

Land-use and management impacts on carbon sequestration in mountain ecosystems

Starting Date 01.01.2013

Duration 36 Months

Discipline Ecology - forestry and

agricultural sciences, land management



Main Goals

The project addresses the effects of land-use changes and management within forest-related land-uses in mountain regions from Bulgaria and Switzerland on soil and biomass carbon stocks.

Activities

WP1 – Site evaluation – sampling design, field visits and sampling procedures in 4 representative regions covering a total number of 24 sites in Rila, Balkan, Rhodopes and Alps comprising different land-use changes and forestry management practices

WP2 – Determination of carbon content in different components of ecosystems and quality of soil organic matter

WP3 – Modeling – new radiocarbon data, application of models RothC, Yasso07 for describing the soil carbon dynamics and carbon stocks under different land-uses

Expected results

Knowledge on carbon stocks in different components of ecosystems and their drivers after land-use changes is generated in order to contribute the efforts in sustainable development of mountain regions and in increasing their adaptive potential and resilience capacity under global changes.

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