

1222•2022
800
ANNI



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



HIGHLANDS.3

DAFNAE
Department of Agronomy Food
Natural resources Animals Environment

Added value of mountain livestock systems: initiatives in eastern Italian Alps

Sturaro E., Pachoud C., Ramanzin M., Raniolo S., Teston M.

DAFNAE - University of Padova, Italy

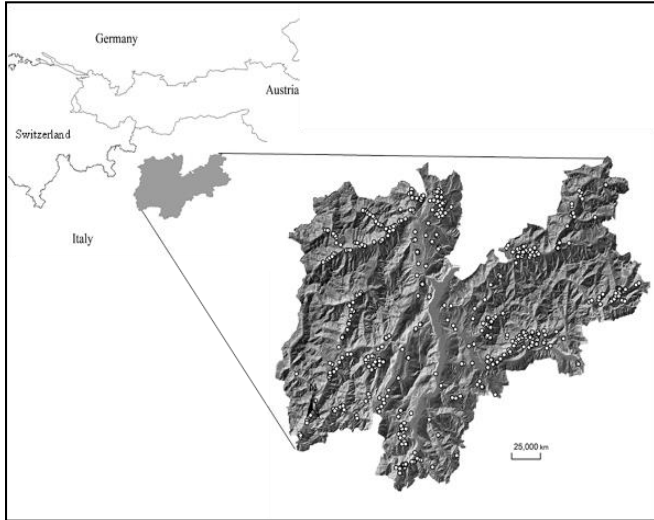
Background

- Mountain livestock farming systems are facing climatic, social and economic changes → abandonment of marginal and less favoured areas and intensification in the most productive areas
- The link between local breeds, typical products and mountain agroecosystems can contribute to generate added value and to favour the resilience of traditional systems

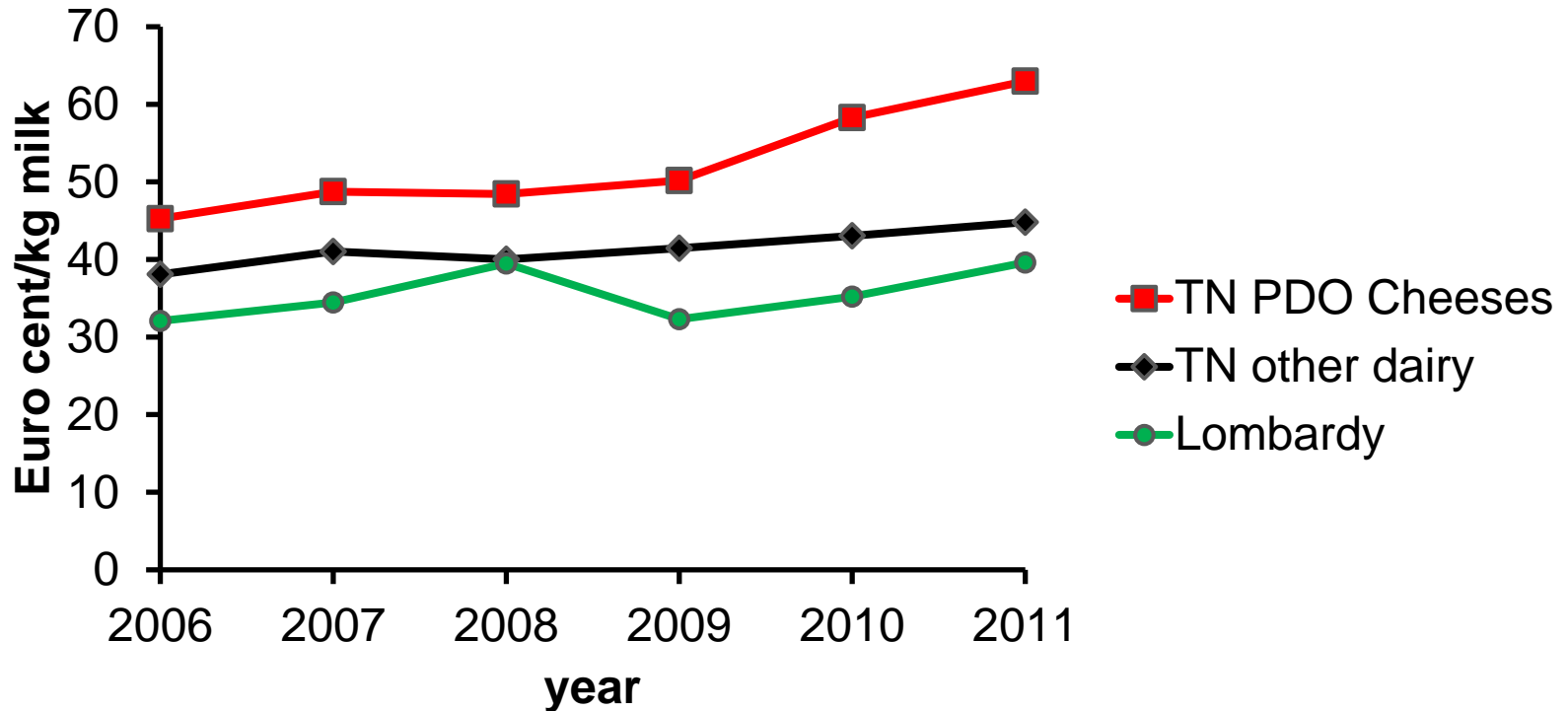
Case study 1: cooperative dairies in Trento Province

Study area → Trento province:

- Mountainous area 6,212 km²
- 1,372 km² UAA, mainly grassland
- 1,075 dairy farms: the majority are members of cooperative dairies producing PDO cheeses

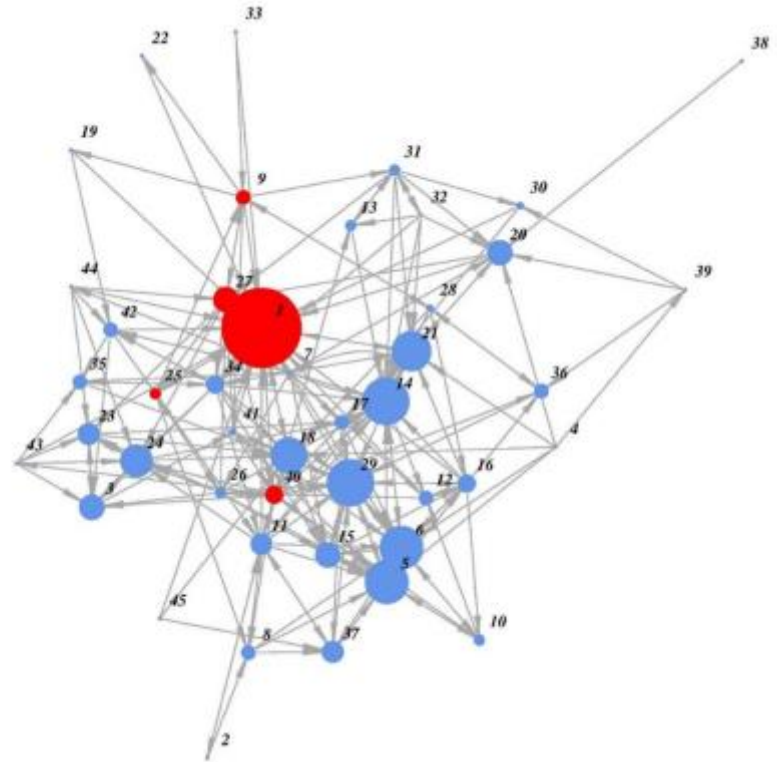


Case study 1: added value of cooperation in dairy cattle farming systems (Sturaro et al., 2013)



Case study 1: added value of cooperation in dairy cattle farming systems

Network advice among the members of the Primiero Cooperative (Pachoud et al., 2020)



Case Study 2: local sheep breeds in Veneto Region

This study is part of a project (Sheep A.L. Chain) aiming to improve the competitiveness of local sheep breed farms (Lamon and Alpagota) through the valorisation of their link with mountain agroecosystems

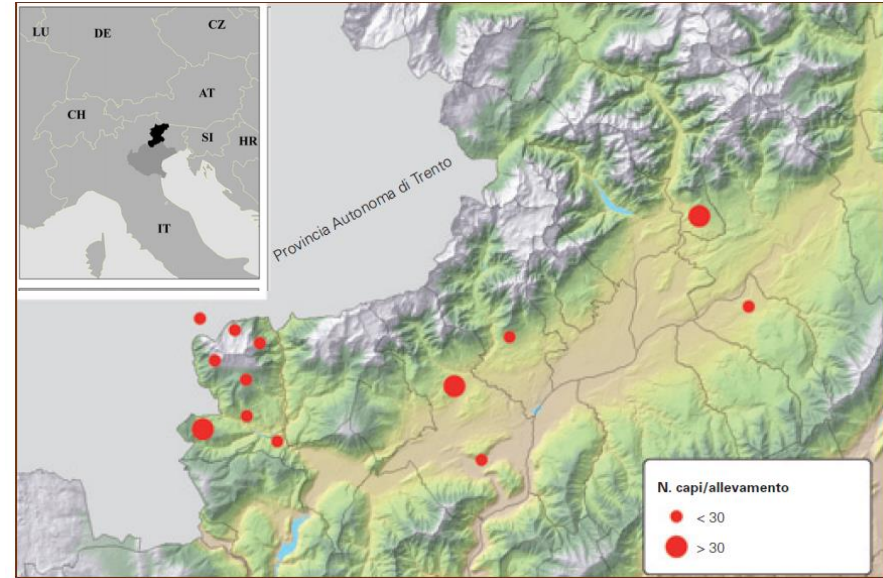
Three specific aims:

- Sustainable use of animal genetic resources/in vivo conservation program
- Link between sheep products and landscape/agroecosystems → “territorial marketing” strategy
- Conversion to organic production: SWOT analysis

Lamon Sheep breed

Breeding Males / Females (n of heads)	73/316
Herds (n)	25
Risk status	Endangered
Uses	Meat

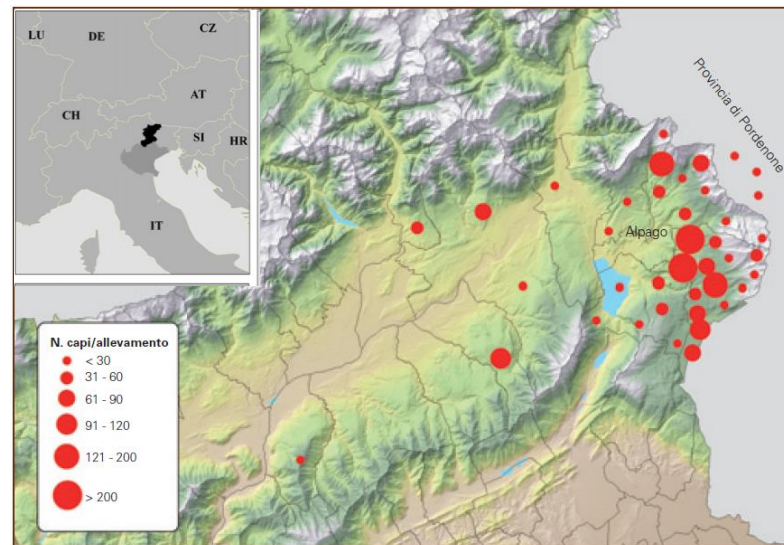
Source: EFABIS, 2020



Alpagota Sheep Breed

Breeding Males	/	96 / 2969
Females (n of heads)		
Herds (n)		59
Risk status		Endangered
Uses		Meat

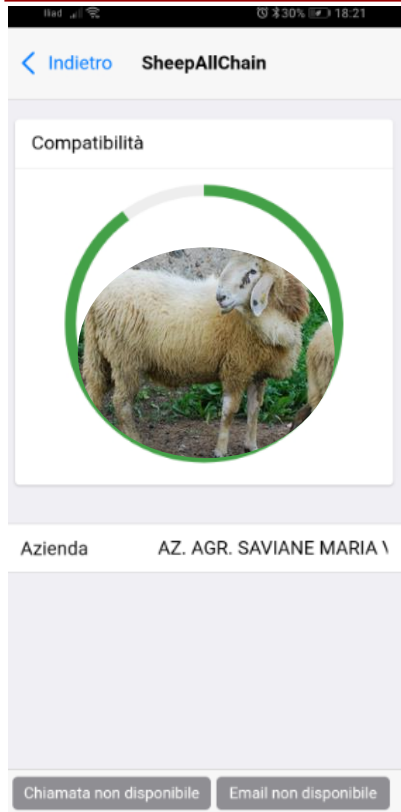
Source: EFABIS, 2020



Slow food presidium «agnello d'Alpago»



Use of genetic resources



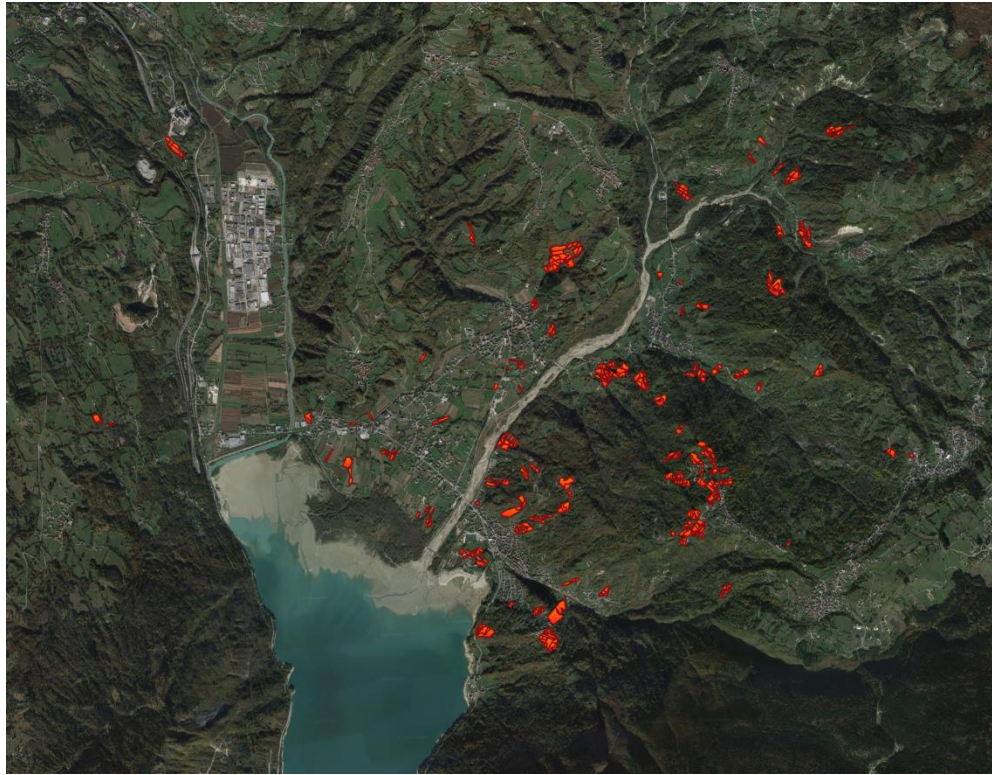
application for mobile phone to support mating plans, with the aim to limit the risk of inbreeding.



Results – farming systems

	Unit	All farms	Alpagota	Lamon
Farms surveyed	N	39	21	18
Local sheep breed	Livestock Unit/farm	8.5	14.6	2.8
Total Livestock Unit/farm	LU	21.4	20.6	22.3
Elevation , mean	m a.s.l.	680	675	687
Grassland (pasture and meadows), total surface	ha	757	466	291
Grassland (pasture and meadows), mean	ha	16.8	19.4	13.9
Forage self-sufficiency	% DM	87%	91%	83%

Results – link between sheep farms and landscape



Patches managed by a
single sheep farm
Google Satellite



Added value: potential conversion to organic production SWOT analysis



Strengths	Weaknesses
Opportunities	Threats
<ul style="list-style-type: none">• Grassland based farming systems• Local breeds• Strong cooperation – Slow food presidium	<ul style="list-style-type: none">• Certification and traceability: expensive and complicated for smallholders
<ul style="list-style-type: none">• Positive trends for market of organic products• Link with (eco) tourism	<ul style="list-style-type: none">• Lack of infrastructures, services and plants (in particular for wool)• Fragmented and harsh landscape• Wolf predations• Marginality of sheep sector with respect to other livestock (agri-food) chains

Conclusions

- Link between livestock systems and mountain agroecosystems → ecosystem services and added value for the livestock products :
 - Public payment/subsidies for ecosystem services
 - Territorial marketing
- The involvement of farmers (in particular smallholders) in cooperative/multiactors approaches is fundamental

Take home message

From local to global: link between local genetic resources, traditional farming systems, high quality products and mountain agroecosystems as key factor to ensure resilience



Contacts

- Link to the website of University of Padova:
<https://www.unipd.it/en/dafnae>
- Link to our publications:
https://www.researchgate.net/profile/Enrico_Sturaro
- Sheep All Chain Project: <https://www.youtube.com/channel/UCLvh17IT-BhgGFIhNg1K74A>
- My email: enrico.sturaro@unipd.it