

A black and white photograph of a rural landscape in the Prosecco Hills. The foreground and middle ground are dominated by terraced vineyards with rows of bare grapevines. A small, two-story stone building with a tiled roof sits in the center of the vineyard. In the background, a hillside features several houses and a tall construction crane. The sky is overcast and grey.

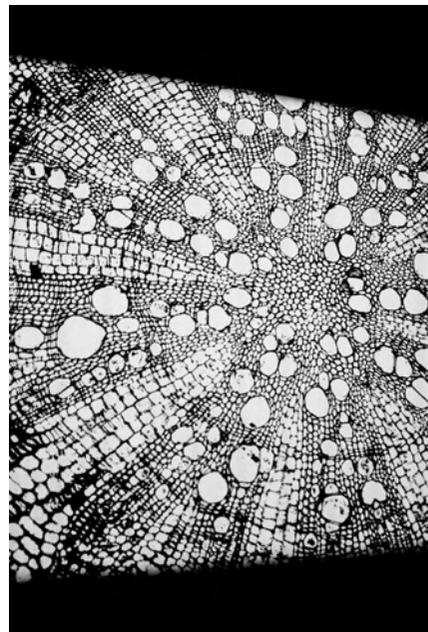
LANDSCAPES | RELATIONSHIPS  
of the Prosecco Hills



map



tree



grape cell

## INTRODUCTION

This booklet is a collaborative project created by eight individuals who are all Master's students at the University of Padova. It is an interdisciplinary venture in that its creators come from a variety of academic backgrounds including Human Rights, Local Development, Sustainable Agriculture and Arts, and so, each bring a particular form of knowledge to the project. The group is comprised of members from various countries – Czech Republic, Italy, Indonesia & South Africa – which also offers a diversity of lived experience to the project.

This project was created in response to a unique university programme entitled *Diversity Beyond the Landscape: Excellencies & Challenges of the UNESCO World Heritage Site of the Prosecco Hills*. The programme consisted of four weekend field trips to the Prosecco Hills region in the north of Italy (predominantly the towns of Conegliano and Valdobbiadene) between March and June 2022, in which a different topic was explored on each visit.

Prosecco wine is inherently tied to the physical space in which it is produced. Its value extends beyond the pleasure of tasting Prosecco's fresh and fruity flavour...

Indeed, it stems from a richly complex web of relationships between people, communities, business, land, culture, history and tradition. *Landscapes | Relationships of the Prosecco Hills* looks at these relationships through the lens of four of the region's landscapes:

### **Geological, Agricultural, Industrial and Social.**

Through this, we aim to provide a creative, collaborative and critical examination of the synergies, tensions and fragilities of the region, and create a conversation between visitor and local to highlight the shared responsibility we all have in taking care of our environment.

The information in this booklet has been collected through site visits, meetings with local actors, university professors and further self-motivated research. We hope that the collection of imagery, mapping, writing and interview in this booklet can provide visitors with an enriched understanding of the famous Prosecco wine, its diverse landscapes and its people, to show how this region is so worth celebrating – and preserving!

# TERROIR

"A particular and vital relationship between a specific region, quality products, producers and consumers." (Petrini 2001).

"The territory appears as an entity representing more than the sum of the material resources it contains. It embodies a story, the relationship to a place, a commitment to a social and cultural context."  
(Fonte, 2006)

We found that the concept of 'terroir' encapsulated our thematic interests well. Used in the context of wine-making, terroir is often thought to reference the vine's physical conditions, such as the soil, climate and topography. Indeed this is true, although it might not be the full picture... Terroir can also be said to include anthropogenic elements that contribute to the wine's character: human-nature interactions and the social-cultural context in which the vines are situated.

Terroir speaks to a relationship between Human and Nature. Similarly, the 2019 UNESCO recognition of the Prosecco Hills as a World Heritage Site is based upon the idea of the area as a '**cultural landscape**' in which the interaction between humans and the natural landscape is foundational to the region's significance. This interaction, along with the region's distinctive geomorphological formations known as '**hogbacks**', as well as the **mosaic** of small, vine-growing plots intermingled with woods and meadows are the three main and unique characteristics that UNESCO and the local communities celebrate.



## What is the ‘heritage’ of the Prosecco Hills in your opinion?

"A wonderful landscape, that is the result of an interesting and specific geomorphological setting." - *Francesco Ferrarese, University of Padova*

"The heritage of the Prosecco Hills is the perfect example of the union between the earth and the efforts and love of humans to take care of it, which results in what we see today. Both elements are essential to protect the Prosecco Hills, which are part and parcel of the tradition and culture of the territory and its inhabitants." - *Isidoro Rebuli, Boutique Hotel Municipio 1815/ Ristorante alla Cima*

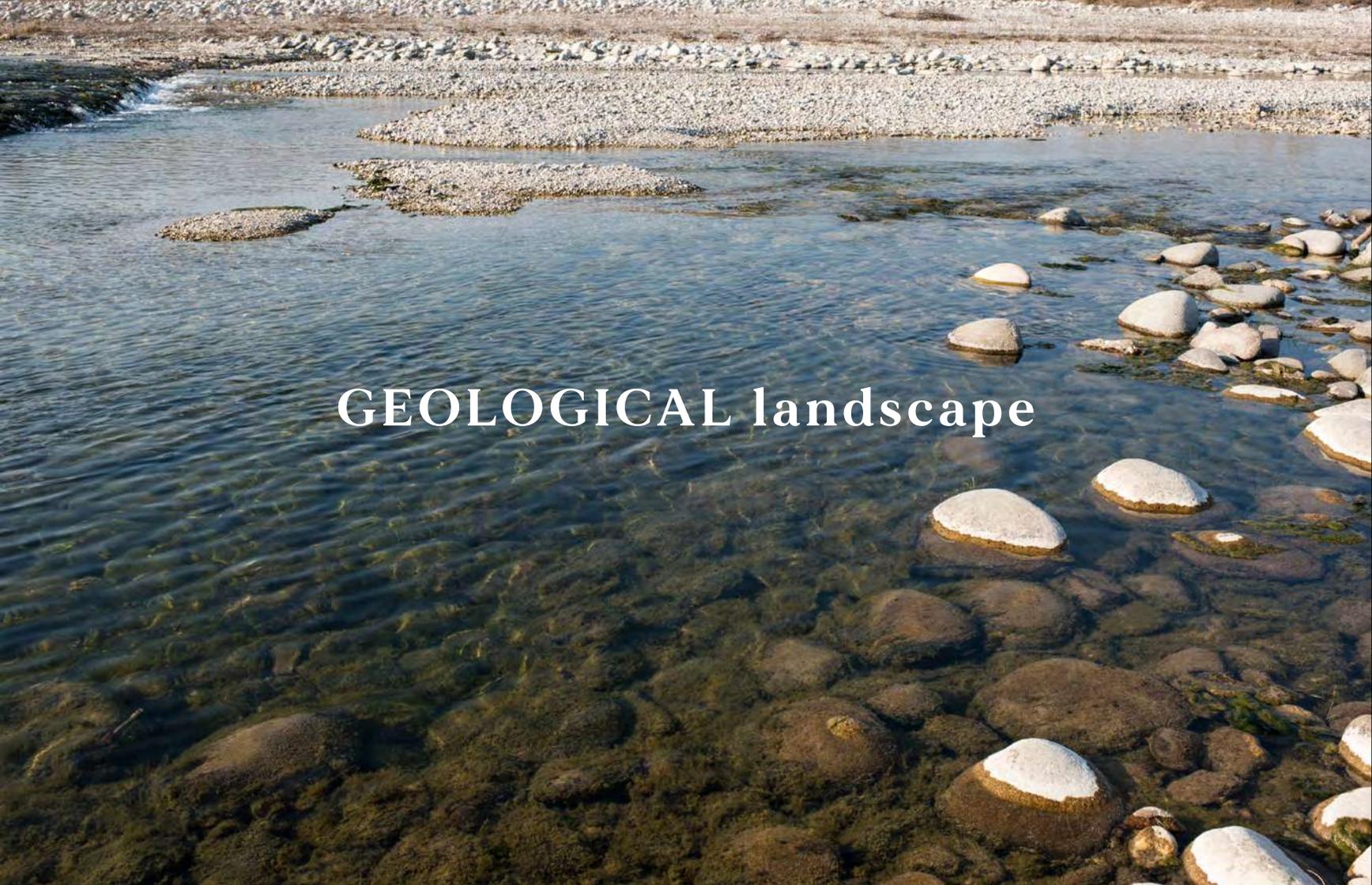
"The territory of the Hills is extremely rich in many ways. Surely, the natural landscapes – shaped by human activities and farmers in the course of centuries and now recognized as UNESCO heritage – together with the Valdobbiadene DOCG production, is the main strength. However, the UNESCO area and surroundings also offer a cultural, historical and artistic heritage, less known but worth exploring. Some examples in the UNESCO area are: the most ancient Italian wine road (Strada del Prosecco e Vini dei Colli di Conegliano e Valdobbiadene), the town of Cison di Valmarino Follina, the medieval city of Vittorio Veneto (historically relevant during the first world war); while outside of the UNESCO area: Monte Cesen, Asolo, Bassano del Grappa, Possagno (temple and plaster cast gallery of Antonio Canova), Villa palladiana a Maser. Besides, the hiking sector has a lot of potential with new hiking and walking trails being created." - *Elena Volontè, Ufficio Informazioni e Accoglienza turistica (IAT) di Valdobbiadene.*

"It is a mixture of landscape, architecture, art, agriculture, wine-making activities, and human capital." - *Camilla Facchinetti, Borgoluce Soc. Agricola*

"The heritage is strictly related to the culture of the Veneto region of dedication to work, perseverance and passion of its inhabitants. Thanks to UNESCO recognition, these values become everyone's heritage." - *Lara Mazzucco, Biemmereti spa (Azienda produttrice di reti, materassi e guanciali)*

"The heritage of the Prosecco Hills is represented by the uniqueness of the vineyards, viticulture, history and tradition, innovation, territory and landscape." - *Franco Meggio, University of Padua*





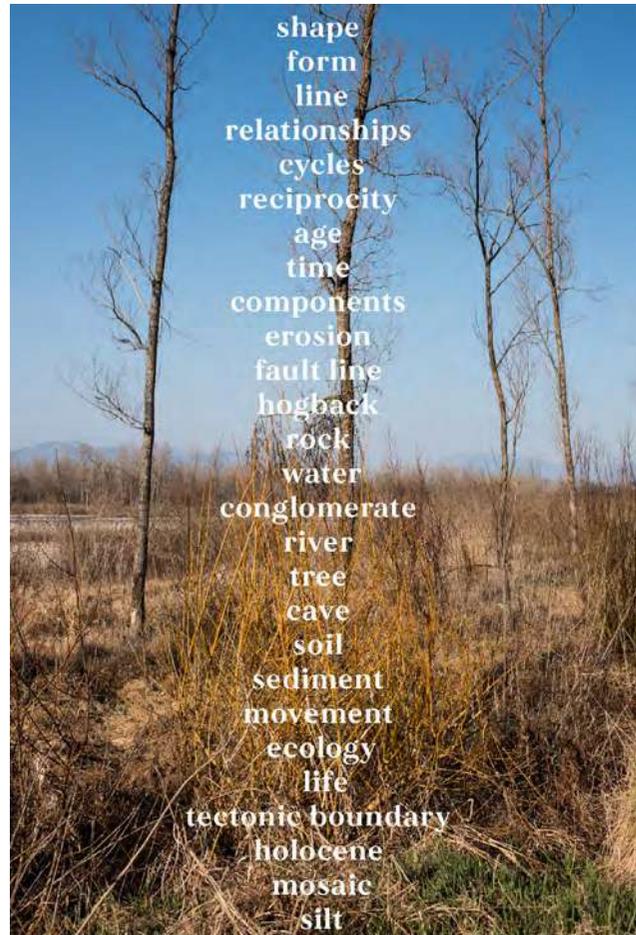
## GEOLOGICAL landscape

On our first visit we were introduced to the geological and geomorphological history and setting of the Hills. With this, we could begin to understand the significance of the physical land itself in terms of the region's viticultural success, and also in light of its UNESCO recognition. For centuries, grapes have been grown in the Conegliano-Valdobbiadene area, and in particular, the Glera grape variety that is the heart of Prosecco white wine has found itself an ideal home here. With the area's steep, sunny hills that allow for good water drainage, its location in between the Alps and the Venetian lagoon providing for optimal wind conditions, the temperate climate with summer rainfall and the alluvial soils, nature has offered humans and their grapevines an exemplary setting.

Over the centuries, humans have taken advantage of these ideal conditions and toiled and shaped the earth to fit their needs and desires. This has resulted in captivatingly picturesque landscapes, and of course, a delicious sparkling drink that is enjoyed across the world. In a sense, the land has created and shaped a community of people around it: those who live and work in the region,

and also those who are more distantly connected to it as Prosecco consumers. Here we observe an intimate relationship between the land – the soil, the hills, the plants – and humans, with each entity having a continuous role in shaping how the other exists. This relationship may not be entirely harmonious, however, because often humans tend to take more from nature than they offer in return. Due to the economic success of Prosecco, the region is largely monocultural whereby forest and meadow have increasingly been replaced by vine. Still, this ecology of rock, soil, plant, hill and farmer, producer, community, consumer live together and closely influence one another's trajectories.

The sacred Piave River winds through the Prosecco Superiore Hills, giving life and vibrancy to all who come into contact with her. The river follows gravity; she chooses the best and easiest path to travel down over the land. The land's shape controls where the water flows, and in return, the river simultaneously 'sculpts' the land. Here exists another poetic relationship of reciprocity, impression and shaping of two entities of nature.



## SOIL EROSION

The geomorphology of the Prosecco Hills is a key element that contributed to the recognition of the area as a UNESCO heritage site in 2019. However, there exists a serious geomorphological threat to the region and its associated Prosecco industry: soil erosion.

As defined by the United Nations Food and Agriculture Organization (FAO), soil erosion is "the accelerated removal of [the highly fertile] topsoil from the land surface through water, wind and tillage." It is a natural phenomenon, "but it is significantly increased and accelerated by unsustainable human activities through intensive agriculture, deforestation, overgrazing and improper land use changes." It has an impact on agriculture, biodiversity, hydrogeology and water quality. Since soil erosion rates are much higher than soil formation rates, its loss and degradation is not recoverable within a human lifespan (FAO, 2020).

A recent study conducted by the University of Padova tried to estimate the levels of soil erosion in the Prosecco DOCG Hills. The study considered two types of soil usage: 'traditional' and 'green'. In the 'traditional' soil, potential soil erosion could reach 43.7 tons per hectare each year.

Given that the total surface of the Prosecco Hills is 210 km<sup>2</sup>, soil erosion is estimated at 300.000 tons each year, corresponding to 3.3 kg per bottle of Prosecco.

On the other hand, in the 'green' type of soil usage, potential soil erosion is estimated to be three times lower, with 14.6 tons per hectare each year, corresponding to 1.1 kg per bottle of Prosecco (Suman, 2019).

Given these results, it can be concluded that soil erosion can be controlled by adopting sustainable agricultural practices. An interesting solution is presented in the documentary *Kiss the Ground* (2020), which is the result of seven years of studies, data collection and research. The documentary proposes the practice of regenerative agriculture to take care of the soil, reduce carbon emissions and reverse the effects of climate change. Industrial farming, monocultures and the use of pesticides are strongly condemned for the detrimental effect on the quality of the soil. Indeed, these practices make the soil unable to absorb CO<sub>2</sub> from the atmosphere, which is essential for the revitalization of the soil itself (Regione Emilia-Romagna, 2020)

During our field trips in the Prosecco Hills, we noticed that not all farmers and stakeholders of the area were so supportive of these kinds of sustainable agricultural practices. In many cases, there was much emphasis on the economic advantages of the Prosecco industry and not much on the social and environmental sides of sustainability. However, we also had the chance to visit the Ancient Oak farm – a certified organic farm, also practicing biodynamic farming – that appeared very sensitive to these prob-

lems.

At the present time, examples such as that of the Ancient Oak are isolated in the Prosecco Hills. In the future, we hope to observe a stronger attention towards sustainable agricultural practices that take into account the quality of the soil, as well as environmental, social and economic sustainability. Indeed, regenerative agriculture is an example of mutually beneficial relationships between humans, animals, and the environment and it can be part of the solution to preserve and enrich the heritage of the Prosecco Hills.

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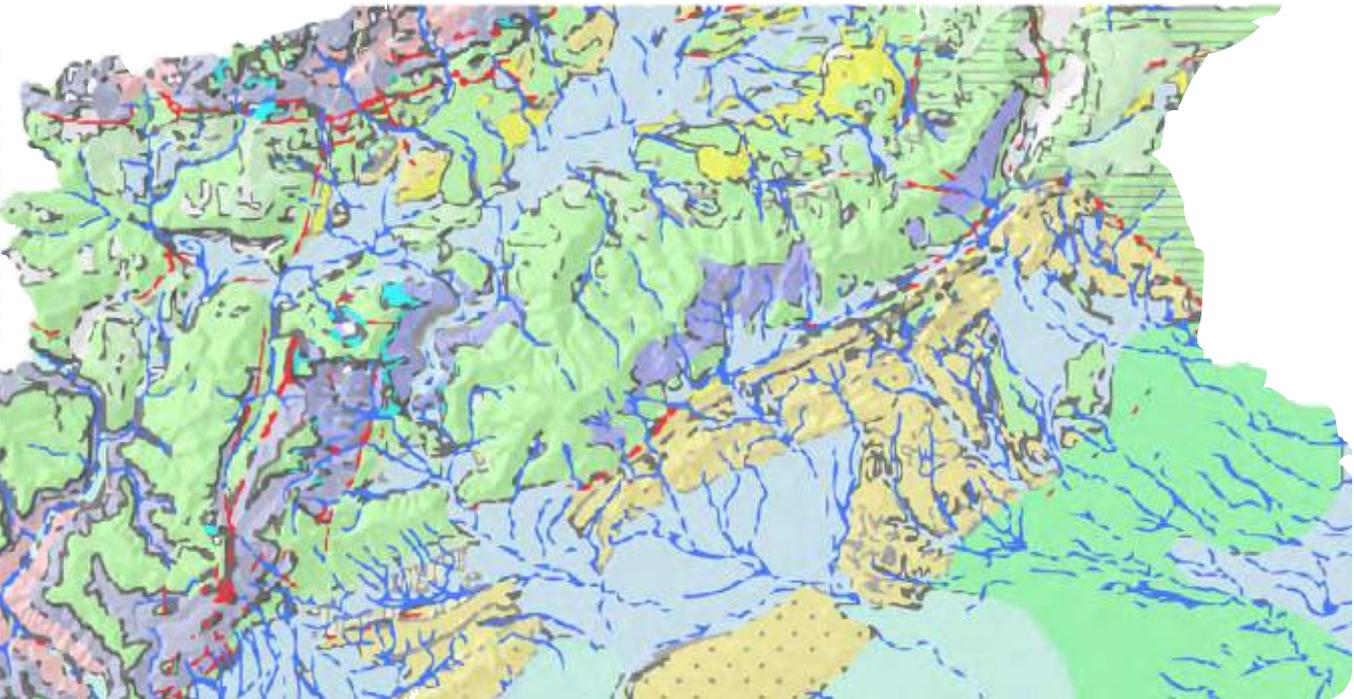
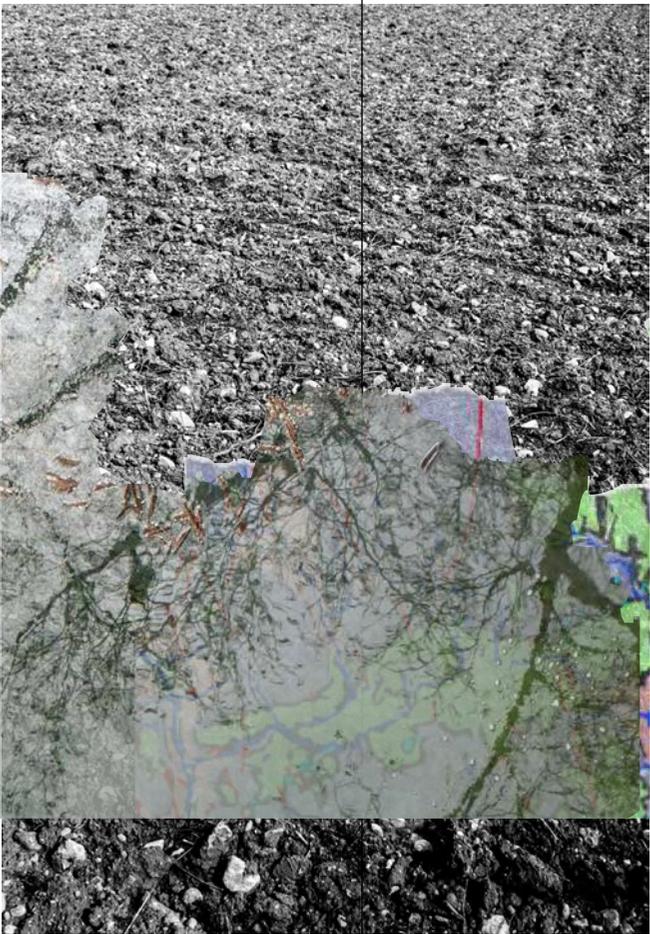
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Suman Francesco (2019), *Colline del Prosecco Docg: uno studio stima l'erosione del suolo*, Il Bo Live. Available at <https://ilbolive.unipd.it/index.php/it/news/colline-prosecco-docg-studio-stima-lerosione-suolo>

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## AGRICULTURAL landscape



### PROSECCO'S VITICULTURE: BETWEEN TRADITION & CHANGE

#### **Introduction: The Balance**

The sub-Alpine hills and the DOCG zones are characteristic with their hogback mountains and steep slopes on which Italian winemakers created a unique wine and heritage. With its UNESCO recognition in 2019, the Prosecco Hills created a bridge between two other UNESCO-valued sites: Venice and its lagoon, and the Dolomites. The world demand for Prosecco sky-rocketed.

The boom marked by the "Prosecco miracle" of the 2010s also caused an increased need to protect the landscapes of the Treviso province. Even though the mass deforestations quintessential of the 1990s and 2000s are now over, the conversion of other agricultural lands into new wineries continues. Hence, the UNESCO certification that evaluates the "patchwork" landscape of the Prosecco Hills can also be seen as an important guideline along the path toward a more sustainable region.

Despite its success, the region remains extremely vulnerable. Once the woods of the mountainsides have been cut and made into vineyards, they cannot be easily transformed back. What if the demand for the famous Italian Prosecco will fall short of its expectations one day? Not only would this scenario cause a loss of winemakers' investments, but it would also be a blow to the conservation of the landscapes. This scenario is probably not in the nearest future, however, since the DOC Prosecco area

exports around 78% of its production due to a permanent demand mostly from the UK, US, Germany, and France. Still, sustainable, and nature-sensitive projects are increasingly important for the region of the Prosecco Hills. We argue that there should be increased attention to organic and biodynamic winemaking, as well as to issues related to the changing climate and landscape. To preserve the tradition of the precious wineries, new and modern approaches are needed inasmuch as the environment keeps changing.

### **The Conflict**

There is a vibrant dichotomy present in the Prosecco Hills. There is a continuous relationship between people and nature, farmers and the land, environment and industry, development, and sustainability, as well as quantity and quality. These conflicts create a challenge for the region and the sustainable future of the local viticulture. They also imply that if the winemakers wish to follow their traditions, they need to change their practices. To overcome the obstacles caused by changing climate, winemakers need to choose or combine practices of mitigation and adaptation. The vineyards of the Prosecco Hills are extremely exposed to the impact of the warming of the globe, especially because of the prevailing monocultural landscape. For example, in 2013, around 6500 hectares of the region were dedicated to the production of Prosecco. In 2016, it was already over 7500 hectares. The winemakers are doomed to deal with the heat waves,

droughts, erosions but also floods or late frosts which are gradually becoming more common. They also need to harvest sooner and, in doing so, they lose one day of harvest each year. This is caused by the rising temperatures, evident especially on the hills (which are warmer than the valleys). If the grapes get sunburned, they lose their aroma typical of the local terroir. On the other hand, if the soil of the vineyards gets bombarded by heavy rains, it cannot absorb the excess water and causes further erosion.

The costs for winemakers producing organic Prosecco in such an environment are also rising. Consequently, only 3% of the wine cellars in the region follows organic procedures such as ISO 14001. Full-fledged organic vineyards need a larger amount of land (instead of the patchwork of smaller vineyards that is typical of the region) to protect her/his vines from the chemicals used on neighbouring farms. In the next part, we will look closely at the obstacles the winemakers face.

### **The Challenges**

Even though biological wineries do not use heavy chemicals to make their soil fruitful, they still need to protect their plants. This is often achieved by using copper and sulphites in the organic vineyards of the Prosecco Hills. Moreover, together with the other wineries, they must fight the FD (flavescence dorée) disease transmitted by a leafhopper. Due to the permanent presence of this disease in the vineyards, chemical control of the disease is

mandated by law throughout the region.

Eco-friendly wineries try to apply minimal chemicals to vines, and so they face a greater threat from the leafhopper insect. They need to apply the pesticide product directly onto the plant, so the soil will not be affected by the substance. In addition, organic vineyards need to be sprayed after each rain. This explains why the costs of organic winemaking are so high and hence, rare, despite the growing demand from local communities for more sustainable practices.

Local people directly experience the negative impacts of spraying chemical. In the past, for example, the pressure of locals led to the ban of an herbicide called 'glyphosate'. However, this did not solve all problems: the use of copper as the alternative to glyphosate also comes with its own complications such as its residual presence in the soil. Copper, together with sulphites, are the primary methods of vine protection used by organic wineries.

With the use of chemicals also comes the risk of increased pollution of surrounding waters. If the vineyards are built too close to a water source, the sulphites used on the vines will sooner or later penetrate a nearby river or other water source. The mention of such challenges introduces the struggles that the regional winemakers face. If they decide to turn to more sustainable and organic solutions, they must face increased costs and risks. Organ-

ic wine usually costs 20 to 40 per cent more to produce but the customers might not always be willing to pay the higher price.

We can also witness a conflict between the core and buffer zones of the Prosecco hills. The producers of DOCG wine put a higher emphasis on quality and tradition, and hence, are not strongly opposed to higher prices. On the other hand, the bigger and more commercial producers of the DOC area would like to increase the quantity of the produced wine. Therefore, current sustainable practices are more greatly connected with the DOCG zone of the UNESCO heritage site. However, sustainability should constitute a common aim for all producers in the region.

### **Solutions**

The DOCG area of the Prosecco Hills has approximately 8712 hectares and is able to produce around 104,7 million bottles of Prosecco. Because of the aforementioned "quality over quantity" mindset, we propose that attention should be turned to more sustainable and organic solutions. The producers of the Prosecco wine in the region should, for example, continue planting more trees and hedges around their vineyards in order to enrich the landscape biodiversity and prevent soil erosion.

The winemakers should also put greater emphasis on recycling methods, the use of renewable energy sources such as solar heating or hydroelectric power, and sus-

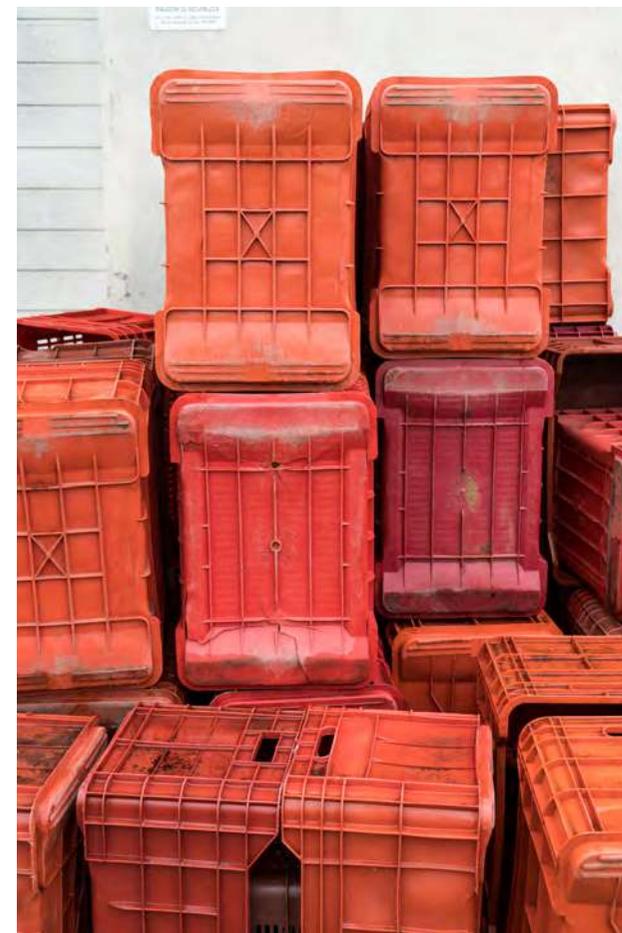
tainable and biodegradable packaging. Local firms can also strive for sustainable certification such as the SQNPI (Sistema Qualità Nazionale di Produzione Integrata). However, they should not seek such solutions purely for superficial publicity and marketing reasons, but rather embrace sustainability as a fundamental principle of business ethics.

Next, sustainable tourism is increasingly interconnected with the viticulture of the region and hence, can constitute a motivation for winemakers to move to a more environmentally-friendly production. "Food and wine" as in industry is often connected to "slow" tourism, which in turn implies a more sustainable way of living. Moreover, wine is ranked third on the list of motivations for tourists coming to Italy. Together with the luring landscapes, the region makes up the perfect travel spot.

Viticulture, local communities, and tourism providers can all benefit from a more sustainable approach. Besides the economic promise of these benefits, the winemakers should change their practices and treat their land more carefully to preserve their viticultural traditions. With ever-changing environmental uncertainties due to climate change, age-old traditions could be soon gone. So, let's create the change that the heritage of the Prosecco Hills so desperately needs.



Photo: Kateřina Hlaváčková



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Based on notes gained during the Arqus Spring School in the Prosecco Hills (2022) and the following sources:

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## What does 'sustainability' mean for you?

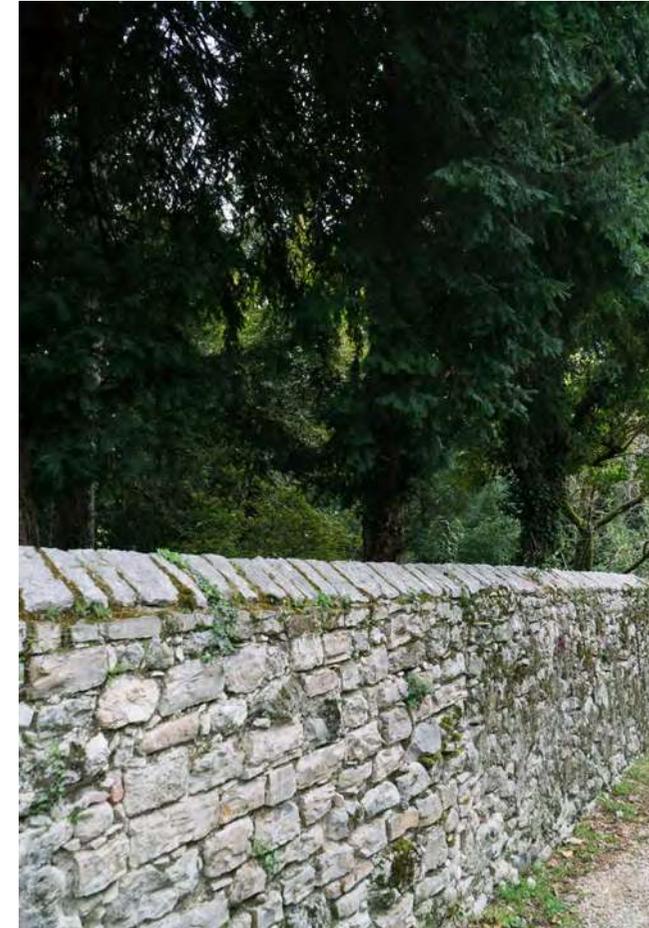
"To me, sustainability means to find a balance between the territory, the environment and its inhabitants. In the hotel and in the restaurant I tried to introduce sustainable practices, such as installing photovoltaic panels, substituting plastic products with others in recyclable materials, and offering electric means of transport to our customers." - *Isidoro Rebuli, Boutique Hotel Municipio 1815/ Ristorante alla Cima*

"According to me, sustainability means innovation, growth and development guided by environmental, social, political and economic principles and aiming at not endangering present and future generations. As touristic operators, we are trying to encompass sustainability in our daily activities: we print less materials (although the demand remains high), we made our website more intuitive and user-friendly, with a section where customers can download materials including maps and trails and, finally, we are trying to make our events as sustainable as possible." - *Elena Volontè, Ufficio Informazioni e Accoglienza turistica (IAT) di Valdobbiadene*

"To us, sustainability means to be certain about the future and our health. As a business, we already adopt sustainable practices. For example, our production waste is used by other companies to create a circular economy; we have a certification stating that our electricity is 100% from renewable sources; and, we installed photovoltaic panels. In the future we will continue to improve our environmental practices. Besides, for us, sustainability is not only environmental. It is also corporate responsibility, meaning that we want our business to be stable and healthy in the future." - *Lara Mazzucco, Biemmereti spa (Azienda produttrice di reti, materassi e guanciali)*

"According to me, sustainability means to adopt a lifestyle and to produce by using an amount of resources that does not impede to future generations to do the same. In my job as a university professor and in third mission activities, I try to teach these values in order to raise awareness on the importance of sustainable development." - *Franco Meggio, University of Padua*

"Since a long time, our company promotes sustainability through its agricultural practices: particularly, the preservation of biodiversity and multifunctionality. Today, there is a lot of attention to the well-being of animals and to the quality of life of the workforce working in the company." - *Camilla Facchinetti, Borgoluce Soc. Agricola*





## INDUSTRIAL landscape

Image: Google Maps

INDUSTRIES OF THE PROSECCO REGION: INNOVATION & BEST PRACTICES TO ENSURE SUSTAINABILITY

### **Being a Small-Medium Enterprise in a World Heritage Site**

Rural tourism and local industries are two economic realities of the Conegliano-Valdobbiadene UNESCO World Heritage Site. Local enterprises have a fundamental role in shaping best business practices to ensure the level of environmental, social and economic sustainability expected of a UNESCO-recognised site.

### **Rural Tourism: Slow and Sustainable**

The tourism industry is vital for the Italian economy, both in terms of revenue and employment. It has been reported that Italy is one of the leading global tourist destinations, and Veneto, in particular, holds the record for the most-visited region, with a tourist flow of 69,184,082 overnight stays and 19,172,576 arrivals in the 2017 period (Visentin & Vallerani, 2018). In addition, according to Ciset (International Centre of Studies on the Tourism Economy), the total number of foreign visitors has increased of 4.8% in arrivals and 7.3% in overnight stays from 2007 to 2016, growth associated by the *Centro Studi del Distretto Conegliano-Valdobbiadene D.O.C.G.* to the boom in sales of the Prosecco wine (Visentin & Vallerani, 2018). However, benefits for the local community and impacts on the environment are often unclear and not univocal. Due to the COVID-19 pandemic, the 2020 and 2021 seasons did not experience the

mass tourism expected from a newly nominated UNESCO World Heritage Site... In the next years the management of tourism will be a crucial test the Prosecco Hills' area will have to pass to ensure preservation of sustainability and the high standards required by UNESCO. Indeed, Visentin and Vallerani (2018) state that "there are potential problems in facilitating increased urbanisation, which could lead to standardisation of the landscape and damage to the area if plans are mismanaged" (Visentin & Vallerani, 2018). An increasing demand for wine, accommodations and attractions will involve huge changes in local configuration of the landscape (Visentin & Vallerani, 2018). Therefore, there is an urge for best practices to be implemented, namely: sustainable and slow rural tourism.

For these reasons, some actors in the territory are proposing initiatives aimed towards slow, rural and niche tourism. For example, the Tourist Information Office of Valdobbiadene which, together with local partners such as wineries and hotels (for example, we had the pleasure to visit Hotel Municipio), helps to promote the sustainable tourism and its qualitative management, endorsing the whole territory (not only the wineries) and enhancing its diversity. They aim to attract a new type of visitor: the one who has enough time to immerse herself in the local culture, food and heritage, for which one overnight stay is not enough. Examples of cultural, historical and artistic heritages of the area are many, and can be best enjoyed if enjoyed with time (for example, trekking or cycling, which

are also more sustainable and less invasive way of moving; the *Strada del Prosecco e Vini dei Colli di Conegliano e Valdobbiadene* the oldest wine route in Italy; the villages of Cison di Valmarino and Follina; and the mediaeval city of Vittorio Veneto).

A positive message is also being launched by tourists themselves (Visentin & Vallerani, 2018), who are starting to understand the importance of sustainability and slow tourism. "It is therefore important to create opportunities that will allow the consumer to admire (. . .) the beauty of the landscape, so that state of mind, sensations and pleasant memories will become the connecting thread back to the locus and its wine" (Tomasi, Gaiotti, Jones in 'Visentin & Vallerani, 2018).

Producers too are becoming more attentive to the quality of the landscape and the environment: "more than 60% of the sparkling wine companies have made, in 2016, interventions for the recovery and the enhancement of agrarian features and elements for conserving and enriching the environmental-heritage and the landscape" (Annual Report of the Consorzio of Conegliano-Valdobbiadene 2016 in 'Visentin & Vallerani, 2018').

To enhance sustainable management of landscape and slow tourism, collaborative efforts to raise awareness on environmental issues have been agreed upon by 15 municipalities of the DOCG and Veneto region, by commit-

ting to improve the quality of the landscape itself. In addition, a collaboration between regional universities and the Regional Landscape Observatory has led to annual 'landscape courses' to "develop and share among local stakeholders and policymakers a new awareness about landscape protection, management and planning strategies" (Visentin & Vallerani, 2018). Concerning slow tourism, cycle-pedestrian paths have been created to encourage such modes of travel and transport in the area.

#### **Industries and the Territory: Circularity and Industrial Symbiosis**

'Circularity' is a practice that aims at slowing, closing and shrinking material and energy cycles through long-lasting design and ensuring maintenance, repair, reuse, re-manufacturing and recycling. For a business model to be defined as 'circular', it should have specific characteristics: it has to minimise the use of virgin resources, increase the use of reusable resources and choose energy investments that are more efficient.

Concerning industries and sustainability in the Prosecco Hills, we have been keen to meet two realities that are pioneering sustainable and circular practices in their business model. These are both located in Pieve di Soligo, a municipality less than 15 km from Conegliano. We met with a local producer of high-quality cosmetics that are made partially from Glera grape waste material from local wineries. The negative connotations of the term "waste" is

sadly what often prevents many companies from adopting circular practices, but it is important to note that in some cases the output of a process is as (if not more) valuable as the virgin material itself. It was evident that the Glerage business owners' passion for this region translates into a business practice that makes use of a material otherwise discarded – a material that is quintessential to the region itself: the Glera grape.

The second example is the eco-industrial park that is to be created in Pieve di Soligo with the project Smart Oasis, born of a net of local enterprises which aims to regenerate the urban space, to improve mobility infrastructure and meet the needs of local entrepreneurs and inhabitants of the area by ensuring a just and inclusive transition: it is a huge step towards environmental, social and economic sustainability. Proximity indeed provides a tremendous opportunity to local enterprises to share human and financial resources and technological infrastructure, enhancing the possibility of innovation but also improving the quality of the environment and the wellbeing of people, making industrial areas more liveable.

#### **UNESCO Policy on the Integration of a Sustainable Development Perspective**

In 2015 the 20th General Assembly of the States Parties to the World Heritage Convention of UNESCO adopted a Policy on the integration of a sustainable development perspective into the processes of the World Heritage Con-

vention (UNESCO, n.d.). It was intended to be an improvement of the Convention in order to guide States Parties in managing their World Heritages according to sustainable development priorities. In the policy proposed, many articles make reference to best practices to help the management of the territory and ensure that local communities too could benefit from such recognition. Some examples are (UNESCO, 2015):

- . The management and conservation of World Heritage properties should contribute to fostering inclusive local economic development and enhancing livelihoods .
- . Enable enduring, inclusive, equitable and sustainable economic development, as well as full, productive and decent employment for local communities.
- . Develop and promote inclusive and equitable economic investments in and around World Heritage properties that make use of local resources and skills, preserve local knowledge systems and infrastructures, and make local communities and individuals, including marginalised populations, the primary beneficiaries of these investments.
- . Encourage locally-driven responsible and sustainable tourism management in and around World Heritage properties, to complement other sources of

growth, so as to promote economic diversification between tourism and non-tourism activities.

Reinvest part of the revenues from tourism activities in the conservation and management of heritage resources in and around World Heritage properties.

The UNESCO framework's emphasis on sustainable development means that, in addition to the prestige of the nomination, much work has to be done to all the terroir dimensions. Circularity and slow tourism, as seen above, are examples of best practices and, despite being still in the process, many steps towards an increased awareness, respect and sustainability of the area have been done.

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### WINERY BUSINESSES IN THE PROSECCO HILLS

Wineries are the heart of Conegliano-Valdobbiadene Prosecco Hills. The perpendicular vineyards winding down the road around the hills are owned by both small and big businesses alike, proud of their local wisdom and practices in producing Prosecco. Some of these wineries have been producing the white wine for decades, maintaining their core values while innovating and adjusting to market's demand throughout the years that result in high quality Prosecco. Taking examples of two family-owned wineries in the area, one small and one large scale, we will delve into different kinds of sustainable practices by the selected local players, all with one vision to take care of the land while still enjoying the fruits that it blessed its people with.

*L'Antica Quercia* is a relatively small winery located along Scomigo Hills in a small district in Conegliano, getting the name from two ancient oak trees that still stand up on the hills overlooking the vineyards up until this day. The name *L'Antica Quercia* literally means 'ancient oak'. Setting itself apart from other wineries due to its speciality in producing only organic wines, *L'Antica Quercia's* wines are mostly prosecco DOCG, with one type of red wine on its list. As it specializes in the production of Prosecco, the grape varietal it cultivates is glera.

In the field, glera grapes are grown along with other

plants, such as olive. The soil in the area is also for ceramics making, which leads to a nutrient dense rich soil. The vineyard employs biodynamic procedures in cultivating the grapes as well as in the post-harvesting stage. It uses organic compost in its cultivation process. In the spring, the colorful flowers that are fully bloomed are cut and buried in the soil to provide nutrients and nitrogen for the soil and vines to grow better. The winery does not use chemical fertilizers that might harm the soil. It uses native yeast on its musts, believing that it would provide the needed microbes for the vines as well as to appreciate the terroir. Its efforts to preserve the land and environment while producing its wine is one value emphasized and prided by *L'Antica Quercia*.

The second winery in the area that is committed to produce in the most sustainable and circular manner is *Borgoluce*. Located in Susegana, *Borgoluce* is an estate with property spanning over 1,000 hectares of woodlands, pastures, vineyards, orchards, canals, mills, cheese-making units and grain fields. Its commitment to produce wine in a sustainable manner does not only cover the grape cultivation and wine production, but also by the usage of clean energy in all its other products. Plantations, animal farms and woodlands supply the estate with energy from its by-products. Buffalo dung from its farms are turned into biogas using a biodigester machine, which then produces thermal energy used to heat up the buffalo sheds. The production chain in *Borgoluce* is short because every-

thing takes place within the estate.

Becoming a UNESCO World Heritage Site in 2019 means that the players in the Conegliano-Valdobbiadene areas are required to preserve the vitality of natural ecosystems and ensure inclusive economic growth and well-being both now and in the future. The practices of the two wineries differ due to the respective size and capability of each farm. However, both of them embody the values that the locals living in the Conegliano-Valdobbiadene Prosecco Hills: a taste of the land while preserving the environment.



## Do you observe any tensions, difficulties and conflicts and/or positive relationships in the Prosecco industry and area?

"The most evident conflicts to us are between the DOC and DOCG areas of wine production and between the regions of Conegliano and Valdobbiadene. The morphology of the territory of Conegliano and Valdobbiadene is different. Valdobbiadene is characterized by higher hills than Conegliano. Thus, the harvest does not happen at the same time in the two areas. Also the final product, wine, is different." - *Elena Volontè, Ufficio Informazioni e Accoglienza turistica (IAT) di Valdobbiadene*

"Only positive relationships. Eventually, the consciousness of being part of the UNESCO heritage grows." - *Giuliano Vantaggi, Associazione Per il Patrimonio delle Colline del Prosecco di Conegliano e Valdobbiadene UNESCO*

"The answer is complex, difficult to summarize. The UNESCO area covers 1/10 of the total area of production of Prosecco. Linking the UNESCO area to the Prosecco wine will surely have a positive impact in terms of notoriety also (and specially) for producers outside the core zone of UNESCO, who with aggressive commercial policies and low production costs are "cannibalizing" the Prosecco Superiore, the one produced in the hilly part and in the UNESCO core zone." - *Massimo De Nardo, Imprenditore agricolo, organizzatore eventi*

"Both. On the one hand, there is a tension between those who wish to reduce at all costs the use of pesticides in vulnerable areas of region (and in the region in general) and those who know how difficult it is to produce wine without pesticides given the pedoclimatic conditions of the territory. On the other hand, the conformation of the landscape - characterized by the presence of vineyards and marginal areas with woods and bushes - reduces the impact of intensive viticulture and creates an ideal habitat for the wildlife and for insects predators of the phytophagous of vines." - *Franco Meggio, University of Padua*

"Surely, it is not easy to reconcile the interests and needs of all actors in the territory. The aim should be to create a common path among the various institutions." - *Isidoro Rebuli, Boutique Hotel Municipio 1815/ Ristorante alla Cima*

"I observe a desire of wine-makers to be more sustainable and respectful towards the environment, an aspect that is not always understood by local communities that continue to see viticulture as a highly polluting industry." - *Camilla Facchinetti, Borgoluce Soc. Agricola*



## SOCIAL landscape

RELATIONSHIPS HUMANS - NATURE IN THE PROSECCO HILLS

### **The Prosecco Hills of Conegliano and Valdobbiadene – Heritage of Humanity**

The term *terroir* includes in its definition the existence of relationships. These relationships are to be intended as connections, red threads between all the areas, activities, points of interest that compose the identity of the landscape and the entities which inhabit it and that over time have helped shape the land.

In the definition that we adopted for this research, *terroir* is defined as "A particular and vital relationship between a specific region, quality products, producers and consumers (Petrini 2001)." "The territory appears as an entity representing more than the sum of the material resources it contains. It embodies a story, the relationship to a place, a commitment to a social and cultural context (Fonte, 2006)."

The social and cultural sphere and the human history is deeply rooted in the area and in the landscape; key to its identity and uniqueness. The Prosecco Hills of Conegliano and Valdobbiadene were named a World Heritage / Heritage of Humanity on July 7, 2019.

In the description of Le Colline del Prosecco di Conegliano e Valdobbiadene – The Prosecco Hills of Conegliano and

Valdobbiadene, the relationship between the human and the land is immediately highlighted, and noted how the presence of the human culture is essential to this area. The landscape – characterized by "hogback" hills (*cigli- oni*), small plots of vines on narrow grassy terraces, forests, small villages and farmland – has been shaped and adapted by man.

In this overview, UNESCO highlights two essential aspects that contribute to define a World Heritage Site. The first point concerns the integrity of the landscape, that is, anything that has contributed to changing the shape of the land over time, posing challenges to the environment, such as pests, wars, poverty, and the industrialization of viticulture, many of the attributes such as the vineyards, *cigli- oni* and architectural elements. Despite these challenges, the level of preservation is confirmed to be good and sufficient to give this title to the area.

However, it is emphasized that the integrity of this territory is to be intended as a vulnerable element under the challenges brought by climate change and the pressure of Prosecco production within a growing global market.

The second aspect UNESCO focuses on is the definition of "authenticity." In this part, which is essential for understanding of the relationship 'human beings – landscape', which is described as follows: "The main attributes of the

property relate to the distinctive landscape, where nature and human history have shaped and been shaped by an adapted and specific system for viticulture and land use emphasizing once again the inextricable link between human presence and territory."

**Poetry as the relationship Human – Nature:  
Andrea Zanzotto, Luciano Cecchinèl**

One aspect that in the last century has more than ever contributed to the creation of the cultural identity, integrity and authenticity on the landscape, is undoubtedly the art form of poetry.

The poet Andrea Zanzotto – the connection with nature  
In fact, one of the most important figures present in the territory of Pieve di Soligo is Andrea Zanzotto.

Andrea Zanzotto (Pieve di Soligo 1921 - Conegliano 2011) was an Italian poet, who participated in the Venetian Resistance during World War II sheltering from central Italy in Pieve di Soligo.

His laborious and autobiographical poetry is inscribed in the traces and memories of his birthplace's landscape, but his scope of reflection expands with concerns on the new industrial world around him. Therefore, his poetry was an act of resistance against the loss of meaning experienced in a fast-changing world.

The experiments with the Venetian dialect show a different approach to the language as a constant changing factor, which is deformed to mirror reality. Zanzotto's civil engagement is clear in his stand to protect his Veneto region from speculative building and landscape destruction. For these reasons, he is regarded as a warrior-poet, who fought with his words to protect what had been dear to him throughout his life: the landscape, politics, history, faith and utopia.

The connection of the poet with the landscape is evident throughout his intense poetic work. Nature is the center of his compositions; it is the starting and ending point of his research, as he mentioned: "*il paesaggio non esiste in senso assoluto ma si manifesta come evento, accadimento che lega in un intreccio indissolubile e non descrivibile - se non per approssimazioni - la realtà del luogo e la condizione psico-fisica dell'uomo*" ("the landscape does not exist in an absolute sense but manifests itself as an event, an occurrence that binds in an indissoluble and undecriable interweave - except for approximations - the reality of the place and the psycho-physical condition of man").

In fact, the poet Andrea Zanzotto, precisely because of this connection with the landscape, was committed to and fought for the preservation of nature, which is increasingly vulnerable and threatened, and which, for the poet, was image of the human condition.

The realization of the loss of nature is increasingly evident to the poet, who in various statements and poetic compositions expressed his concern for an increasingly threatened nature: "*Nel nostro paesaggio sembrano prevalere la fabbrichetta velenosa, la puzzolente discarica, l'orribile intasamento del traffico per strade sempre più insufficienti e pericolose*" ("In our landscape, the poisonous factory, the stinking landfill, the horrible traffic jam for increasingly insufficient and dangerous roads seem to prevail").

**Luciano Cecchinèl – the link with the landscape through emigration**

Luciano Cecchinèl, (Lago, June 15, 1947) is a contemporary poet, direct connection and personal friend of Andrea Zanzotto. Analyzing the figure of Luciano Cecchinèl, his story and his poetic compositions, it is fundamental to introduce another theme which is deeply rooted in this territory as a vital and strong link between the human component and the territory in question.

Central to Cecchinèl's poetic work is the theme of Venetian migration during the twentieth century. In fact, part of his maternal family was forced to leave their place of origin to emigrate to the United States in search of new opportunities and a better life, as the poet states: "*i veneti costretti dalla pellagra*" ("the Venetian forced by pellagra"). In the poet's work, as well as in his words, there lingers the idea of a "*cesura / caesura*" – having had to migrate – that both separates and unites, and that creates an awareness

in those who have emigrated and gone through such an experience, which, as seen in the poet's compositions throughout his life, never fades.

**Pieve di Soligo: relationship Human – Nature as a perspective for the future**

Connecting to these two themes that fall under the human culture-territory relationship, such as contact with nature and the commitment to its preservation, but also the connection of a community with the Prosecco hills landscape, as highlighted in the history of Venetian migration, it is important to focus, on what can now, in the present, be found of these relationships, in the territory analyzed.

Whilst 30 years ago the communities in the Veneto region were almost marginalized, today the human landscape is different thanks to the integration of foreigners into the Venetian community started in the early 1990s. It was a difficult journey because there were no precedents given that Italy was for a longtime a country of emigration and not of immigration. The experiences collected of second-generation citizens tell a story of integration through civil participation for the development of Italy.

Furthermore, there is a shared idea of the Italian territory as welcoming marginalized people and giving them the opportunity to further their education and show their cultural background, which permits the correction of biases

and prejudices based on cultural and religious differences. For instance, active citizenship through participation in local politics in order to inspire change within society by being a good citizen.

Pieve di Soligo is a shining example of integration because of the involvement of second-generation citizens in every level of society and their willingness to improve and bring forward change. Nonetheless, the city is facing challenges regarding the improvement of the relationships created in the past among different communities, the economic division between foreigner or second generations and the locals, and the cultural shift of transforming diversity into normality in the society.

Instances of the integration of different cultures in Pieve di Soligo are the many cultural and social initiatives in the territory:

*CulturalMente* is a cultural and religious association, its focus is on interfaith dialogue between Catholics and Muslims. They believe that only friendship between communities can make real change, for this reason they organize many culinary events as food is the bearer of cultures.

There are several Islamic associations collaborating with the municipality and other local organizations: the Veneto Islamic Federation, the UMEI (Unione Marocchini all'estero in Italia) and the Islamic Cultural Centre EMANET in

the Municipality of Susegana work to stop biases and discrimination against Muslims by educating on Islam and provide support to Muslims in Italy, specifically in the Veneto region.

The Community Garden of Associazione Democrazia is a social place where locals and foreigners meet and help each other. They farm the land not only for the subsistence of one's family, but also to fight loneliness and to ward off the extinction of produce such as ancient beans. The Diocesan Caritas is a pastoral organization of the Catholic Church in Italy. In Pieve di Soligo, it offers several services to foreign workers.

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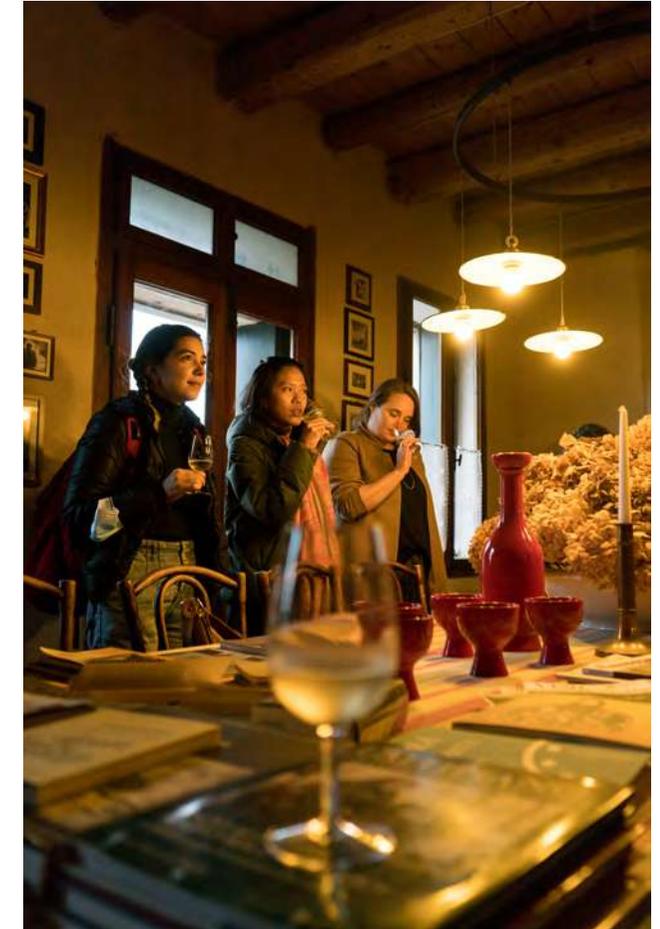
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## How has the UNESCO recognition impacted the region and its stakeholders?

"It contributed to link the Prosecco wine to a beautiful and armonious territory." - *Camilla Facchinetti, Borgoluce Soc. Agricola*

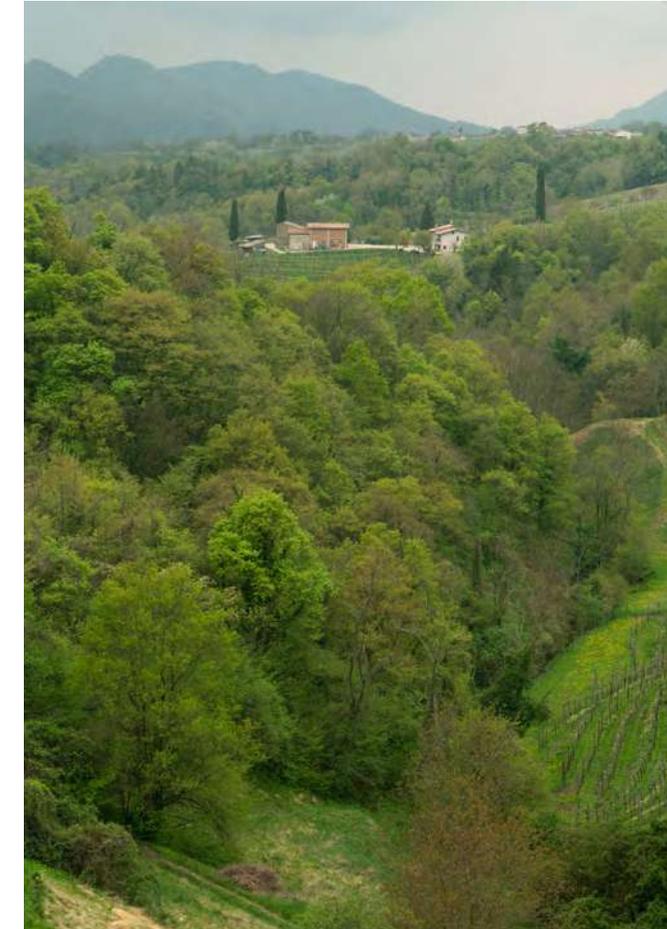
"According to me, the main impact is not to have reached a goal but to be in the beginning of a new process. Particularly, all actors in the wine making industry are more conscious of the importance to make concrete efforts to safeguard what was created, maintained and built in over a hundred years of viticulture." *Franco Meggio, University of Padua*

"The UNESCO recognition happened in 2019 and in 2020 the Covid-19 pandemic started. Therefore, the effects of the UNESCO recognition on tourism will be observed in the following years. Nonetheless, in the last years, international tourism increased and encouraged local inhabitants to pay more attention and care to tourists and to be more ready to welcome them. In a way, the Covid-19 pandemic was "helpful" because if tourists would have suddenly increased already in 2019, most likely the area would not have been ready to host all of them. Entrepreneurs are divided on this topic, with some who are open towards tourists, and others who do not want to adapt their offer to tourists' needs. For instance, some wineries are developing innovative projects of touristic enterprises, other wineries offer wine tastings and others, usually the smallest and oldest ones, are completely disinterested." - *Elena Volontè, Ufficio Informazioni e Accoglienza turistica (IAT) di Valdobbiadene.*

"I do not know exactly. However, I notice an increase in tourism and in the structures suitable for receiving it. I hope that the DOCG and UNESCO regulations are able to slow down the strong expansion in wine production." - *Francesco Ferrarese, University of Padua*

"It surely contributed to the increase in tourism and to make the territory known. It was also useful to make inhabitants more responsible and conscious of the territory in which they live and work." - *Isidoro Rebuli, Boutique Hotel Municipio 1815/ Ristorante alla Cima*

"It implies visibility and pride, since the path to be recognized as UNESCO heritage was long and difficult. The touristic and economic impact will be significant. Besides, many small houses in the area will be renovatd and used for turistic purposes." - *Lara Mazzucco, Biemmereti spa (Azienda produttrice di reti, materassi e guanciali)*



## Where do you see the future of the region of the Prosecco Hills?

"I see Italian and foreign tourists visiting the Prosecco Hills with great interest, appreciation, and willingness to deepen their knowledge of the territory." - *Camilla Facchinetti, Borgoluce Soc. Agricola*

"I hope to see the area of Conegliano and Valdobbiadene more involved in tourism, promoting a strong community with a strong identity but also welcoming, inclusive, innovative, sustainable. I hope that young generations will be able to create all this." - *Elena Volontè, Ufficio Informazioni e Accoglienza turistica (IAT) di Valdobbiadene*

"I see it in its maintenance, which should be the reason for UNESCO." - *Francesco Ferrarese, University of Padova*

"In hospitality, with attention towards the quality and not quantity of tourism." - *Massimo De Nardo, Imprenditore agricolo, organizzatore eventi*

"The future of the Prosecco Hills is and should be oriented towards innovation, taking advantage of scientific research to counter abiotic and biotic problems that will inevitably arise because of climate change." - *Franco Meggio, University of Padua*

"Our territory has a lot of potential and there will be a significant economic and touristic growth. It is essential to take advantage of this moment and to manage it well, to be able to maintain the identity of the territory intact." - *Isidoro Rebuli, Boutique Hotel Municipio 1815/ Ristorante alla Cima*

"The future that we envisage for the Prosecco Hills is that their beauty and authenticity will be preserved thanks to the great efforts of the farmers in the area." - *Lara Mazzucco, Biemmereti spa (Azienda produttrice di reti, materassi e guanciali)*

"The Prosecco Hills are now recognized as one of the most beautiful landscapes in the world. It will be important to show the best of it to international tourists." - *Giuliano Vantaggi, Associazione Per il Patrimonio delle Colline del Prosecco di Conegliano e Valdobbiadene UNESCO*



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(All images taken by Ella Petousis unless otherwise indicated).

