

# Terraced areas in the Alpine environment (Vallée d'Aoste – NW Italy): an anthropogenic landscape



Regione Autonoma Valle d'Aosta Région Autonome Vallée d'Aoste Assessorato Agricoltura e Risorse Naturali



AD

(BOXU

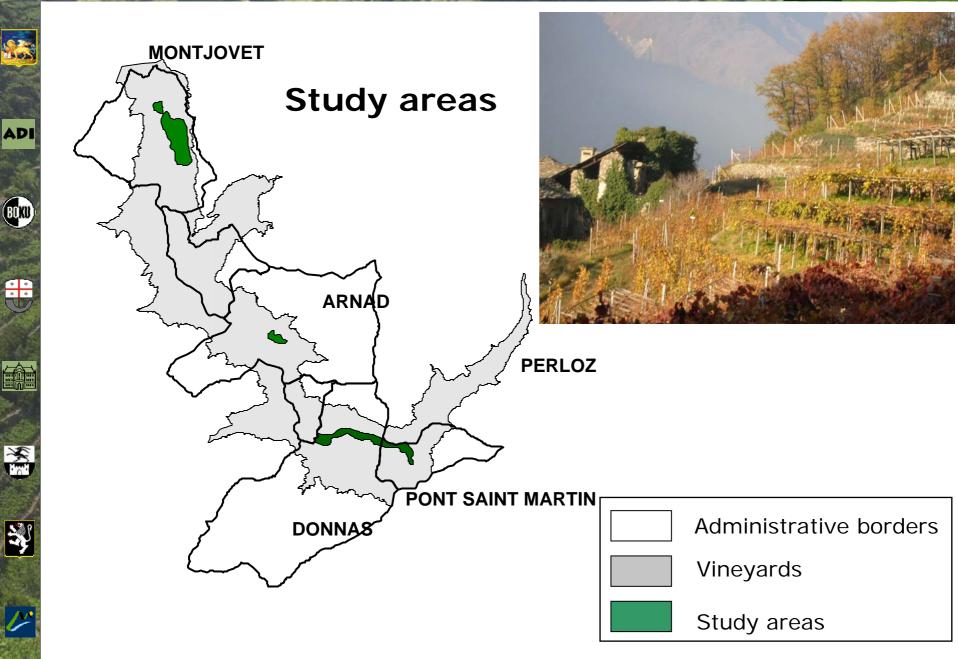




Dipartimento di Economia ed Ingegneria Agraria, Forestale ed Ambientale Sezione Topografia e Costruzioni

Project co





Project co

ADI

BOKU

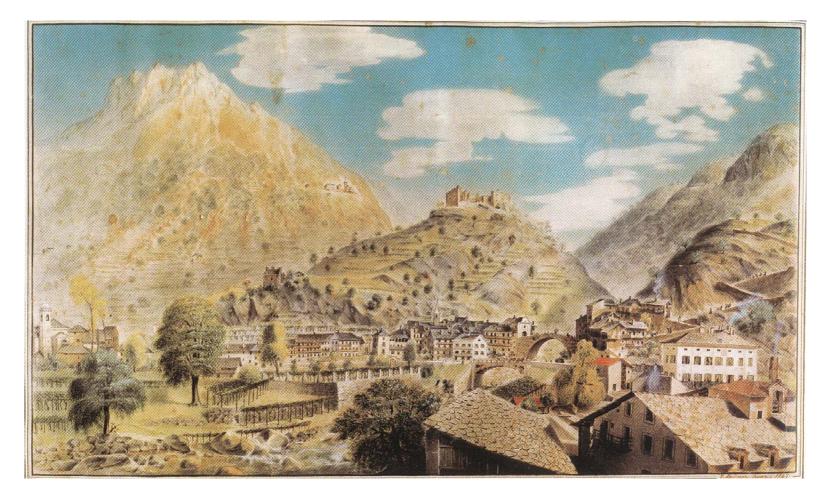
E

× 1

3



### PONT SAINT MARTIN - DONNAS VINEYARD HISTORICAL TERRACED LANDSCAPE



## Late 19<sup>th</sup> century

**Project** 

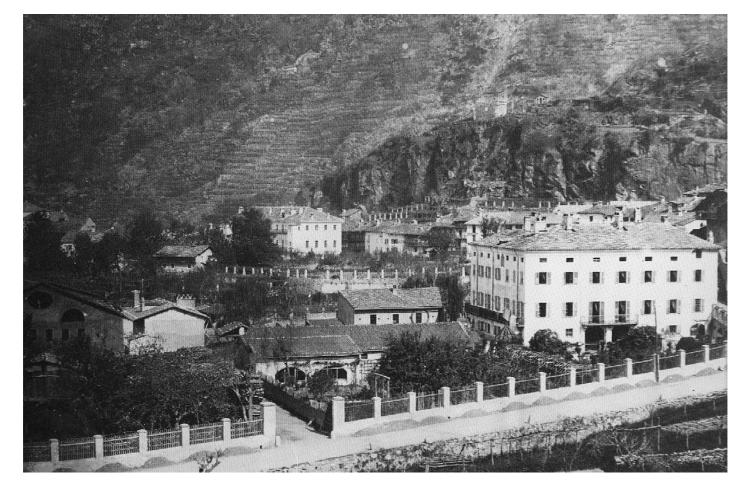
ADI

BOKU

3



### PONT SAINT MARTIN - DONNAS VINEYARD HISTORICAL TERRACED LANDSCAPE



## Late 19<sup>th</sup> century

Project co-funded by the European Uni

ADI

BOKU

× i

3





### DIFFERENT TYPOLOGIES OF TERRACE WALLS







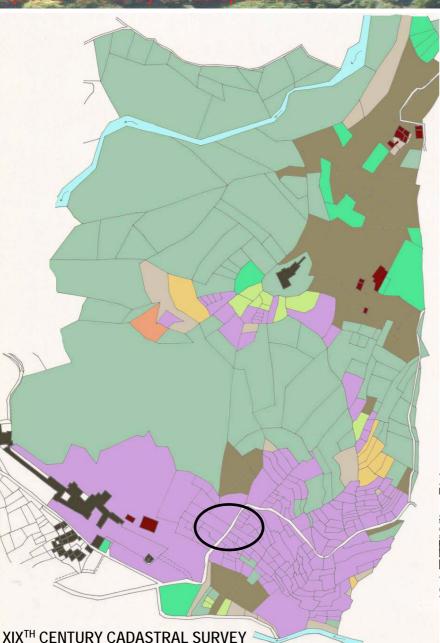
Project co-funded by the European Unio

ADI

BOXU

X

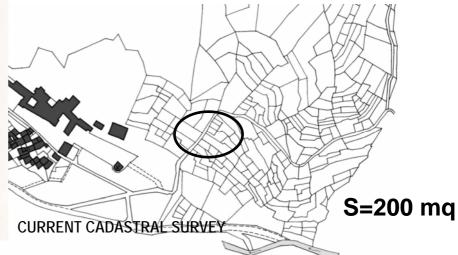




#### ARNAD MUNICIPALITY – LAND USE DATING 1896 historical cadastral survey – paper XXXI (original graphical scale 1:1.000)



### Vineyard landscape still maintains its original shape (historical land fragmentation - same owners)



Project co-funded by the European Uni

X

3





### PEDOLOGICAL SURVEYS SOIL CHEMICAL ANALYSIS

PEDOLOGICAL AND CHEMICAL SOIL PROPERTIES EVALUATION OF SOIL PRODUCTIVE VOCATION ADI

BOKU

\* \*



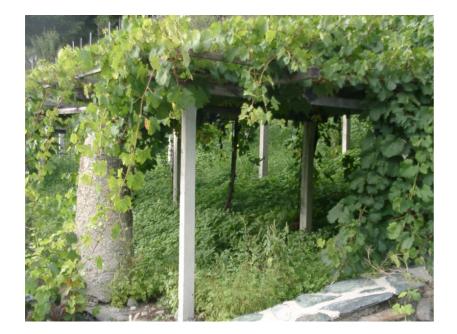
# **ARNAD STUDY SITE**

ARNAD I: 13 years old vineyards (espalier shaped)

ARNAD II: 12 years old vineyards (pergola shaped)

ARNAD III: abandoned (30-35 years)





Project co

ADI

BOKU

Ŧ

1

3

### PERGOLA-SHAPED

# ARNAD II 12 years old vineyards

### **Technic Escalic Cambisol**



Project co

ADI

BOXU

E

÷,

1



Site	Horizons	Depth	Skeleton	pН	Available P	C tot	N tot
ARNAD II		cm	% by weight		mg kg <sup>-1</sup>	g kg <sup>-1</sup>	g kg <sup>-1</sup>
	Ар	0-2	21.4	7.1	25	20.1	1.5
	Bw1	2-17	23.6	7.2	26	9.4	0.7
	Bw2	17-33	23.6	7.4	23	10.5	0.9
	Bw3	33-51	15.3	7.8	15	8.0	0.8
	Bw4	51-81	6.3	8.3	14	6.6	0.6
	Bw5	81-100	8.3	8.4	13	4.8	1.1
	BC	100-110+	20.3	8.1	7	5.0	2.1



Preserving the terraced landscapes of the Alpine Arc means to preserve also these specific soil characteristics.



ADI

BOKU

×

3



ADI

BOXU





V<sup>th</sup> International Congress of the European Society for Soil Conservation *"Changing Soils in a Changing World: the Soils of Tomorrow"* Palermo, 25-30 July 2007

# Terraced vineyard in Alpine environment (Vallée d'Aoste – NW Italy): an anthropogenic landscape

Freppaz M., Agnelli A., Drusi B., Stanchi S., Galliani C., Revel Chion V., Zanini E.

michele.freppaz@unito.it www.lnsa.unito.it