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# Towards a fire smart landscape: understanding wine sector



## 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. Maintaining those fields active constitute a security service to parts of the landscape (WUI-homes, parcels of forests).
- Yet, northern Mediterranean (particularly mountain) agriculture is progressively being abandoned, thus increasing forest continuity and consequently the risk of larger wildfires. The 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. Then we have been able to observe during 21st century a deep change in agriculture social and physical landscape that will go on evolving these 20 next years.

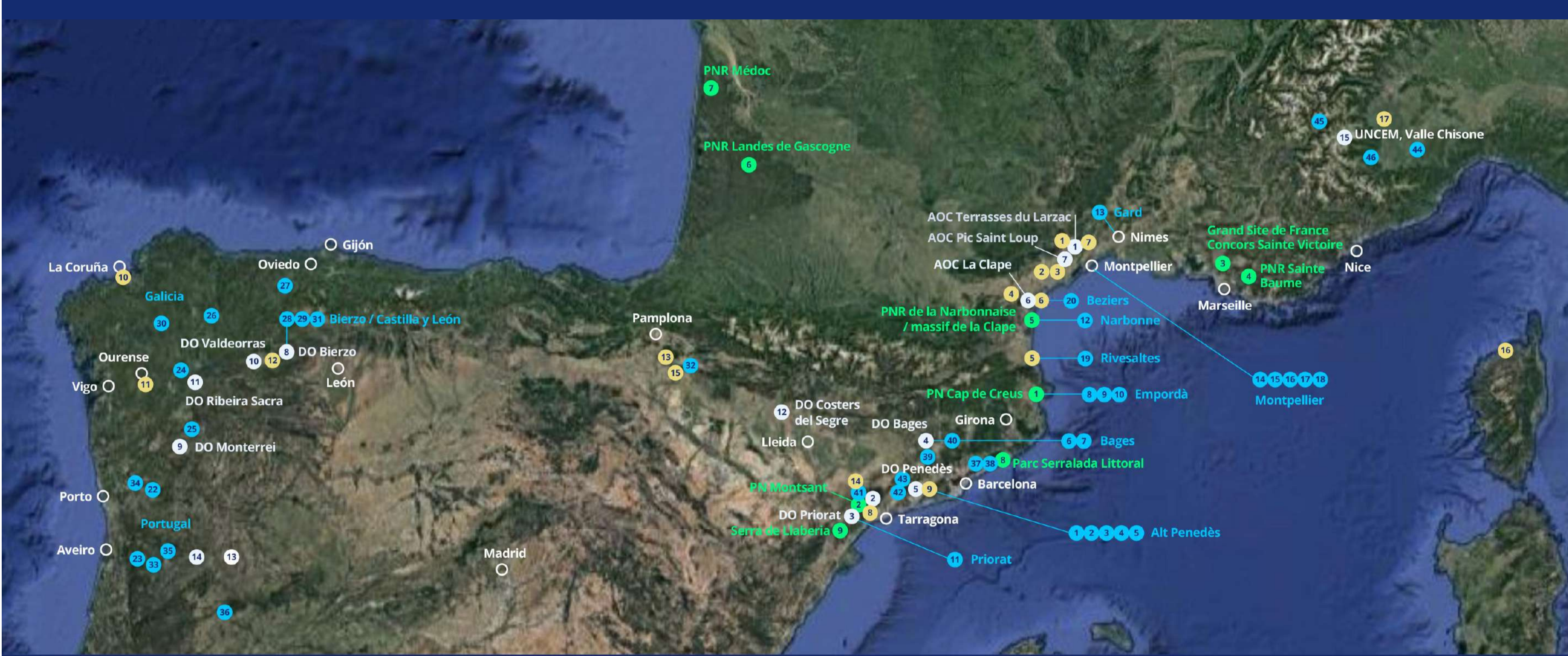
## Research questions

- RQ1:** Which are the productive factors of vineyard managers and wine producers that relate to wildfire risk? Which are their concerns?
- RQ2:** Are they interested in engaging in fire-reduction measures?
- RQ3:** What is the existing support of administrations in this field? Is it necessary to improve it and how?



## Methodology

- Online survey (2023) in wine sector of France, Spain, Italy, Portugal: 323 responses, 158 fulfilled
- In depth interviews (landscape managers, wine makers) and field visits in wine territories that suffered wildfires events in Mediterranean Spain, Portugal, Italy and France (2021-2024)



<p><b>46</b> Cellars</p> <p>All size cellars from "vignerons independant" to international group</p> <ul style="list-style-type: none"> <li>1 Liopart</li> <li>2 Can Felixes</li> <li>3 Mas Candí</li> <li>4 Heretat Mont Rubí</li> <li>5 Pardas</li> <li>6 Olter del Mas</li> <li>7 Abadell</li> <li>8 Vinyes dels Aspres</li> <li>9 Arché Papes</li> <li>10 Espelt</li> <li>11 Mas Martinet</li> <li>12 Chateau Pech Redon</li> <li>13 Chateau de Valcombe</li> <li>14 Domaine Cazalis</li> <li>15 Domaine de Mirabeau / Vignes de Coccagne</li> <li>16 Chateau Lascoux</li> <li>17 Domaine de la Triballe</li> <li>18 Cave Cooperative Le Cellier du Pic</li> <li>19 Cave Cooperative Vignerons des Cotes d'Alpy</li> <li>20 Grange de Bouys</li> <li>21 Cave cooperative Torpez</li> <li>22 Symington group</li> <li>23 Sogrape</li> <li>24 Regina Wanam (HGA Group)</li> <li>25 Bodega Triay</li> <li>26 Lar de Ribocoba</li> <li>27 Valdesil</li> <li>28 Encima Wines</li> <li>29 Pitecous (Terres Gaudais)</li> <li>30 Enomat</li> <li>31 Descendants de J. Palacios</li> <li>32 Cooperative Bodegas San Martin</li> <li>33 Tondato</li> <li>34 Quinta da Avileda</li> <li>35 Julia Kemper Wines</li> <li>36 Almeida Garratt Wines</li> <li>37 Alta Alala</li> <li>38 Bouquet d'Alella</li> <li>39 Entrebosc</li> <li>40 Cooperativa Artium</li> <li>41 Winerias Tomas Cusiné &amp; celler Cirvoles</li> <li>42 ADV Marges del Gato</li> <li>43 Mes 500</li> <li>44 Vignaeti piemontesi</li> <li>45 Azienda Agricola Martina</li> <li>46 Polaverga</li> </ul>	<p><b>17</b> Stakeholders</p> <p>Managing agri-culture, forest &amp; firefighting in wine areas, local research groups</p> <ul style="list-style-type: none"> <li>1 Chambre Agriculture du Gard</li> <li>2 SAFER Occitanie</li> <li>3 Pble DFCI ONF Hérault</li> <li>4 ONF Pyrénées Orientales</li> <li>5 SDIS 66</li> <li>6 SDIS 34</li> <li>7 Communauté de communes Grand Pic Saint Loup</li> <li>8 VITEC</li> <li>9 INCAVI</li> <li>10 Fundación Juana de Vega</li> <li>11 Xunta de Galicia, Consellería do Medio Rural - bomberos</li> <li>12 Asociación Bierzo Vivo</li> <li>13 Viticultura Viva</li> <li>14 Asociación propietarios forestals de la Pobla de Carvoles / Vilosell</li> <li>15 Ayuntamiento</li> <li>16 Association Uzoburu</li> <li>17 Dipartimento di protezione civile di governo regionale piemonte</li> <li>18 PNR Cap de Creus</li> <li>19 PN Montsant</li> <li>20 Grand Site de France Concors Sainte Victoire</li> <li>21 PNR Sainte Baume</li> <li>22 PNR de la Narbonne / massif de la Clape</li> <li>23 PNR Landes de Gascogne</li> <li>24 Parc Serralada Littoral</li> <li>25 Serra de Lliberia</li> </ul>	<p><b>15</b> Designation of Origin</p> <p>All scales from regional to local representation of wine areas</p> <ul style="list-style-type: none"> <li>1 AOC Terrasses du Larzac</li> <li>2 DO Montsant</li> <li>3 DO Priorat</li> <li>4 DO Bages</li> <li>5 DO Penedès</li> <li>6 DO La Clape</li> <li>7 AOC Pic Saint Loup</li> <li>8 DO Bierzo</li> <li>9 DO Monterrei</li> <li>10 DO Valdeorras</li> <li>11 DO Ribeira Sacra</li> <li>12 DO Costers del Segre</li> <li>13 DO Beira Interior</li> <li>14 DO &amp; COLAB Dão</li> <li>15 UNCEM, Valle Chisone</li> </ul>
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## Results

- Part of vineyard managers show concerns about wildfires in Mediterranean vineyards.
  - Spain: 85%
  - Portugal 65%
  - France: 58%
  - 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 (A large portion of the respondents declare counting with wine tourism as a side-activity), general awareness to their territory.
- 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. ( 8% of vineyard managers are part of a forest owner association in Spain, 5% in France, none in Italy).
- 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.
- 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. More: there is a loss of trust from wine growers towards administrations.
- There is an interest for developing a brand distinguishing wine makers engaged in fire risk prevention. Not so focused on increasing sales.

