

Atlantic Vineyards: Reflecting on the Wine tourism Potential of the Azores

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Abstract:

This paper explores the wine tourism potential of the Azores, focusing on the unique Atlantic vineyards of the region. It examines the historical and cultural significance of viticulture in the Azores, highlighting how the island's volcanic soil and maritime climate contribute to the distinct characteristics of its wines. By analyzing current tourism trends and local wine tourism initiatives, the paper identifies opportunities for sustainable development and economic growth. It emphasizes integrating wine tourism with the broader cultural and natural heritage of the Azores, proposing strategies to enhance the visibility and attractiveness of the Azorean wine industry to global tourists. The findings suggest that with targeted investment and strategic marketing, the Azores can position itself as a premier destination for wine tourists, thereby boosting the local economy and preserving its unique viticultural heritage.

Keywords: Azores, tourism, wine, wine tourism, vineyards

JEL codes: Z32

Introduction

Portugal, despite its small size, boasts a diversity of soils and climates that create a variety of vineyards, making its wines famous worldwide. These regions, shaped by communities and nature, have rich historical and cultural

identities. The cultural landscapes, grape varieties, and production techniques constitute a unique heritage, significantly influencing production and policies, as highlighted by Quintela et al. (2023). By valuing wine and its landscapes, stakeholders in wine-producing regions, along with residents, are expanding employment opportunities in sparsely populated rural areas (Quintela et al., 2023).

These landscapes, cultures, grape varieties, and production techniques are, in themselves, a unique heritage in the world, making them strong international attractions for wine tourism. The growing economic interest in wine landscapes, manifested in activities that combine tourism with wine production, has increasingly attracted the attention of political and economic agents in wine-producing territories and places, as well as residents, who see strengthened opportunities in rural, sparsely populated interior areas.

In this process, the unique physical characteristics of the wine, associated with historical practices and cultural and heritage environments of great relevance and significance due to their typicity and uniqueness, are fundamental. In Portugal, rurality plays a crucial role in agriculture, and the wine sector has a significant dimension. About 20% of the total area of permanent crops is dedicated to vineyards, with this area being more significant in the agricultural regions of Trás-os-Montes, Ribatejo and Oeste, Alentejo, and Entre Douro e Minho (33.65%, 19%, 16.3%, and 13.4%, respectively) (INE, 2022). Furthermore, despite the small size of our country, the total wine production is approximately 7.5 million hectoliters in 2023, making us the 10th largest producer in the world (OIV, 2024).

In the Azores, wine production also plays an important role, with a significant vineyard area contributing to the local economy. The valorization of the Azores' wine landscapes is essential for promoting tourism in the region, creating new economic opportunities and reinforcing the cultural identity of the islands.

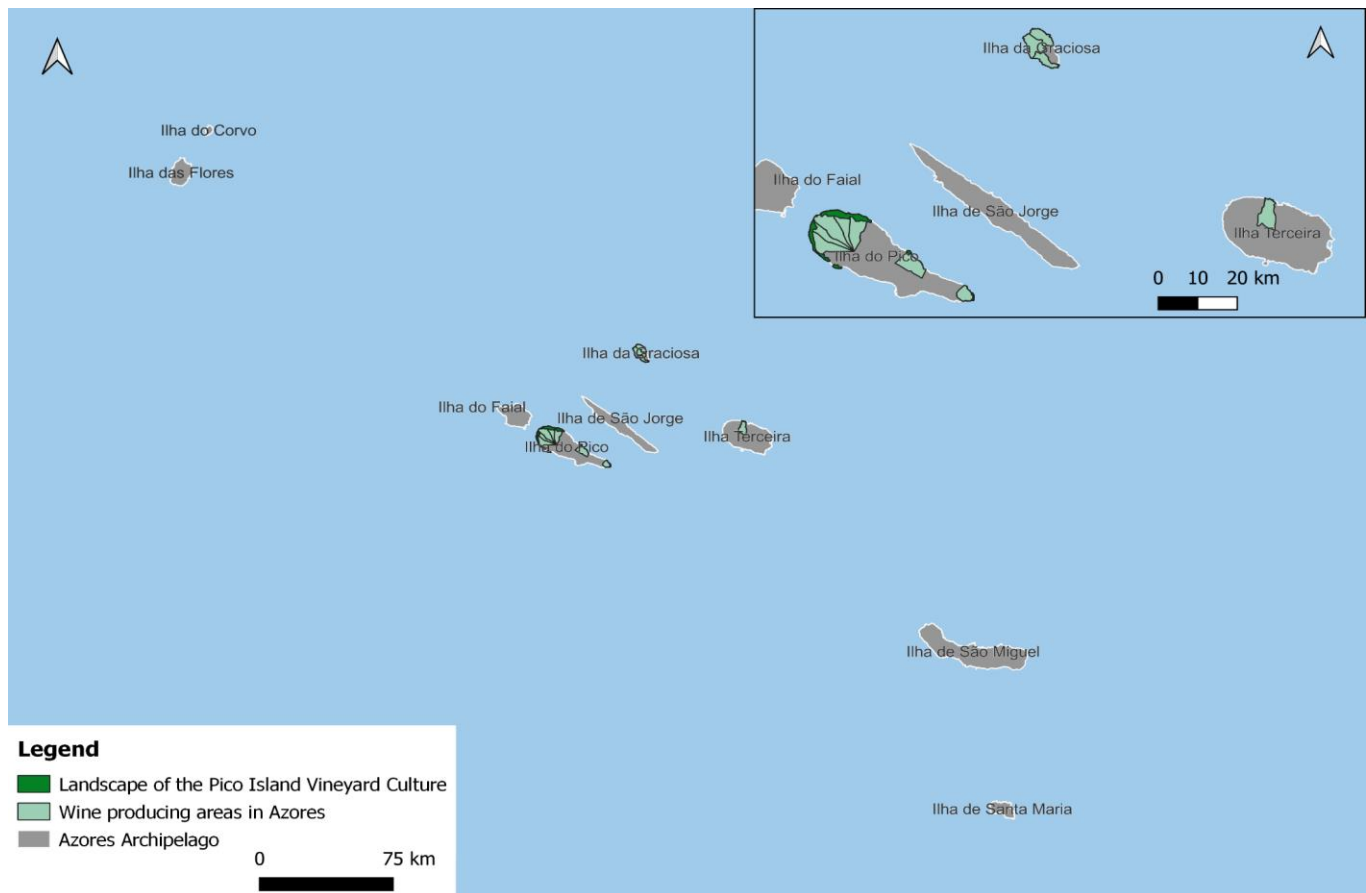
The aim of this work is to characterise the territory of the Azores archipelago in terms of its wine-growing dimension and to analyse its expansion between 2013 and 2023, from a longitudinal perspective. It also aims to summarise the evolution of the tourism phenomenon in the archipelago over the last decade, establishing a direct link to the growth of the wine tourism phenomenon in this destination.

This article is divided into several sections, beginning with the theoretical background relating to the characterisation of the wine-growing territory of the Azores, with emphasis on the evolution of viticultural production. It then goes on to briefly analyse the evolution of the Azores (2013-2023) as a tourist destination, particularly with regard to the profile of demand, essentially highlighting wine tourism. This is followed by a methodological framework and the results obtained from this analysis are presented, identifying the Azores' wine tourism potential. Finally, the conclusion presents the main contributions of the study and future research lines.

Background | Characterisation of the wine-growing territory of Azores

The Azores Archipelago comprises nine volcanic islands located in the North Atlantic, approximately 1500 km from the western coast of mainland Europe and about 3900 km from North America's coast (Figure 1).

Figure 1: Azores Archipelago

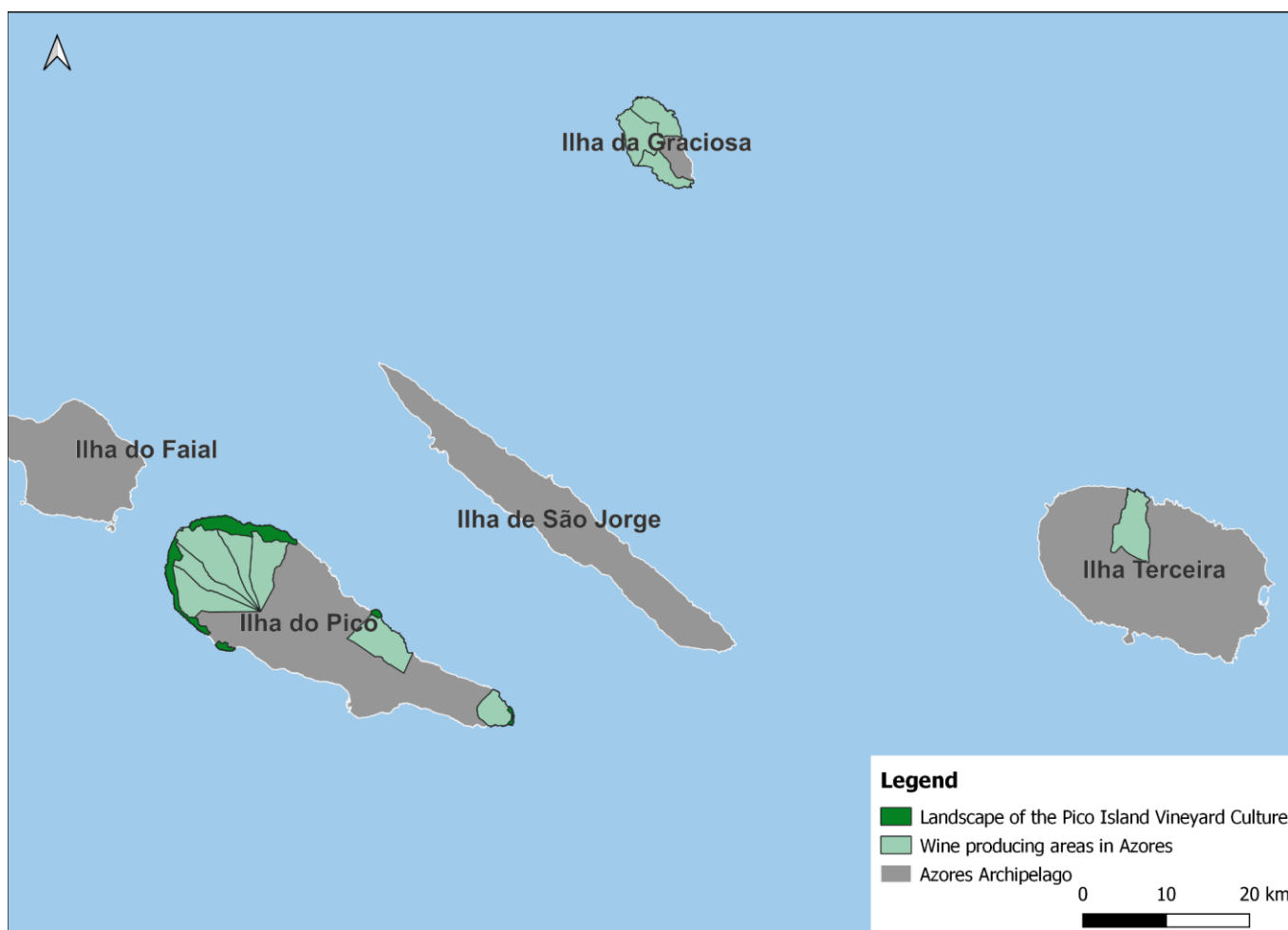


Source: own elaboration

The Azores' geology is complex, not only due to its volcanic origin but also because of its geotectonic setting. The islands are the result of volcanic activity associated with the triple junction of the North American, Eurasian, and African lithospheric plates. The Azores has a typically maritime climate, characterized by mild temperatures, high rainfall, and high relative humidity, with an average annual temperature around 17.4°C.

Regarding the introduction of viticulture in the Azores, it began in the early days of colonization, around the 15th century, with the aim of meeting the food needs of the first inhabitants. The initial plantations were established in marginal lands where other agricultural crops were not viable. Viticulture flourished on islands such as Pico, São Jorge, and Graciosa (Figure 2), playing a significant role in the local agricultural economy, particularly with the production of high-quality wines, such as those made from the Verdelho grape variety (Goulart, 1991; Sousa, 2004).

Figure 2: Main wine productions zone in Azores and UNESCO area



Source: own elaboration

In the 19th century, Azorean viticulture faced a severe setback with the arrival of powdery mildew and, later, phylloxera, pests that devastated European vineyards. These diseases forced significant restructuring in the islands' viticulture, with the introduction of American hybrid grape varieties known as Direct Producer Hybrids (HPD), which led to the production of "vinho de cheiro." This type of wine, characterized by a distinctive aroma often compared to strawberries, became part of the region's cultural identity (Sousa, 2004).

The volcanic soils of the islands, rich in nutrients and with a structure that facilitates drainage, along with the temperate climate and maritime influence, create a unique terroir. This terroir is particularly favourable for native grape varieties such as Verdelho, Arinto dos Açores, and Terrantez do Pico (Wiemann, 2022). Vineyards are traditionally planted in "currais," small enclosures surrounded by dry stone walls, which protect the plants from strong winds and sea salt. This traditional cultivation method not only preserves the natural landscape but also contributes to the uniqueness of the wines (Governo dos Açores, 2021).

Viticulture in the Azores faces several challenges. The rugged terrain and small scale of the vineyards hinder mechanization and increase production costs. Additionally, the labour force is scarce and aging, posing a threat to the continuity of viticultural traditions. Furthermore, the introduction of grape varieties not adapted to the local environment can lead to the loss of the unique characteristics of Azorean wines (Governo dos Açores, 2021). However, the Azores offer a remarkable example of how viticulture can be integrated into a unique landscape, resulting in wines that are both a cultural expression and a sensory experience. The preservation of traditional practices, combined with an innovative and sustainable approach, is crucial to ensure the future of viticulture in the region.

With Decree-Law No. 17/94 of January 25, which approved the Statute of Viticultural Zones for the Autonomous Region of the Azores, three production zones were designated as suitable for producing Quality Wines. Thus, the denominations "Biscoitos" and "Pico" were established for Quality Liqueur Wines Produced in a Determined Region (VLQPRD), and "Graciosa" for Quality Wines Produced in a Determined Region (VQPRD). As a result of the approval of these Demarcated Regions, the Azores Regional Viticulture Commission (CVRAçores) was established. In 1997, CVRAçores classified the first VQPRD and VLQPRD wines (<https://www.cvracores.pt/>).

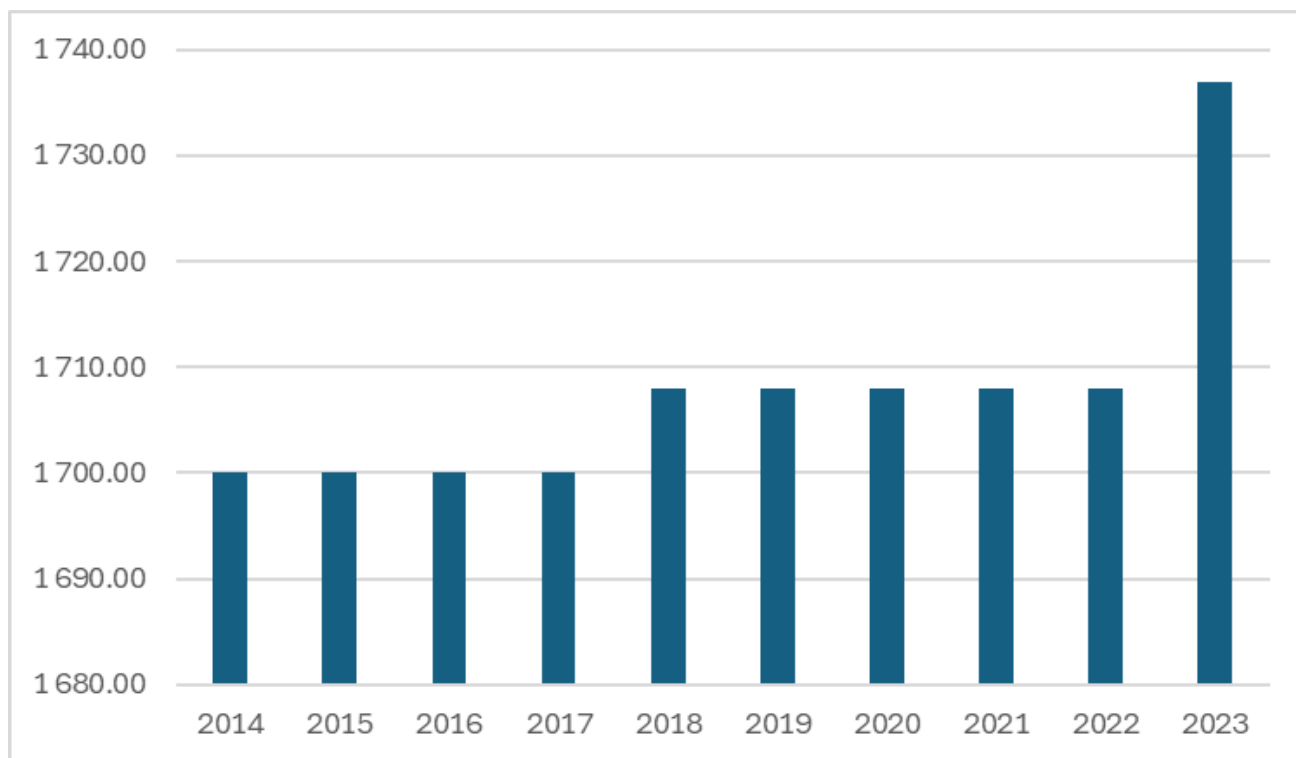
There is, therefore, significant potential for development, particularly through the promotion of wine tourism. The focus on native grape varieties and the quality of the wines has allowed Azorean wines, especially the white wines, to gain national and international recognition, noted for their freshness, salinity, and minerality (Ribeiro, 2020, Wiemann, 2022). Additionally, the viticultural landscapes of the Azores, particularly the vineyard culture on the island of Pico, are already recognized as a World Heritage Site by UNESCO. This offers a unique opportunity to attract tourists interested in authentic and quality experiences. The inscription of the Vineyard Culture Landscape of Pico Island on the UNESCO World Heritage list in 2004 is international recognition of a unique landscape, reflecting a distinctive version of viticultural activity on a small volcanic island and its evolution since the arrival of the first settlers in the 15th century (Costa, 2018).

With the growing recognition of the quality of its wines and the singular beauty of its landscapes, the Azores are well-positioned to establish themselves as a leading destination for wine tourism, contributing to the local economy and the preservation of its cultural heritage (Wiemann, 2022).

Evolution of Viticultural Production

In terms of total area, vineyards in the Azores covered 1,737 hectares in 2023, representing 1% of the total vineyard area in Portugal. Notably, and contrary to the national trend, the total vineyard area in the Azores has been increasing since 2018, as illustrated in figure 3.

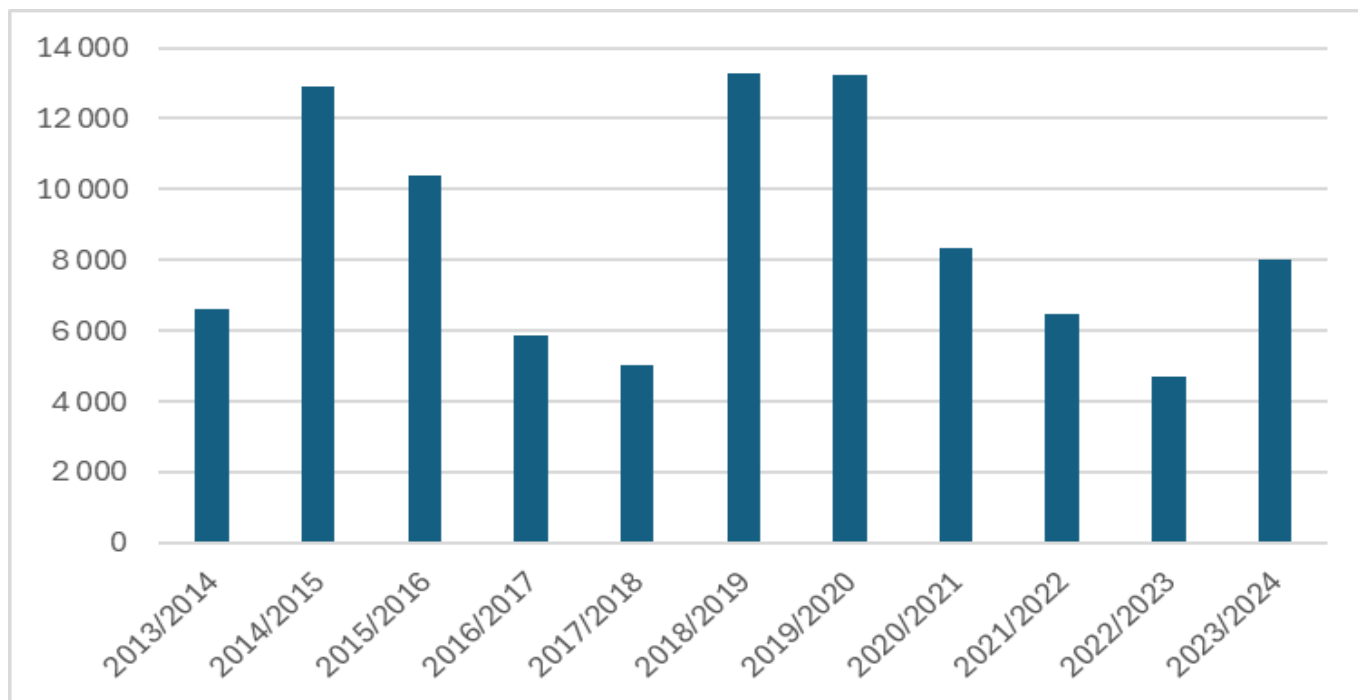
Figure 3: Evolution of the wine area in Azores



Source: IVV, 2024

Regarding the evolution of wine production (figure 4), it is interesting to note that it has been quite variable over the past ten years. Indeed, the highest production years were the 2018/2019 harvests, following a relatively sharp decline in 2017/2018. In the 2020/2021 harvest, there was another significant drop, almost halving the production of the previous year's harvest, before increasing again in the most recent 2023/2024 harvest.

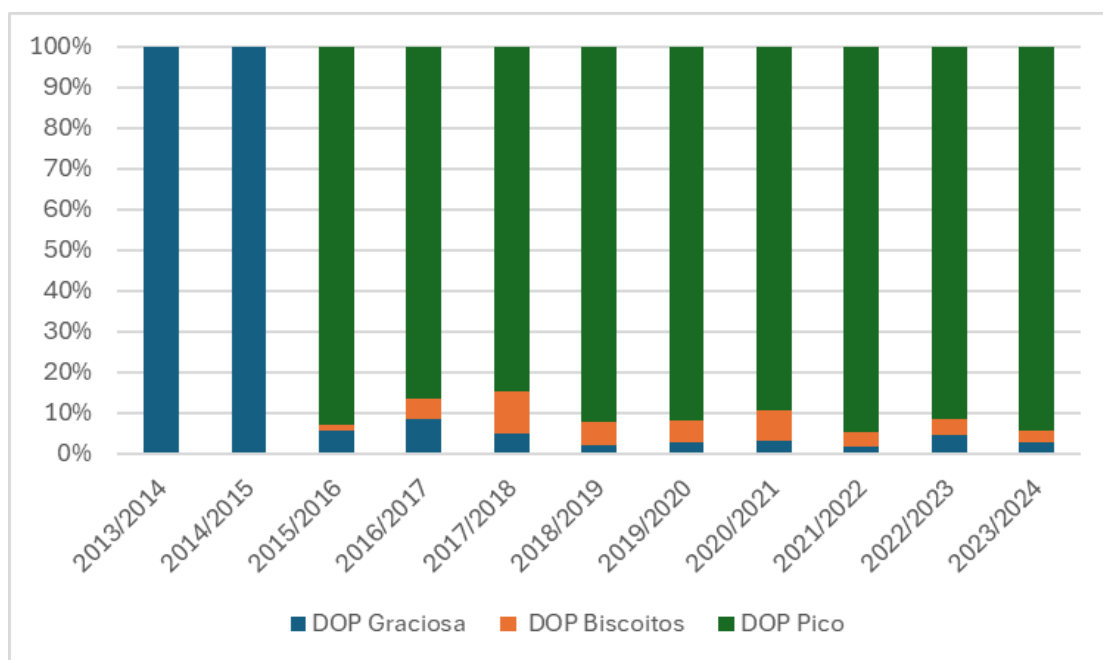
Figure 4: Evolution of the wine production in Azores



Source: IVV, 2024

An analysis of the production of wine eligible for the DOP (Quality Wines) designation emphasizes the importance of the Protected Landscape of the Vineyard Culture of Pico Island (figure 5). In recent years, this area has been responsible for the highest wine production in the Azores region.

Figure 5: Evolution of the wine production in Azores, by DOP



Source: IVV, 2024

Tourism evolution trends in the Azores (2013-2023)

Tourism in the Azores has grown significantly in recent years, demonstrating that this sector is being recognized as an essential component of development processes, especially in low-density territories and islands (Cadima Ribeiro et al., 2023). However, there have been two moments when this has been particularly clear and is essentially due to two events. The first coincides with the beginning of the century, through the creation of the tourism offer, and the second since 2015, thanks to the liberalisation of airspace.

In this way, the Azores went from being practically unknown in the 1990s, having at that time an economy based on the primary sector), and some corresponding industries, with tourism having increased significantly from 1997 to 2006 and decreased due to the global economic crisis of that time (Silveira and Santos, 2013).

Since 2015, due to the development of accessibility in terms of transport, an accelerated growth was reflected in the tourism sector. The results directly related to tourism include an increase in the number of tourists on inter-island, national and international flights, the opening of new routes to Europe and the USA (Silveira et al., 2023). This has also promoted the increase in the overnight stays and income, distributed somewhat differently across the various islands of the archipelago, all of which benefited from this development in tourism, namely the demand has a balanced impact on the specific accommodation sector, in all its different forms.

In 2023, the Azores broke all records in the tourism sector, with tourist accommodation registering around 3.8 million overnight stays and 1.2 million guests. By type of tourism sector in the Azores, 75.6 percent of companies are in the Accommodation sub-sector, 9 per cent in Tourist animation, 8.5 per cent in Restaurants and similar, and 8.5 per cent in Travel agencies and 3.8 per cent in Rent-a-car (OTA, 2020).

The latest figures released by the Regional Statistics Service (SREA) indicate that, in 2023, the total number of overnight stays was 3.8 million, an increase of 15.1 per cent on the previous year. The total number of guests was 1.2 million, 14.8 per cent more than in 2022, and the average stay was 3.18 days. According to the same source (SREA, 2023), these are the highest figures since records began (2001). Already in 2022, the total number of overnight stays had surpassed the highest figure ever recorded in 2019, before the covid-19 pandemic, which affected the sector for the next two years. The increase recorded in 2023 was higher than that seen in the country, which showed an increase of 10.7 per cent on the previous year (SREA, 2023). It should also be noted that a record 157.8 million euros in revenue was generated in hotel establishments, marking 2023 as the first year ever to exceed 150 million euros in total revenue in the Azorean hotel industry.

The year 2023 represented the breaking of many records in the tourism sector, with revenue from hotel establishments reaching a record 157.8 million euros, marking the first time that the 150 million euro mark was surpassed in the Azorean hotel industry. This year represented not only a record in terms of demand and growth, but also the winning of some of the sector's most important prizes and awards worldwide, as described in Table 1.

Table 1: National and International awards received by the Azores as a tourist destination

Year	Award	Description
2022	Winner of the National Tourism Award in the "Authentic Tourism" category, by Expresso Newspaper and BPI Bank	The "Azores Routes - Cultural and Landscape Itineraries" project, promoted by the Azores Regional Secretariat for Tourism, Mobility and Infrastructure. The project is characterised by structuring the tourist offer based on the natural and cultural heritage underlying the current and ancestral Azorean cultural practices.

2022	Winner of the National Tourism Award in the "Inclusive Tourism" category, by Expresso Newspaper and BPI Bank	A project that aims to investigate and enhance the tourist experience of children with autism spectrum disorders (ASD) and their carers. The project aims to develop tourist offers with the active participation of families and tour operators by creating unique adapted experiences, including an assessment of the children's psychological well-being.
2022	Destination of choice, by National Geographic	Selected as one of the destinations of choice for 2023.
2023	Winner of the National Tourism Award in the "Innovative Tourism" category, by Expresso Newspaper and BPI Bank	Ultra Blue Island® by Azores Trail Run® event. An annual trail running event held on the island of Faial in the Azores. Accessible to all types of people, from experienced and professional athletes to those new to trail running, or even those who are not athletes but are looking for a healthier and more active life.
2023	"World's Best Adventure Tourism Destination", by World Travel Awards	Portugal won in 12 global categories. The highlights were the victory of the Azores as the World's Best Adventure Tourism Destination, Madeira for the ninth time as the World's Best Island Destination, and Braga, voted the World's Best Emerging Destination.
2023	Certification of "Sustainable Tourism Destination" "Silver Level IV", by. Global Sustainable Tourism Council	The Azores are the first archipelagic region in the world with this certification.
2023	Featured in the "Nature" category, by National Geographic	They characterise the Azores as a "land born of fire, but now shrouded in green", stressing that "the Azores are working to guarantee their future".
2023	Madalena do Pico was distinguished as one of the "Best Tourism Villages" by the World Tourism Organisation	Madalena do Pico voted one of the 54 "Best Tourist Villages" in the world
2024	Quality Coast, an international prize awarded by Green Destinations	Distinguishes coastal environmental quality for sustainable tourism.

Source: own elaboration

In addition to the domestic market, the destination's main source markets are the United States of America, which stands out as the main source market with 17,000 overnight stays (19.1% of the subtotal - overnight stays from residents abroad) and year-on-year growth of 34.7%, followed by Germany with 16,700 overnight stays (18.8% of the subtotal) and zero year-on-year growth and Canada with 9,800 overnight stays (11.0% of the subtotal) and growth of 55.5% (SREA, 2023). The main reasons for travelling are leisure (84.3%), visiting family and friends (6.4%), business (4.6%) and others (4.7%). In general, holidaymakers are very satisfied with what the destination has to offer (4.7 out of 5) (OTA, 2019), knowing that residents play a fundamental role in the quality of tourists' experiences and in the popularity of the destination (Cadima Ribeiro et al., 2023). They value the landscape/nature, environmental quality, cleanliness, the "novelty" factor, safety and the quality of the sea water as the main attributes of the destination. However, they have lower levels of satisfaction with transport, particularly public transport, although since 2015 they have had a higher level of satisfaction with air transport. They value landscape/nature, environmental quality, cleanliness, the "novelty" factor, safety and the quality of seawater as the main attributes of the destination (OTA, 2019).

The Region's tourism performance and the various international awards and prizes demonstrate the positive evolution of tourism in the Azores, the high levels of quality offered in the destination and the international recognition that the region has achieved in one of the most competitive sectors of the world economy.

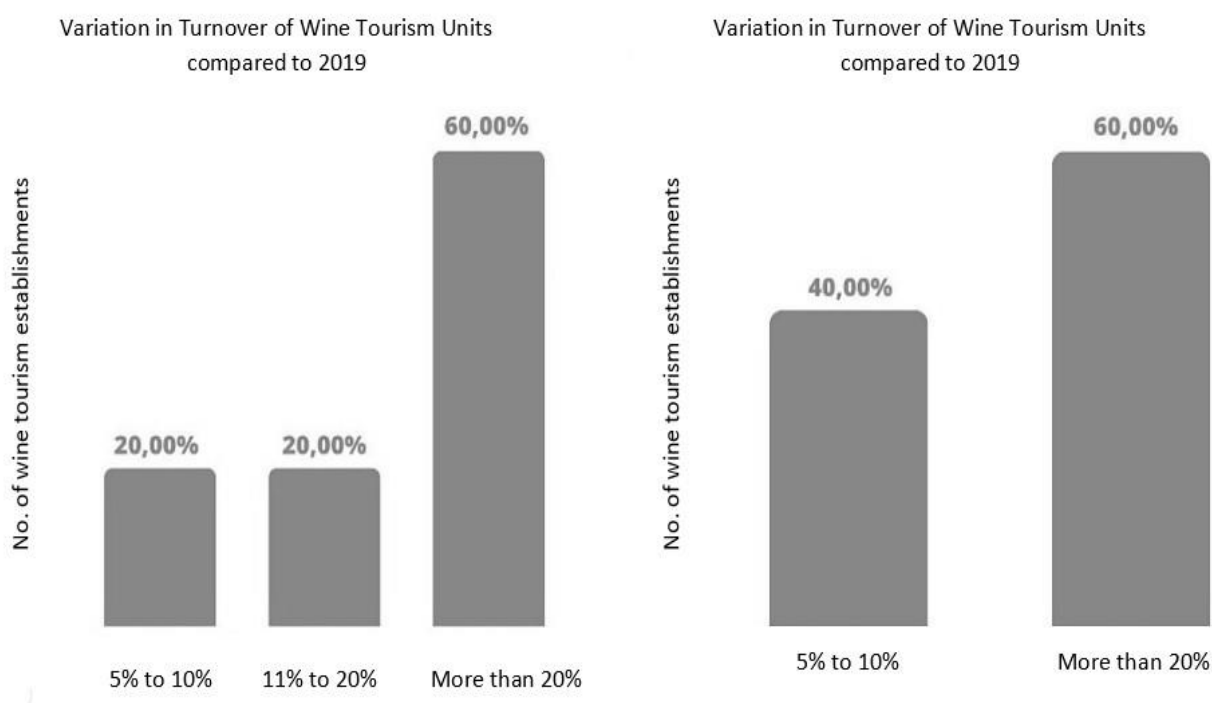
Methodological framework

The study employs an exploratory methodology aimed at the initial characterization of the problem, constituting the first stage of the research process. This involves a bibliographic review reflecting the accumulated scientific knowledge on Azores wine territory and vineyards, aggregated to the evolution of wine tourism in the region. In a second stage, it was collected a set of secondary data to analyse this territory to evaluate Azores as a leading destination along the last decade and its potential of evolution on wine tourism sector.

Analysing the Azores' wine tourism potential

Analysing the available data on tourism in the Azores, it is possible to draw parallels between the evolution of tourist demand in the archipelago and the popularity of Azorean wine, through the proliferation of wine tourism. According to Turismo de Portugal, the wine tourism survey revealed that both demand and turnover increased significantly compared to 2019, as shown in Figure 6.

Figure 6: Evolution of Wine Tourism in Azores (2019-2022)



Source: Tourism of Portugal, Survey to Wine Tourism (2022)

In the last 10 years, tourism in the Azores has undergone a significant evolution, becoming a destination sought after by travellers from all over the world. This transformation has been driven by various marketing initiatives and improved transport and accommodation infrastructure. The natural landscapes, outdoor activities and commitment to sustainability have attracted a growing number of tourists looking for authentic experiences in contact with nature.

At the same time, the wine produced in the Azores archipelago has gained international prominence and recognition, contributing to the region's popularity. The unique terroir, characterised by volcanic soil and the Atlantic climate, gives Azorean wines distinctive characteristics that have delighted oenophiles and wine critics.

Wine production, especially on the islands of Pico and Faial, has grown in quality and quantity, consolidating itself as an important element of the Azores' cultural and economic identity.

Thus, the evolution of tourism and the growing popularity of Azorean wine reflect a synergy that values and promotes the natural and cultural riches of the archipelago, ensuring a promising future for this unique region. In this context, wine tourism is a tourist product that is in the process of being affirmed in the region, as can be seen from the responses obtained regarding the evolution of demand, as well as the turnover directly associated with wine tourism.

Conclusion

In conclusion, the Azores have significant potential as a wine tourism destination, leveraging their unique volcanic soil, maritime climate, and rich viticultural heritage. By integrating wine tourism with the broader cultural and natural assets of the islands, the region can attract global tourists, promoting sustainable economic growth. Strategic investments and marketing can position the Azores as a premier destination for wine tourism, enhancing local economic prospects and preserving its distinctive viticultural traditions.

This study highlights the Azores' potential as a prime wine tourism destination, emphasizing the unique interplay between volcanic soil, maritime climate, and historical viticulture. Theoretically, it contributes to understanding how integrating wine tourism with local cultural and natural heritage can drive sustainable development. Practically, it suggests that strategic investments and marketing can enhance the global appeal of Azorean wines, thus bolstering the local economy.

Although, the research presents some limitations regarding reliance on secondary data and the regional scope, which may not fully capture the nuances of global wine tourism trends. Additionally, the longitudinal perspective, while insightful, may miss short-term fluctuations and recent developments in the tourism industry. In terms of future research, it should be focused on primary data collection, including tourist surveys and interviews with local stakeholders, to gain deeper insights into visitor experiences and preferences specifically on the wine tourism sector. Comparative studies with other emerging wine tourism destinations can also provide a broader context. Furthermore, exploring the impact of climate change on viticulture in the Azores will be crucial for long-term sustainability.

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