MOVING
MOuntain Valorisation through INterconnectedness and Green growth

Drôme Valley

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 **Drôme Valley 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 Drôme Valley 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: Drôme Valley

Mountain Reference Landscape: Drôme Valley MRL

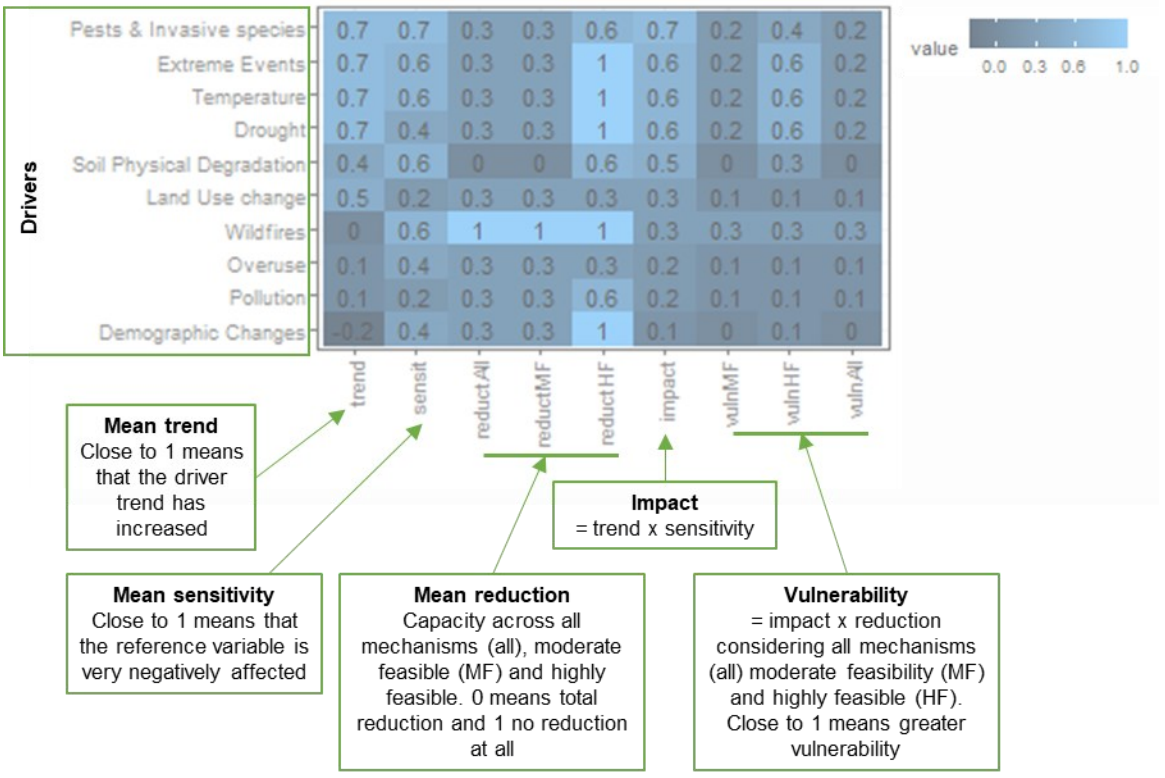
Value Chain: Sheep meat locally produced and valorised

Land-use system: Permanent pastures

Reference variable: Grasslands and shrubbery availability on the pasture areas

[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



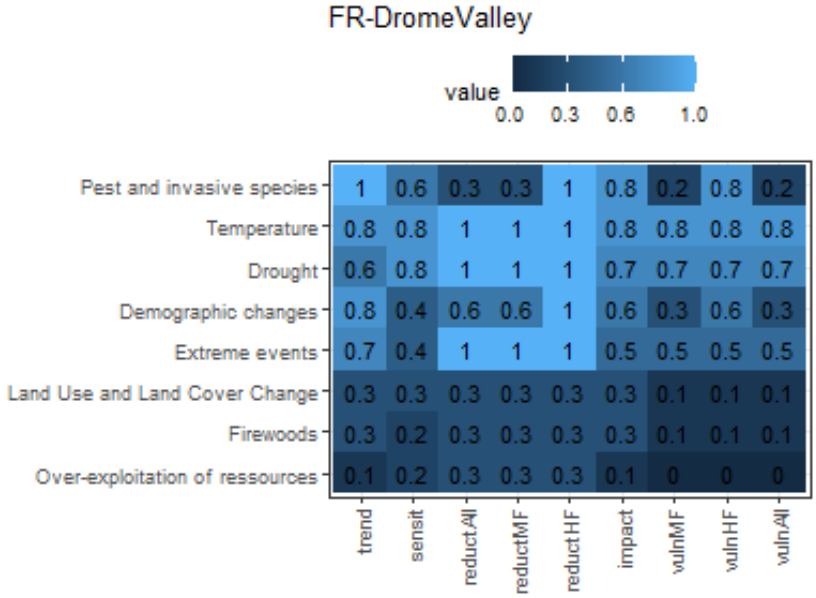


Figure 1. Vulnerability Matrix for Drôme Valley MRL (below) and how to read it (above). Source: MOVING H2020

The factors that are perceived to be most influential are invasive species (with the wolf issue), climatic drivers (temperature, drought and extreme events) and demographic changes. There is little perceived adaptive capacity to these drivers. In contrast, in other case studies we have found mechanisms that can also influence the reduction of the impact of climate drivers, it may be interesting to see if they could be applicable to the context of the Drôme Valley.

1.1 List of adaptative mechanisms suggested by consulted stakeholders

- Reduction of livestock pressure in mountain pastures defining a precise grazing schedule
- Adopt agro-silvo-pastoralism and eco-pastoralism
- "Report sur pied": management of the equilibrium between grazing and stoked fodder

2. Vulnerability Map

Vulnerability drivers:

- Precipitation
- Temperature

Spatial explicit factors:

- Position/precipitation
- Elevation

Table 1. Spatial Vulnerability Index for Permanent Pastures at Drôme Valley MRL

Spatial Vulnerability Index			Spatial Explicit Factor 1	
			Position / Precipitation (mm)	
			Western Vercors / [900-1500]	*Southern Vercors / [0-900]*
Spatial Explicit Factor 2	*Elevation (m)*	*[0-600]*	**3**	**4**
		]600-1100]	**2**	**3**
		]1100-max]	**1**	**2**

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

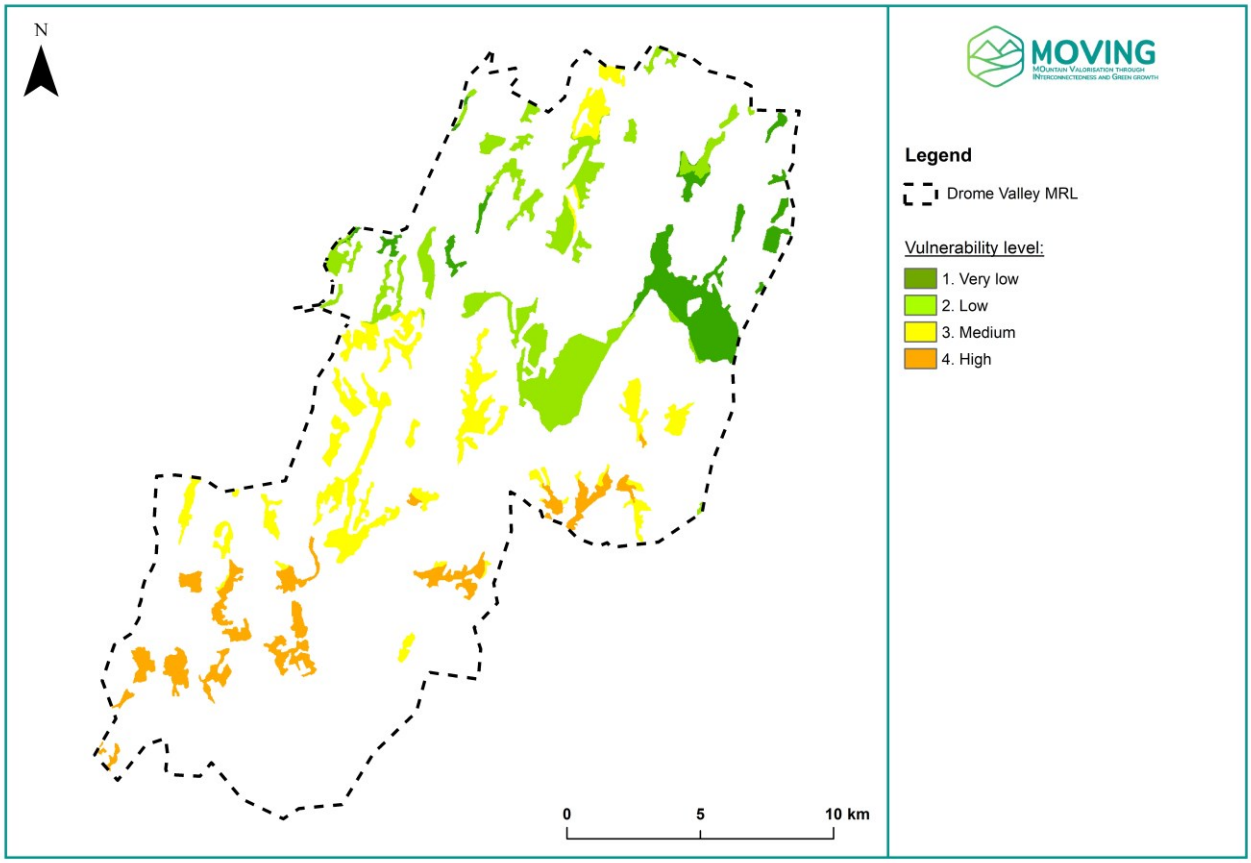


Figure 2 - Vulnerability Map for the Permanent Pastures of the Drôme Valley MRL.
Source: MOVING H2020