



**MOUNT
RESILIENCE**

Restoring mountain soils to support agriculture and pastoralism in a changing climate

Climate change adaptation
in mountainous areas

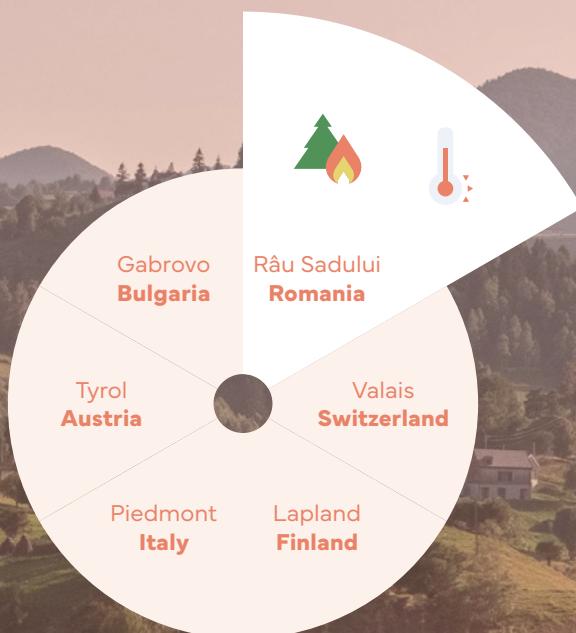
Rau Sadului, Romania



MOUNT RESILIENCE



MountResilience supports European regions and communities located in mountainous areas to increase their capacity to adapt to climate change and to transition towards a climate-resilient society. The project is conceptualising, testing and scaling up climate adaptation and nature-based solutions to respond to policy and societal needs. Additionally, it seeks to influence citizen behaviours to effectively address specific climate impacts in mountainous regions.



Râu Sadului is a region located in the Carpathian Mountains known for its large forests, meadows, pastures and sheepfolds, making it one of the **most important pastoral areas in this mountainous area**. Even though its population is currently involved in **different economic sectors**, the area is still characterised by smaller villages, **agricultural lands, and touristic activities** which depend on natural resources. In recent decades, **prolonged summer droughts, warmer winters with less snow cover, and soil erosion due to extreme weather events** are becoming more frequent in this region, **degrading vital ecosystems, threatening biodiversity, and jeopardising traditional livelihoods**.

Adapting to Climate Change

Climate risks:

Extreme heat, wildfires



Restoring mountain meadows through an integrated management approach

Higher temperatures impact the health and reproductive rates of livestock, limited water resources cause heat stress for crops and animals, and more frequent extreme events lead to soil degradation, landslides, and erosion. These conditions **make farming** in the mountain meadows of Râu Sadului **more uncertain and demanding**, resulting in the **depopulation of this region**. This in turn leads to further ecosystem degradation and an **increased risk of wildfires**, as there are fewer people to manage and safeguard the land.

The **MountResilience partners** in Râu Sadului are collaborating with **local farmers** to **restore 40 hectares of land** and strengthen the sustainability of pastoral activities. With the help of **drones equipped with multispectral cameras**, they have been able to assess the true condition of the soil and design tailored solutions to renew the vitality of these ecosystems. This has been achieved by **applying tailored soil treatments, removing invasive vegetation, and reseedling with more productive native species**.



How to combine adaptation and tradition to sustain local economy of rural livelihoods in mountainous areas?



Râu Sadului proves that **innovation and tradition can work hand in hand** to sustain both the land and the local economy of rural and mountainous areas. The combination of **drone technology** and **long-standing farming practices** is helping **boost the productivity of mountain pastures** and therefore the viability of these livelihoods, while also **reducing climate risks** and **enhancing biodiversity**.





Contact

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