



What new strategies for the governance and valorisation of Piedmontese chestnut forests?


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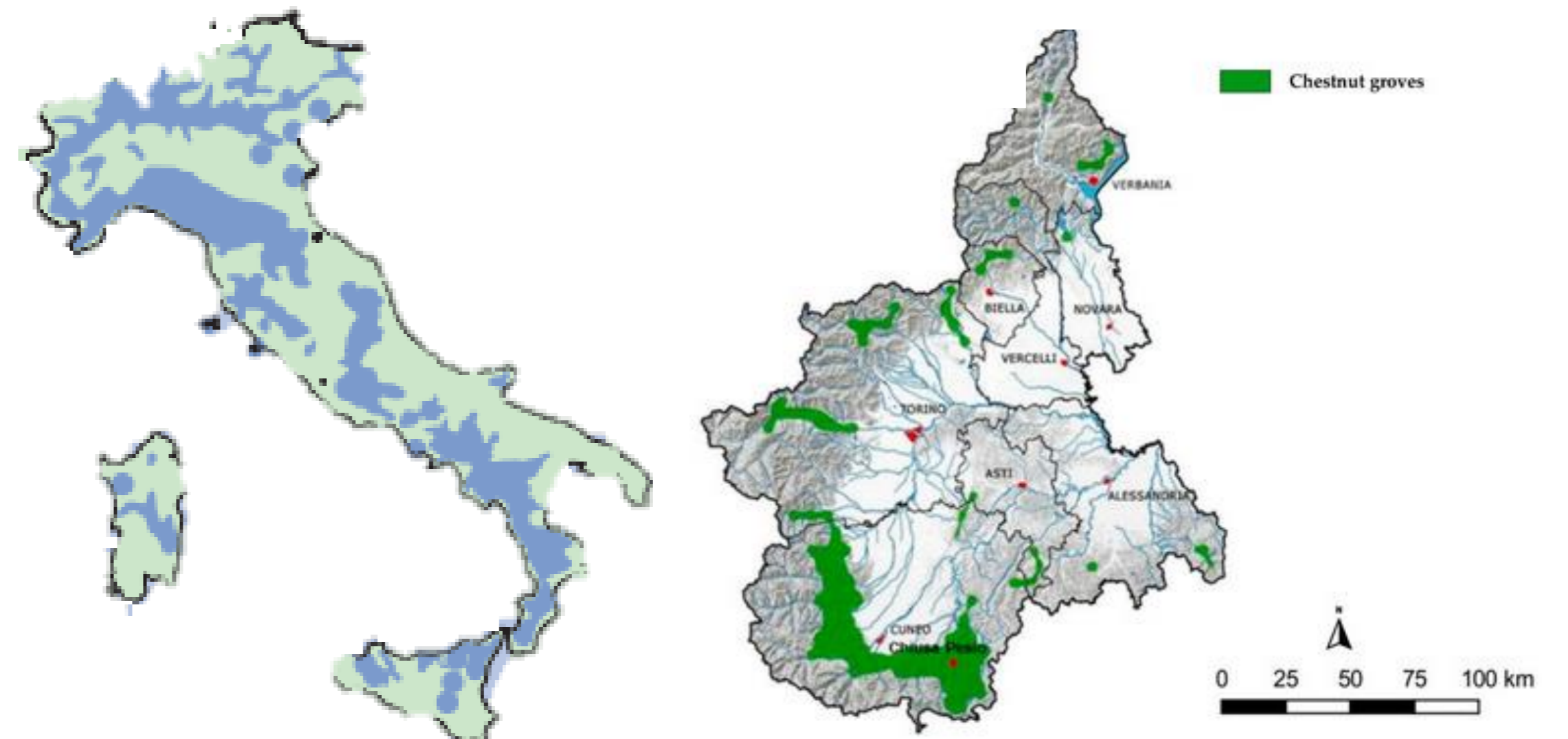
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1. Introduction

 **590+ thousand** ha of chestnut coppices in Italy of which about **28%** in Piedmont (Gasparini et al. 2022)

 After WWII, about **40%** of the national chestnut groves were abandoned, due to several changing factors: depopulation of mountain areas, biotic adversity and socioeconomic changes (Manetti et al. 2017)

 The **main wood-based value chain**, apart from the fruit, is **tannin** -> a Piedmontese company is a world leader (Bruzzese et al. 2023)



Sweet chestnut trees surface: a) Italy (Fernández-López & Alía, 2009); b) Piedmont region (Gullino et al. 2020)

1.1. Research Question


Which factors could be useful in enhancing the resource and stimulating higher value-added production chains?




1.2. Aim

Proposing new strategies for the valorisation of the resource that can also be prodromal of the socioeconomic revitalization of marginal, fragile and inland areas, as well as bring added value with a smart use of chestnut wood

2. Materials & Methods

 A'WOT methodology, a multi-criteria analysis which merges a qualitative method - SWOT matrix (Bruzzese et al. 2022) - and a quantitative method - Analytic Hierarchy Process

 Data collection took place in two stages (n= 20 experts, July 21-June 22): I) obtaining local or intra-criteria priorities of SWOT factors; II) identifying global or inter-criteria priorities


Analytic Hierarchy Process results

SWOT factors	Ranking of global factors	SWOT factors	Ranking of global factors
O4. Increasing civil society's awareness of ecosystem services	1	T1. Climate change, pests and diseases	8
O1. Chestnut research projects	2	S6. Generational change of forest entrepreneurs	9
T2. Depopulation of mountain areas	3	W3. Weakly harmonised forest management	9
W4. Old machinery and poor support for innovation in processors	4	S2. Provision of ecosystem services (cultural and protection)	10
T4. Weak granting of subsidies and incentives for the forest-wood sector	4	W6. Modest public support for the provision of ecosystem services (PES)	10
O3. Forest certification and quality labels	5	W1. Negative stumpage value	11
T3. Lack of market knowledge and strong foreign competition	6	S3. Richness of wood assortments	12
S5. Vocational training initiatives	7	W5. Technological defects of wood	13
O2. Business networks	7	W2. Land pathology and orographic context	14
S4. Tradition of chestnut use	8	S1. Good resource availability	15

Notes: S: Strengths; W: Weaknesses; O: Opportunities; T: Threats

3. Results

 **External factors:** opportunities and threats as priority strategic elements

 **Internal factors:** strengths and weaknesses deemed least interesting

- Importance of civil society awareness and research
- Profound recognition of the role of services in addition to products
- Importance of strong know-how on resource use and machinery innovation needs as internal strategic levers

4. Conclusions

Take-home messages:

- External factors as a leverage strategy, as opposed to internal ones
- Difficulties in involving stakeholders early in the decision-making process

Implications:

- Importance of an effective and timely communication with stakeholders
- Promotion of social learning and trust-building
- Fostering of the crowding-in effect

Future research:

- Empirical evidences
- Spatial upscaling

Limitations:

- Small sample
- Snowball sampling technique
- Threshold of comparable variables with the AHP

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for more information

