ROCKTheALPS: Harmonized ROCKfall natural risk and protection forest mapping in the ALPine Space (ASP462)







The European challenge:

As forest covers 40% of the Alpine Space and that one of the major natural risks threatening Alpine Space viability and liveability is rockfall, RockTheAlps is specifically dedicated to the enhancement of rockfall protection forest ecosystems service in risk management and prevention policy. The challenge is to provide for the first time an Alpine space harmonised rockfall risk and protection forest map including an evaluation of the efficacy of this ecosystem service.

The Project

The overall objective of the project is to reinforce & strengthen the implementation of rockfall risk prevention/mitigation strategy/policy support in line with a sustainable forest management approach. This objective directly draws upon the Alpine Space objectives: capitalization & up-scaling of existing solutions, promoting a common integrative approach for policies/decision making & planning processes, enhance the sustainable management of natural risks and natural resources.

The general approach developed by the project is to:

- share knowledge and data;
- develop an innovative common regional rockfall model considering forest effects;
- use this model for producing regional maps and to compile them for producing the first Alpine Space wide harmonised map of rockfall risk and protection forests;
- transfer these maps in existing WEBGIS platforms.

These innovative maps and associated tools will contribute to improve risk management and to better manage climate change, including major natural risks prevention of the European strategy for the Alpine region (EUSALP) and the forest ecosystems services mapping and valuing actions of Europe 2020 biodiversity strategy. The project outputs (maps, factual data, and syntheses of information) will support local, regional, national and European governance authorities to assessing and promoting forest based solution in rockfall risk prevention strategy and policy.

Partners:



IRSTEA National research institute of science and technology for environment and agriculture (Coordinator); SFS Slovenian Forest Service; UL University of Lubljana, Biotechnical Faculty, Dept. For Forestry and Renewable Resource; SFI Slovenian Forestry Institute; UNIPD University of Padua; DISAFA University of Turin Dept. Of Agricultural forest and food Sciences: **ERSAF** Regional agency for Services in Agriculture Lombardia Region, and Forest, PAT SFF Autonomous province of Trento, Forest and Wildlife dept.; BFW Federal Research and Training Centre for forests, Natural Hazards and Landscape; BMLFUW Austrian Federal Ministery of Agriculture, Forestry, Environment and Water Management – Forest department section III/4; BRGM French Geological Survey; Alp'Géorisques; LWF Bavarian State Institute of Forestry – Department of Sylviculture and Mountain Fores; **BFH HALF** Bern University of Applied Sciences – Department of Forest Sciences.

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