



UNISECO



European Union's  
Horizon 2020  
Programme  
GA N° 773901

# Enhancing knowledge exchange for the adoption of agroecological practices in vineyards: the Chianti Biodistrict

Foto: A. Povellato

Understanding and Improving the Sustainability of Agro-ecological Farming Systems in the EU

ISSUE BRIEF

***Effective cooperation and peer-to-peer knowledge exchanges are key actions to operationalise agroecological practices and to avoid negative effects on yields and on economic viability of farms.***

Chianti is an intensive and renowned winegrowing area of Central Italy, where local actors have recognised the need of improving the sustainability of farming systems by adopting agroecological practices at the territorial level, with practical benefits for the local agri-food sector and community.

## ENVIRONMENTAL PRESSURES FROM INTENSIVE VINEYARD MANAGEMENT

Vineyard monoculture has led to soil degradation, environmental impacts of fertilisers and pesticides, and reduction of biodiversity. Adopting agroecological practices can address those issues. However, the lack of agroecology-specific advisory services is among the main barriers to practice diffusion in Chianti.

## COOPERATION CAN SPEED UP THE DIFFUSION OF AGROECOLOGY

Recently, environmentally concerned farmers have cooperated to create a “Biodistrict”, a grassroots initiative based on strategic planning, that endorses the principles of agroecology. The Chianti Biodistrict promotes the adoption of key agroecological practices in vineyards, i.e. green cover, composting and pest monitoring, that can boost the provision of public goods, while keeping the profitability of winemaking.

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**Country:**

Italy

**Related to UNISECO case study:**

Chianti Biodistrict

**Languages:**

EN, IT

**Year of release:**

2021

**Publisher:**

UNISECO project

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*Green cover of vineyards*

*The practice can increase the water retention potential and the organic matter of the soil, while preventing erosion and protecting biodiversity.*

Foto: A. Povellato

Biodistrict's strategy includes a series of initiatives that local actors should activate to support practice diffusion while removing key barriers: creating small machinery rings and cooperation networks for composing agricultural residues; increasing the number of weather forecast stations to improve pest outbreak modelling, promoting an integrated Agricultural Knowledge and Innovation System, able to consider the different local contexts within a wider network between research, advisors and farmers.

## POTENTIAL OUTCOMES

The identified agroecological practices can mitigate the environmental impacts of intensive vineyards, by improving the use efficiency of agronomic inputs and natural resources, with beneficial effects in terms of soil quality, reduced toxicity impacts on human health and ecosystems, and organoleptic attributes of products. A more effective cooperation and peer-to-peer knowledge exchanges can reduce the uncertainty associated with the implications of the adoption of new agroecological practices and minimise the risk of work overload, yield reduction and long payback periods.

## FURTHER INFORMATION

Chianti Biodistrict website - <https://www.biodistrettodelchianti.it/index-en.html>

UNISECO project website – Case Studies – Italy - <https://uniseco-project.eu/case-study/italy>

### ABOUT UNISECO:

UNISECO is a European research project aiming to develop innovative approaches to enhance the understanding of socio-economic and policy drivers and barriers for further development and implementation of agro-ecological practices in EU farming systems.

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Project timeframe: 1 May 2018 – 30 April 2021

<https://cordis.europa.eu/project/id/773901>

<https://zenodo.org/communities/uniseco-h2020/>

UNISECO in the EIP-Agri projects database:

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/understanding-and-improving-sustainability-agro>

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773901. This issue brief represents the views of the authors. The European Commission is not responsible for any use that may be made of the information it contains.