



# **SEXTO CONGRESO INTERNACIONAL SOBRE VITICULTURA DE MONTAÑA Y EN FUERTE PENDIENTE**

## **SIXTH INTERNATIONAL CONGRESS ON MOUNTAIN AND STEEP SLOPE VITICULTURE**

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**“Viticultura heroica: de la uva al vino a través de  
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**“Heroic viticulture: from grape to win through  
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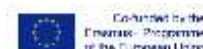
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## Conservation, restoration and enhancement of Pergola Valdostana vineyard landscapes

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### Abstract

Since the early 1990s there has been a growing institutional and political sensibility with regard to the protection and preservation of the landscape. Cultural Landscapes, remarkable and deserving sites selected by UNESCO to be safeguarded at international level, and the Registro Nazionale dei Paesaggi Rurali Storici, both embody concrete actions and initiatives for the recognition, conservation and enhancement of landscapes.

As evidenced by several authors, and now acknowledged by the whole community, the vineyard landscape, characterized by wise territorial management by man, is a significant expression of the past and has an important environmental, communicative and social value.

The Interreg project Vi.A. - Route des VignoblesAlpins, intends to preserve, valorise and promote the environmental, cultural and landscape heritage of the vineyard through a diagnosis of the typical mountain landscape and its related aspects.

The aim of the study is to identify strengths and critical issues and develop effective actions and tools to preserve, recover and enhance the specificities of Alpine vineyards.

### Keyword

Vineyard landscapes; Pergola Valdostana

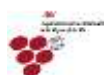
### Introduction

Since the early 1990s there has been a growing institutional and political sensitivity with regard to the protection and preservation of the landscape. The European Landscape Convention (2000) introduced its legal recognition as well as the implementation of specific policies aimed at safeguarding it. Cultural Landscapes, remarkable and deserving sites selected by UNESCO to be safeguarded at international level, and the “Registro Nazionale dei Paesaggi Rurali Storici” at Italian level, both embody concrete actions and initiatives for the recognition, conservation and enhancement of landscapes.

The International Fontevraud Charta (2004) embodies one of the first actions undertaken for the protection, management and enhancement of landscapes with reference to the viticultural field. In fact, the vineyard landscape, characterized by skilful territorial management by man, is a significant expression of the past and has an important environmental, communicative and social value. The Charta recognizes a key role for all the stakeholders present in the territory, inside and outside the wine supply chain, able to take concrete actions for the formation, maintenance, protection and promotion of the wine landscape (Herbin 2013; Ambroise and Herbin 2012).

The Interreg-ALCOTRA “Vi.A.” Project – “Route des VignoblesAlpins”, intends to preserve, to valorise and to promote the environmental, cultural and landscape heritage of the North-Western Alpine regions located between Piedmont, Aosta Valley and Savoy.

The diagnosis of typical mountain vineyard landscapes and identification of related aspects are the first fundamental steps towards the recognition, protection and enhancement of these landscapes.





The study launched in Aosta Valley in 2017, aims at identifying strengths and critical issues and developing effective actions and tools to preserve, recover and enhance the specificities of Alpine vineyards in a medium-long term sustainable perspective.

## Material and methods

### *Study area*

The Project considers two distinct wine-growing areas in Aosta Valley, each one homogeneous by morphology, characteristic elements of the landscape, but characterized by the presence of Pergola systems with different height development.

The first wine-growing area, called "Donnas", includes four municipalities (Perloz, Pont-Saint-Martin, Donnas and Bard) and is located at the beginning of the Valley, near Piedmont. The prevailing form is the high Pergola Valdostana, with an altimetric development between 300 and 450 meters above.

The second wine-growing area corresponds to the municipalities of Morgex and La Salle, located in the upper Valley near France, and characterized by the presence of the low Pergola Valdostana system, which extends to an altitude up to and over 1200 meters and is the only training system found in this area.

### *Historical and socio-economic analysis of the landscape*

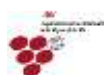
In the preliminary stages of the project, based on numerous bibliographic sources, the history of the vine in Aosta Valley, as well as the historical evolution of the landscape in the two areas, were reconstructed and to highlight the viticulture characteristics in these areas, the socio-economic data from the last ISTAT Agricultural Census, referring to 2010, were taken into consideration. Extrapolations regarding the type of management (full-time, part-time), the age of and gender of those involved in the activity and the weight of viticulture in relation to other business activities were made to deduce preliminary indications regarding the productive specialization of the areas. These data will be completed through socio-economic analysis, started in winter 2017.

## Results

The bibliographic analysis, extended to the whole Valley, highlighted that vineyard and wine-growing landscapes have been part of the history of the Region since pre-Roman times to the present days (Di Corato, 1974). There are numerous testimonies in travel journals by English tourists (Williams, 1854, Malvezzi, 2003) that indicate how the Pergola system was widespread in the nineteenth century throughout the Valley, even in areas where today the vine is bred exclusively in "spalliera" (rows).

As far as the diagnosis of the landscape is concerned, the most characteristic element of the natural landscape of the "Donnas" area is represented by a very steep terrain, which man has for centuries contrasted through terracing with stonewalls in order to stabilize the slopes and obtain cultivable surfaces more easily. The present breeding method uses a traditional and complex system of vertical and horizontal wooden frames (in many cases also with the help of stone elements) to support the vine, whose shoots grow about 2 meters above the ground. The overall landscape effect is remarkable for the geometrical patterns produced which can be seen, as soon as one enters the Valley.

In the second wine area "Morgex and La Salle", the predominant landscape element consists of a less steep geomorphological profile, mostly flat, where the terraces are present only in the steepest areas. The harsher climatic conditions, especially in winter months, have required suitable agronomic measures achieved thanks to the low Pergola. The cultivation of vines in this area has the same characteristics seen previously (pilings and stone elements), but with plants 0.50 to 1.30-1.40 m high and an extension of the vineyards in a much more horizontal rather





than vertical sense. The resulting geometrical patterns are different from the "Donnas" area and characterize the local viticulture and landscape.

The analysis of statistical data from the last ISTAT Census - still in progress - has shown that the two areas differ in the number of farms and vineyard areas, however without highlighting particular structural and socio-economic differences. In the "Donnas" areas the vineyard area surveyed in 2010 is wider, equal to 42.55 ha, distributed on 158 farms where 88.6% fall into a vineyard size class below 5000 m<sup>2</sup>. The "Morgex and La Salle" area includes a smaller vineyard area, equal to 29.51 ha, spread over 106 farms, where 86.8% fall into a vineyard size class below 5000 m<sup>2</sup>. The percentage of surfaces used to produce PDO grapes is higher in Morgex (89%) than in Donnas (53%), as compared to an overall regional average of 65%. The average age of the farmers does not differ significantly, reaching an age of around 62-63 years. Regarding gender, in the "Donnas" area there is a greater female presence (32.3%) as compared to "Morgex and La Salle" (26.4%).

The various elements that characterize the Aosta Valley vineyard systems have been classified in internal system variables (strengths and weaknesses) and extrinsic variables (opportunities and threats), then organized into a SWOT matrix as a qualitative tool for decision support. This matrix may be the basis for the institutions in charge of outlining future strategies for enhancing the Aosta Valley countryside landscape heritage.

## Conclusions

The study highlighted, from a qualitative point of view, the elements that characterize viticulture in the Aosta Valley and in particular the Pergola Valdostana vineyard landscapes. The research carried out is only the first part of a larger project, which also foresees a quantitative socio-economic analysis, started in winter 2017. This study will support an in-depth analysis and updating of the census data and at the same time it will evaluate the differences in terms of revenues and costs connected to the two different types of vineyard management. The elaboration of the collected data, and a related diagnostic study of the vineyard landscape, will allow for the identification of actions for the recovery, conservation and enhancement of vineyard landscapes.

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