



Wine producers as landscape stewards against wildfire

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FIRE-RES



FIRE-RES is a H2020 Innovation Action **4-year project** (2021-2025)

led by the **Forest Science and Technology Centre of Catalonia** in Spain.

34 innovations are developed to operationalise Integrated Fire Management measures for prevention and preparedness, detection and responses, and restoration and adaptation.

→ IA 3.1 Fire wine – engaging wineries in maintaining fire-resilient territories through a label



INTRODUCTION



- Wildfires represent a recurrent threat to Mediterranean forests.
- Agricultural parcels amidst the forested landscape constitute a key fuel discontinuity, which is a crucial infrastructure for the fire responders to attack with security, and/or to modify the wildfire spread behaviour → offer a not underacknolwedged "security service"
- Yet, northern Mediterranean (particularly mountain) **agriculture is** progressively **being abandoned** → increased forest continuity → risk of larger wildfires.
- Abandonment of agricultural land **is accelerating** because of the ageing of the farming population and the small size of the new projects of neorural population \rightarrow 21st century: deep change social and physical landscape.
- OUR RESEARCH QUESTION: How do agriculture producers perceive wildfires and their role in their risk management?
 - > to understand their productive factors, fire-related concerns, and interest in engaging in fire-reduction measures.



METHODOLOGY



- Exploratory study
- Data collection:
 - ➤ in-depth interviews and field visits to wine areas in Mediterranean Spain, Portugal and France (2022).
 - 33 cellars + 11 groups of stakeholders managing agriculture forest & firefighting in wine areas or local research group + 5 natural parks or similar (hosting vineyards) + 12 Designation of Origin
 - > survey sent through wine areas of 4 countries (2023).
 - 149 answers. 48% Catalonia, 24% France, 7% Italy, 2% Portugal, 17,4% rest of Spain (particularly Valdeorras/Galicia).



METHODOLOGY



Map of interviews November 2022





FINDING 1 – FIRE-CONCERNED VINEYARDS



Part of vineyard managers show concerns about wildfires in Mediterranean vineyards.

→Spain: 85%

→France: 68%

→Italy: 55%.

Reasons are:

- potential losses in their yields or organoleptic characteristics (smoke taint),
- potential reduction of their scenic beauty linked to their wine tourism and marketing,
- general awareness to their territory.





FINDING 2 – VINEYARD & FOREST OWNERSHIP



In some wine regions, rural landowners own both agricultural & forest parcels.

Forest parcels tend to be managed with lower intensity – due to limited knowledge, or limited profitability.

Bridging both agriculture and forest domains represents anyhow an opportunity to engage in risk-reduction practices.

Survey: 8% of vineyard managers are part of a forest owner association in Spain, 5% in France, none in Italy.





FINDING 3 – INTERACTION FOREST & VINEYARDS



But:

- Wine producers don't know well about forest management, even if they are owner of forest.
- Many don't know about existing financial support (>60% in France and Spain)
- Isolated wine plots in forest suffer hard production conditions (wild fauna, long distance in case of treatments, competition of trees in case of dryness).
- **Profitability is main factor** for their maintenance.
- In the interviews, economy and landscape management (urban sprawl, renewable energy development) seem to have priority with regard to fire risk.





FINDING 4 – ADMINISTRATIVE & ECONOMIC FRAMEWORK MATTERS



Behind **similar landscapes there are huge differences**:

- land register,
- wine economy,
- type and size of cellars,
- wine makers and wine producers

This heterogeneity complicates landscape and fire risk management.

In examples of the past (1985-95, France) wine sector realities and difficulties have not been considered, and policies of support have been abandoned without explanation → **loss of trust** from wine growers towards administrations.





FINDING 5 - INTEREST IN A LABEL



There is an interest in Catalonia (and Spain) for developing a brand distinguishing wine makers engaged in fire risk prevention. Not so focused on increasing sales.

- 27% to recognize the effort,
- 31% to recognize the socioecological responsibility
- 7% to improve the sales
- 19% don't know
- 17% have already too many labels and brands

In France it seems unclear

- 11% to recognize the effort
- 2% to recognize the socioecological responsibility
- 0% to better the sales
- 33% don't know
- 18% have already too many labels and brands





DISCUSSION and CONCLUSIONS



- Landscape diversification (mosaic, fuel discontinuity) is fundamental for avoiding extreme fire events. Wine sector can contribute to that strategy, but it needs support, adapted to each territory.
- What kind of support?
 - **Strategic zoning** for effective wildfire impact (IA2.2)
 - **Financial support** to incentivize vineyards in critical (less attractive) areas + also acknowledging the regulatory ecosystem service provided to society (positive externality)
 - **Technical information** to producers
- Limitation of study: data collection ratio per country but also reflects the contrast of realities in the different countries (consciousness of fire risk, slit between wine area and forest management...) and the difficulties to contact with agriculture/wine sector.





www.firewine.eu





