the locations of other land uses may play a role in the forest biomass. For instance, the distance between the closet river and forest can be considered as one factor which is the accessibility of water. The analysis on the relationship between different types of land use and forest biomass may help future forest management.

Objective: To know the influencing types of land use on forest biomass in the neighboring area with buffer radius 1000m.

Data: The main research data were retrieved from the Spanish Forest Map, MFE50 and the forest types in MFE50 included broadleaves, coniferous, and mixed forests. The land-use data were retrieved from CORINE Land Cover 2018. Climatic data were retrieved from the State Meteorological Agency in 2020.

Methods: The research methods have two parts. First, spatial analysis on different types of land use to know the land use ratio in forest buffer area. The second analysis is mixed modelling to know how the land uses effect forest biomass.