MOVING
MOuntain Valorisation through INterconnectedness and Green growth

Sumava - Cesky Les

Vulnerability matrixes and vulnerability map

2024

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What will you find?

The MOVING (MOuntain Valorisation through INterconnectedness and Green growth) project stands at the forefront of climate resilience, aiming to fortify the sustainability of mountain areas against climate change. A key outcome of the project is the creation of tools that show susceptibility and vulnerability, ready to be used by both experts and the general audience[1].

This document synthesises crucial information for the **Sumava - Cesky Les Region**, particularly focusing on the Participatory Vulnerability Matrix and the Spatial Vulnerability Map.

Using a participatory approach, the Vulnerability Matrix allows to downscale relevant information to the local level, offering a detailed view of how drivers of change impact this territory. Understanding that areas within the Sumava - Cesky Les Region are not equally vulnerable to identical threats, the Spatial Vulnerability Map emerges as a critical tool. It showcases the varied susceptibility across the region, paving the way for more effective, targeted adaptation strategies.

Mountain Reference Region: Sumava - Cesky Les

Mountain Reference Landscape: Sumava - Cesky Les MRL

Value Chain: Beef Production

Land-use system: Permanente pastures

Reference variable: Quality of pasture for cattle

[1] Extended outputs are accessible through the following documents: 'Land Use Systems and Land Cover Map in 23 Reference Regions' and'Land use system vulnerability matrixes and vulnerability maps for the 23 reference regions'

1. Participatory Vulnerability Matrix

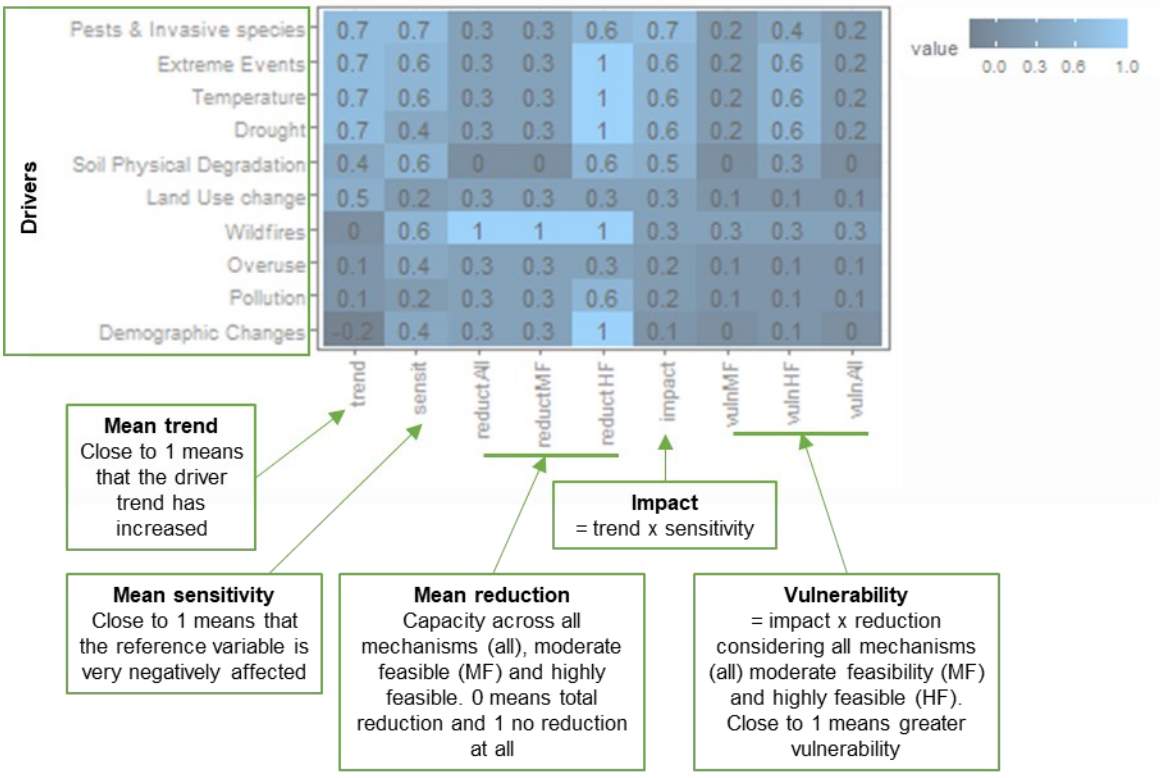

Figure 1. Vulnerability Matrix for Sumava - Cesky Les MRL (below) and how to read it (above). Source: MOVING H2020

Although participants are aware of the high sensitivity that the reference variable (quality pasture for cattle) may have to some of the drivers such as drought, temperature, land degradation or extreme events, they do not currently see it as a potential problem, so the perceived vulnerability is low (Figure 12). Participants give more importance to how they are affected by regulations related to the National Park, Nature Protected Areas, or regulations of agricultural practices.

1.1 List of adaptative mechanisms suggested by consulted stakeholders

- Changes in resowing and mowing procedures
- Changes in subsidies scheme
- Education and promotion of agriculture
- Support for modernization and innovation in agriculture and rural development

2. Spatial Vulnerability Index and Map

Vulnerability drivers:

- Precipitation
- Demographic changes

Spatial explicit factors:

- Elevation
- Distance to urban centers

Table 1. Spatial Vulnerability Index for Permanent Pastures at Sumava - Cesky Les MRL

Spatial Vulnerability Index			Spatial Explicit Factor 1	
			Elevation (m)	
			[0-800]	*]800-max]*
Spatial Explicit Factor 2	*Distance to urban centres (km)*	*[0-50]*	**3**	**1**
		]50-max]	**4**	**2**

Vulnerability levels: 1 – very low, 2 – low, 3 – medium, 4- high, 5 – very high.
Source: MOVING H2020

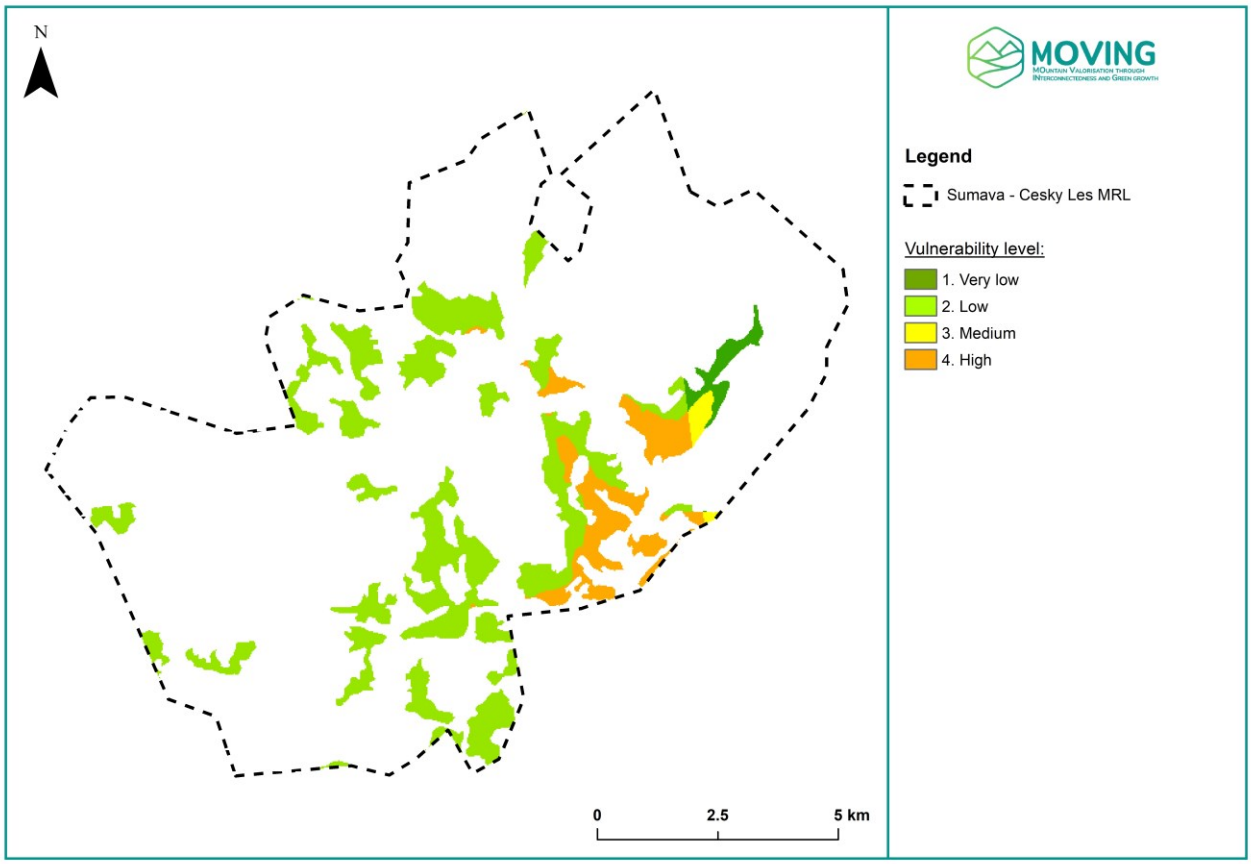

Figure 2. Vulnerability Map for the Permanent Pastures of Sumava - Cesky Les MRL.
Source: MOVING H2020