



AMALPI trek: a geocultural trail from Maloja to St. Gotthard to increase the awareness of natural hazard in mountain settings

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The historical evolution of a territory is usually related to its geological features and geomorphological dynamics. Floods and slope instabilities modify the landscape impacting on human life. The perception of the value of natural resources in mountain area and the culture of respect is an essential component in strategies aimed at ensuring the population a future of well-being, social and economic growing.

The AMALPI Trek takes its name from the A.M.AL.PI.18 Project [1], which is the Italian acronym for “Moving Alps, and Movements in the Alps”, developed in the framework of the European funded Interreg Italy-Switzerland Cooperation Program V-A 2014-2020. The project aims to encourage an innovative strategy for the promotion of natural and cultural heritage in the Alpine area from Maloja to St. Gotthard (through Val Bregaglia, Valchiavenna, Regione Moesa and Alto Ticino), even by the creation of a cross-border geo-cultural trail connecting sites which have experienced important geomorphological and anthropic changes due to the occurrence of landslides of great social impact. The trail is addressed to a scientific-cultural and educational tourism, to raise the perception of landscape components in the framework of the “total history”, composed by the geo(morpho)logical, bioecological and historic-cultural heritages. Placed in a central position, the AMALPI Center (scheduled to open mid-2023 in Chiavenna), will be a study and research hub on large landslides, reference for school activities and promotion events. In addition, an open access hiking guidebook and map will lead the trekker to discover tools and methods that allow the comprehension of past and ongoing processes, with the help of illustrative panels describing the main patrimonial aspects of the territory, which is rich in historical palaces, archaeological sites, and natural monuments.

The AMALPI Trek runs through 10 Alpine valleys and crosses 7 mountain passes, for a total of about 150 km, plus several thematic itineraries that branch out of the main trail. Along the way, 19 large landslides of different age and type are touched. In many segments, the AMALPI trek follows historical trade routes, used in the past for the exchange of silk and soapstone products. There are some links between large landslides and stone resources typical of these mountains. A striking example are the “*crotti*”, natural caves used as cellars, perfect places for the storage of foods and

other goods, and the *"trone"*, local soapstone caves, both generated by the gravitational accumulation of cyclopean boulders. The petrographic features of soapstone outcropping rock offer then a good workability, but locally they become weakness planes predisposing sliding.

Looking at the causes and effects of landslide events, the trekker accrues the perception of human vulnerability to natural hazard, but it is also invited to discover how to prevent, mitigate, and manage hillslope dynamic to develop a sustainable and fulfilling life in mountain areas.

[1] Interreg V-A Italy-Switzerland 2014-2020 Cooperation Program, Axis II "Cultural and natural enhancement"). Project ID 594274, "A.M.AL.PI. 2018 - Alpi in Movimento, Movimento nelle Alpi. Piuro1618-2018".

<https://progetti.interreg-italiasvizzera.eu/it/b/78/alpiinmovimentomovimentonellealpipiuro>