

## Submitted Abstract

ID IMC22-FSAbstr- 496

<b>First Author</b> First Name Last Name	Mélanie (1,2) Clivaz
<b>Submitting Author</b> First Name Last Name	Mélanie Clivaz
<b>Correspondence</b>	melanie.clivaz@unil.ch
<b>Co-Authors</b> >> E-Mails will be not listed	Reynard, Emmanuel (1,2); Trouilloud, Séverine (1,3)
<b>Organisations</b>	1: Interdisciplinary Centre for Mountain Research (CIRM), University of Lausanne, Switzerland 2: Institute of Geography and Sustainability (IGD), University of Lausanne 3: Service Culture et Médiation scientifique (SCMS), University of Lausanne
<b>Country</b>	Switzerland
<b>Region</b>	Western Europe
<b>Title</b>	Citizen Science To Stimulate The Transformation Towards Sustainability Of Mountain Valleys.
<b>Keywords</b>	Climate Change, Adaptation, Citizen Science, Hérens
<b>Type</b>	List Of Focus Session
<b>Focus Session ID</b>	02

## Abstract

Sustainable development seeks to balance the environmental, economic and social dynamics of a territory, and to preserve good livelihood conditions for future generations. Citizen science can contribute to sustainability and transformation of society by involving the inhabitants in the co-production of knowledge (Pettibone et al., 2018; Strasser et al., 2019; Sauermann et al., 2020). To address these two dimensions of sustainability - the balance between economic development and environmental protection by involving society, and the intergenerational dimension - the citizen science project "Val d'Hérens 1950/2050 - Lives, images and practices of a changing territory" was set up by the University of Lausanne in the Hérens valley (Valais, Switzerland). The project combines participatory research, scientific outreach activities and artistic approaches. It involves several research teams as well as the population of the valley. The general objective is to answer the question: what are the challenges of living in the mountains in a context of climate change?

Several research teams are working on nine topics: evolution and perception of landscapes, soundscapes, socio-economic development, impacts of climate change on mountaineering, on the forest boundaries or on heritage plants, climatic perceptions, as well as hunting and dog-sledding practices. The project is structured around three periods: (i) Past - collecting and sharing the living history of the valley; (ii) Present - establishing shared diagnoses (with the population) and (iii) Future - imagining possible futures.

This contribution deals with the transdisciplinary character of the project. It discusses the challenges of participatory approaches to research on sustainability in the mountains. Engaging with the population takes time and requires gaining the trust of the inhabitants. Working with the schools in the valley and relying on certain committed personalities in the valley helps to strengthen this trust. We were also confronted with the concurrence of political processes (fusion of communes) which make the scientific approach difficult. Finally, it is necessary to regularly provide the population with concrete results so that they can fully engage in university research that is perceived a priori as theoretical and not very rooted in the territory.

### REFERENCES

Pettibone, L., Blättel-Mink, B., Bala#zs, B. et al. 2018: Transdisciplinary sustainability research and citizen science: Options for mutual learning, *GAIA*, 27(2), 222-225.

Sauermann, H., Vohland, K., Antoniou, V. et al. 2020: Citizen science and sustainability transitions, *Research Policy*, 49(5), 103978.

Strasser, B.J., Baudry, J., Mahr, D. et al. 2019: "Citizen Science"? Rethinking Science and Public Participation, *Science & Technology Studies*, 32(2), 52-76.