

## Extended Abstract

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<b>Paper/Poster Title</b>	<b>Exploring the drivers of Sustainable Innovation in wine cooperatives: a case-studies analysis</b>
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<b>Abstract</b>	<b>200 words max</b>
<p>With the current social, economical, and environmental scenarios, the intensive farming is no longer viable. In this context, innovation may play a crucial role. In particular, responsible innovation represent a value creation driver, allowing farms to realize internal economies and external social economies. The development of innovative processes is particularly suited to cooperatives, as they generate a competitive advantage and allow to overcome two constraints to sustainable innovation adoption: high costs and complexity. These aspects, which highlight the significant role of cooperation and innovation in the shared value creation process, have not been broadly addressed in previous contributions, especially regarding the wine sector. Therefore, this study aims to investigate the drivers of innovation processes for shared value creation in wine cooperatives. A 2-step analysis was implemented, including the definition of an interpretative model on the drivers of sustainable innovation processes for shared value creation in cooperatives, and a comparative analysis among two wine cooperatives, in order to validate such model. Results have validated the hypothesized scheme: in both cases, the drivers included in the model are essential for the adoption of innovations in viticulture. In particular, governance mechanisms and the very effectiveness of innovations change according to the territorial context.</p>	
<b>Keywords</b>	smart innovation, viticulture, shared value creation, sustainability, smart farming, comparative analysis.
<b>JEL Code</b>	Q00: Agricultural and Natural Resource Economics; Environmental and Ecological Economics: General
<b>Introduction</b>	<b>100 – 250 words</b>
<p>Food systems sustainability is at the heart of the debate that sees Europe as the first climate-neutral continent by 2050. In particular, the EU proposes a forward-looking vision of agriculture: sustainable and pursued through innovation (EC, 2017). The most significant socio-economic changes also concerned citizens-consumers, who showed more interest toward environmental and social issues, generating new consumption demands including intangible needs (Marotta, Nazzaro, 2012). In this context, environmental protection represents a competitive lever that, through the introduction of sustainable innovations, allows to meet citizen-consumers' new needs and, at the same time, produces positive environmental and social externalities (Iakovou <i>et al.</i>, 2014; Marotta, Nazzaro, 2012, 2020). This scenario led to the</p>	

development of enterprise's new socially responsible behavior. In particular, the wine sector experimented innovative paths of change affecting production processes, increasingly smart and green (Fiore *et al.*, 2017; Dries *et al.*, 2013). Wine cooperatives have changed their investment priorities focusing on Precision and Smart Agriculture (Giuliani *et al.*, 2011). The introduction of Smart Innovation, when accompanied by appropriate models of corporate governance, can support farmers in business decisions and allow cooperatives to create and share value (Alves *et al.*, 2007). Furthermore, the cooperative model generates significant positive effects on territories, producing public goods and social wealth (Vitale, 2019). These aspects have not been broadly addressed in previous contributions. For this reason, this study aims to investigate the drivers and the impacts of the implementation of Smart and Precision Innovation processes on the creation and sharing of value in wine cooperatives.

**Methodology**

**100 – 250 words**

In order to achieve study's aims, an interpretative model has been proposed. Such model has been developed through the analysis of relevant contributions in literature concerning factors affecting sustainable innovation processes implementation in agrifood sector. In particular, five drivers of sustainable innovation for the creation and sharing of value have been identified: internal resources, external resources, policies, governance mechanisms, and market. Such model has been validated developing a comparative case-study analysis (Eisenhardt, 1989) of two wine cooperatives characterized by a high degree of innovation belonging to different territories (north and south Italy). Such cooperatives were selected according to different criteria (i.e., area of reference, degree of innovation, number of members). The study relies on both primary and secondary data. The latter were acquired from the websites of the cooperatives. The primary data were collected through semi-structured in-depth interviews concerning: i) smart and precision innovations adopted by the cooperative; ii) factors considered in the interpretative model as drivers of such innovations; iii) value creation variables (economic, environmental and social); iv) structural characteristics of the cooperative. The interviews were taped and transcribed. Cross-case analysis (Eisenhardt, 1989) was performed to find patterns and differences between the two cooperatives.

**Results**

**100 – 250 words**

The study shows that, for both cooperatives analyzed, internal resources represent an important driver for the development of smart and precision innovation projects for the creation of shared value. In particular, the cooperatives employ specialized staff for the development and adoption of sustainable innovation projects, and provide training activities. As for external resources, both cooperatives understand the importance of social capital: in both cases, partnerships have been made with public and private institutions for the development of sustainable innovation projects. Policies represent an essential tool as most innovation projects are implemented through public funds (i.e. RDPs and other public funding). Governance mechanisms



play a key role for both cooperatives, but in weak territorial context, such as that of the south of Italy, they are essential to involve cooperative members in innovative activities, as it is necessary to provide ad hoc contracts and incentive mechanisms. In stronger territories, instead, such as that of northern Italy, an essential role is assumed by trust, while it is not necessary to conclude formal contracts. With regard to the market, both cooperatives have adopted innovations to make production processes sustainable, in order to meet citizen-consumers' new needs. For both cooperatives, sustainable innovation processes led to several benefits in terms of economic (cost reduction and resource optimization), social (enhancement of the territory and increased employment), and environmental value creation (reduction of the use of fertilizers, reduction of waste of natural resources, and respect for the environment and biodiversity in general).

### **Discussion and Conclusion**

*100 – 250 words*

Results highlights the important role of governance mechanisms in weak territorial context, such as the south of Italy, in order to encourage cooperative members to take part in innovation processes. In fact, in such context, contractual and incentive mechanisms become significant in order to facilitate the dissemination of innovation and thus the creation and sharing of value.

This study contributes to the advancement of knowledge in providing new evidence regarding the role of innovation in the cooperative context. Policy makers could set ad hoc policies concerning various inclusion mechanisms or targeted training activities, especially in the weakest areas, in order to involve different actors in innovation projects and spread benefits related to such activities.

Despite the interesting results, the study has limitations linked essentially to the methodology adopted as the comparative analysis is based only on two case-studies, so the results obtained cannot be generalized.

Further and future researches should include a wider number of case-studies, in order to evaluate more realities belonging to different territorial contexts. In addition, future studies could focus on the effects, in terms of greater or lesser involvement of cooperative members in innovation processes, gained through different governance mechanisms. Furthermore, further research could extend the application of the proposed model to different sectors than wine, in order to assess its applicability outside the same.