

THE LANDSCAPE IN THE DEVELOPMENT OF VINEYARD REGIONS

An application to the ACO Dão and ACO Bairrada (Central Portugal)

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ABSTRACT

The aim of this paper is to analyse the impact of landscapes in the notoriety and marketing of wines and in tourism promotion, specifically in the case of two centenary Portuguese demarcated regions - ACO *Dão* and ACO *Bairrada*. These two demarcations have a very long history in wine production and have remarkable wines. Nevertheless their wines aren't even close to being fully recognised in the international market or national one, as are the wines of *Douro*, *Vinhos Verdes* or *Alentejo*, the other Portuguese demarcated regions under evaluation. This lack of notability is linked not only to past fluctuations in the quality of the wine but also to the lack of recognition of other development factors, such as the landscape. Concerning the landscape, the centre of Portugal has a particular vineyard mosaic and a rich historical and archaeological patrimony that should be seen as a commodity by the producers and the tourism promoters.

This paper shows results from the first author's PhD thesis, specifically the identification of territorial symbolic elements (landmarks), which are potential tools for the creation of a singular image for the regions and the wines' differentiation in the global market. A compared research is made, among the five most relevant Portuguese demarcated regions: *Douro*, *Vinhos Verdes*, *Dão Bairrada* and *Alentejo*. An integrative methodology has been used, combining: a) a perception study, sustained in the opinions of producers, tourism promoters, official entities, residents and tourists, achieved through surveys analysed by using Multiple Correspondences Factorial Analysis (MCFA); b) a market study, joining the producers and the consumers' opinions about the use of the landscape and the commercial labelling in the wine selection and promotion, analysed through surveys treated by descriptive statistics; c) a representation study, supported in promotional brochures of both economic activities (the wine market and tourism), whose images are classified through Cohen's Textual Theory and analysed with the support of two other MCFAs.

Key-words: landscape, identity, perception, representation, market, enotourism

1. INTRODUCTION

This paper concerns the landscape of the five most emblematic Portuguese wine demarcated¹ regions: Vinhos Verdes, Porto/Douro, Dão, Bairrada and Alentejo (Lavrador Silva, 2008). The Dão and the Bairrada regions, have a long history in wine production and have produced remarkable wines although they still lack promotion, at both national and international scales.

The focus of this paper is to present the Dão and Bairrada landmarks (strong, weak, positive, negative) and its assignment in the identity of the regions, attending to the sub-regions' scale. It also mentions the role of the landscape in opposition to the labelling in wine marketing and (eno)tourism promotion, particularly important to the development of the multifunctional rural areas, as defended in the European Landscape Convention (EC, 2000) and the LEADER/PRODER Projects.

The PhD dissertation involves three research dimensions - perception, wine market and representation – sustained in surveys and interpretative images analysis, tested by heavy statistical tools, namely Multi Correspondences Factorial Analysis (MCFA). To present the results, graphs and GIS maps are used. Following the recommendations of the Common Agriculture Policy (CAP) and according to the perception study, the different stakeholders' opinions are researched in order to understand the levels of knowledge, interests and actuations. These facilitate the use of bottom-up management strategies concerning landscape preservation and give a contribution to wine marketing and tourism promotion. Complementarily, the results of the market study are presented, comparing the perspectives of consumers and producers. Looking for coherence and a mean of checking the surveys' answers, the results of the perception study and those of the market study are compared with the promotional images identified in the representation study.

It is defended in this study that an adjusted use of the landscape in wine promotion could help its qualification and increase the recognition of Dão and Bairrada as multifunctional wine regions. The conclusions give indications for readjustments between the wine and the tourism sectors concerning more articulated promotional actuations.

2. METHODS

In the perception and market studies surveys are used, supported in questionnaires, which were elaborated from the opinions of key stakeholders² and were pre-tested as is recommended in large samples and comparative studies (Jönsson and Gustavsson, 2002). Two questionnaires are constructed: a) one for the population in general, including wine experts and tourism technicians, concerning the perception study; b) another for producers and aimed at a market study.

For the perception study, there were 470 respondents. The questionnaire has three parts: Part A – related to landscape perception, evaluates: 1) notable aesthetic and promotional values; 2) viniculture characteristics; 3) potentialities and fragilities of the regions' management with implications in the viniculture and tourism activities; Part B – implicates 54 questions and focuses on three fundamental market dimensions

¹ To simplify, the Appellation of Controlled Origin (ACO) consigned to the regions is omitted in the full text.

² In the wine sector we consider producers, technicians and official authorities and in the tourism sector, we looked at tourism posts, wine museums and official authorities.

(Simões, 2006) - the wines' choice; the wines' promotion and the wines' commercialization - and is aimed at iconographical preferences in the promotion of the landscape and the label; Part C – the demographical and socioeconomic profile of the respondents is researched, concluding a universe of adults (84% between 20 and 60 years of age), with higher education degrees (47% university graduates), and qualified professions (43%), partially linked to the wine sector (35%, 65% in Dão and 24% in Bairrada). The marketing questionnaire involves 92 producers and presents four Groups of questions, two related to the promotion and the other two to the commercialization. The answers are compared with Part B of the perception surveys by the use of descriptive statistics.

For the representation study, 260 promotional publications (35 from the Dão region and 23 from Bairrada) are collected from producers, tourism posts and official entities. The images are analysed and categorized according to Cohens' Theory (Sarmiento, 2004). They are defined into three categories: Landscape, Labelling and Tourism.

The Multiple Correspondences Factorial Analysis (MCFA) is used in both the perception and representation studies, due to its ability to manipulate large and heterogeneous universes of information. In both studies the number of axes selected results from the condition of embracing all the variables (“actives” and “supplementary”) and the totality of the wine regions. For the selection of the representative variables in each axis the 100/ n rule are used, with n representing the minor matrix dimension (Jambu, 1989).

In the perception study - MCFA (a) - the “strong” and the “weak” landmarks are distinguished, depending on their contribution value in the axis and the existence of the responders' agreement. For the identification of the region or sub-region identity, we joined the axes and variables where the region is projected and analysed the notoriety, the number, quality and diversity of vineyard elements that represent the region.

For the representation study, two factorial analyses are done: MCFA (b) and MCFA (c). In the first, we set as “active” variables the regions and the promoters, making it possible to define differences between promotional actuations. In the second, the matrix is inversed, and the categories under evaluation (Landmark, Label and Tourism) are fixed as “active” variables. The MFCA (c) allows the landmarks' hierarchism, considering as “strong” landmarks those with higher contributions in the axes where the regions are projected. It also allows the definition of the region's identity. The region or sub-region is assumed as a wine region if the variables projected in the factorial axis represents vineyard elements, labelling and/or enotourism features. Another criterion to define the region's identity is whether the representation images have the consensus of the publishers.

3. THE AOC DÃO AND AOC BAIRRADA AS WINE REGIONS

In the perception study, the Dão and the Bairrada have less recognition (notoriety, aesthetic value, landmarks, touristic potentialities) than the other regions in the study, in particular the Porto/Douro and Alentejo. In fact, both regions have been plotted in secondary axes, or in a secondary position inside an axis, in attending the MFCA (a). Another result is both regions have been projected in the same half-axis, proving the existence of similarities in landscapes and other viniculture and touristic realities, allowing for the existence of Beira's (Central Portugal) territorial identity (Table 1).

Table 1 – Respondents’ opinions concerning the ACO Dão and ACO Bairrada

AXES	“CLASSIFICATION VARIABLES”	“OPINION VARIABLES”					
		VITIVINICULTURE	S.L.	TOURISM	S.L.	PROMOTION	S.L.
AXIS 3 (7,1%)	Producers and wine experts from ACO Dão and ACO Bairrada.	Tourism development is supported, namely: accommodation, restoration and cultural programs. Viniculture is emphasised: the environmental legislation and the enlargement of the vine parcels. The mosaic vine/ forest is defended.	+	Don’t recognize the aesthetic value of the region’s landscape. Depreciate the monumental and natural region’s heritage. Approve services in the <i>quintas</i> and manor houses.	-	Controversy concerning the mosaic vine/forest in the wines’ promotion, a negative landmark for the regions’ promotion.	-
	Retired from the ACO Vinhos Verdes	Traditional cultural systems are defended: polyculture and high systems. Different opinions concerning: the <i>bocage</i> , stone walls and terrains’ applanation.	-	The harmony is recognized in the Vinhos Verdes landscapes. They are concerned with the villages’ preservation and accessibilities. Negative impacts of the quarries are recognized.	±	No agreement concerning <i>bocage</i> .	-
AXIS 6 (5,4%)	Producers and wine experts from ACO Dão and ACO Bairrada.	Controversy attending the vine/ forest association. Sector modernization is defended: the vines’ irrigation, the intensification, the cooperatives and the increase of the parcels’ size	±	Negative impacts of the quarries are recognized.	±	Partially admitted as negative is the use of the mosaic vine/forest in the wines’ promotion. The wine quality is the most remarkable promotional value.	+
	Youngsters visiting the AOC Porto/Douro for the first time.	Unenlightened about cultural practices and the vine mosaics.	-	Interest in open air sports; without opinion attending services in the <i>quintas</i> and landscape fragilities, namely: the quarries’ and the junkyards’ impacts	±	Conscience of the inconvenience of using forests in the AOC Porto/Douros’ promotion.	±

SL – Sensitization level: High (+); Medium (±); Low (-)

As for the notoriety of the Dão and the Bairrada, the respondents link it to the wine quality. The association vine and forest is also identified as the two regions’ most characteristic mosaic. However, some respondents look at this mosaic as a negative landmark for the viniculture and promotion, perhaps due to the veiling of the vines by the forest, particularly in the Dão. Another result is the omission of the regions’ many heritage values: monuments, vernacular vestiges, archaeological constructions (miles, graves, others) and natural elements (thermal waters, soils, rocks), in the axes where the two demarcated regions are projected, showing a lack of recognition of those potentialities. There is also a lack of conscience of the environmental fragilities in these regions: the controversial territorial management, the industrial dispersion and the high forestall fire risk (DGOTDU, 2004).

The AFCM (a) also proves the relative reduced notoriety of the Dão and the Bairrada as wine regions. In fact, there is a reduced presence of tourists and people born or living outside of the regions in the explanation of the axes where the Dão and Bairrada are projected, in opposition to the other demarcations in the study: Vinhos Verdes, Douro and Alentejo. Confirming the lack of notoriety the AFCM (a) revealed: a) in axis 4 tourism guides from the Oporto wine cellars considering the wines’ notoriety of Bairrada as middle. Their opponents, wine technicians from the Alentejo,

have the same opinion attending the Dão; b) in axis 5 employees in the services, in Alentejo, consider the notoriety of the Dão as a winegrowing region to be reduced.

In the market study, the consumers of the Dão and Bairrada emphasise the long history of wine production in these regions (mean 50%; Dão 66%; Bairrada 57%) and wine health benefits (Dão 63%, Bairrada, Alentejo and Douro 40%). Attending the labelling, the quality/price relation is also particularly important in the consumers' choices of these two regions (Dão 77%; Bairrada 74%; mean 73%). In opposition, the consumers are less demanding in relation to the wine quality, expressed in the certification (mean 47%; Bairrada 35% and Dão 27%, Fig. 1). In the labelling representation, the respondents of the Dão are specially fond of the heraldic (Dão 54%, mean 35%), the most voted icon, followed by sophisticated labels (mean 33%), logos (mean 25%), and mythology (mean 20%).

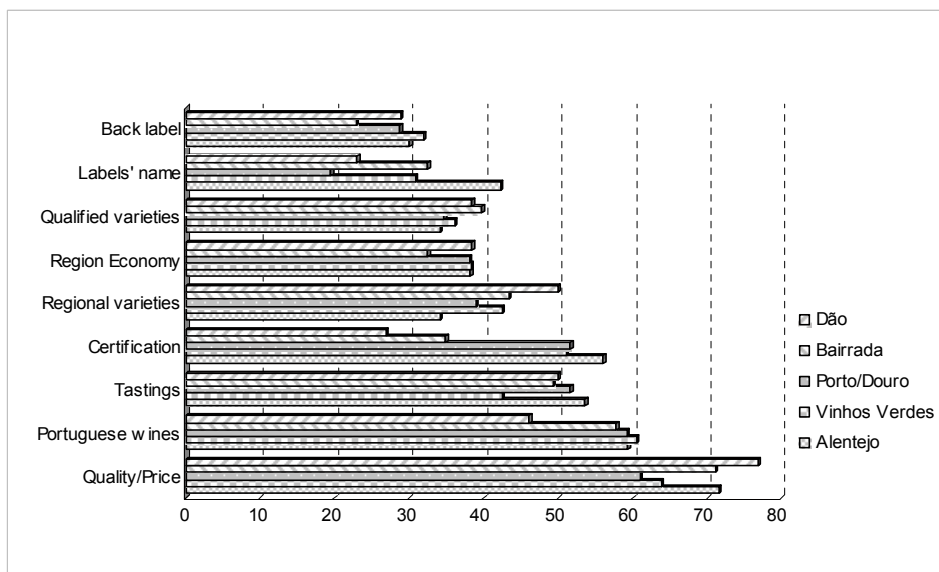


Figure 1 - The labelling in the choice of the wine

For the Dão and Bairrada consumers, the landscape is of less interest in the wine choice, in comparing with those from the Porto/Douro or Alentejo regions (Fig. 2). Even the modern cellars have a reduced interest (Dão 13%), which is better evaluated in Bairrada (17%), perhaps given the large “wine cathedrals”, and the signature of renowned architects whose projects have recently been constructed in this region. In the landscape representation, the consumers like realistic images, emphasising the vines' elements (grapes, colours of the lifts, others - mean 77%, Bairrada 76% and Dão 72%).

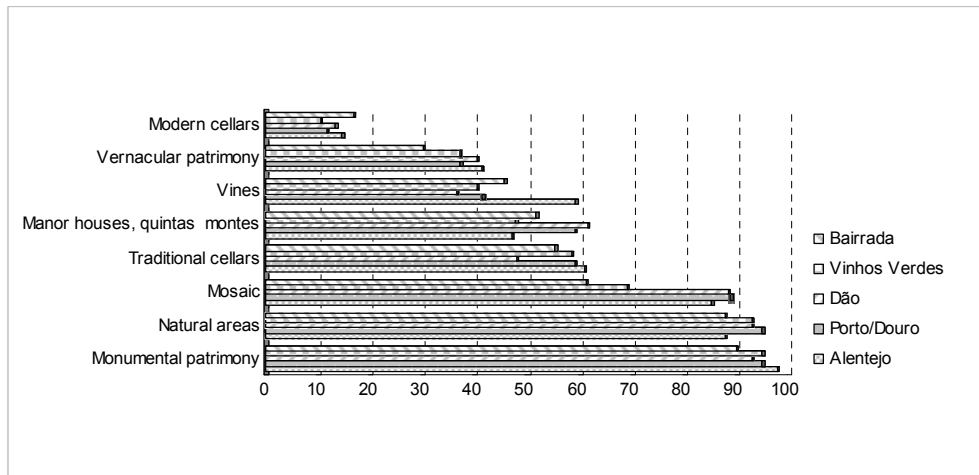


Figure 2 – The landscape in the choice of the wine

Considering the offer, the producers stressed the wine quality and the certification as the strongest arguments in the notoriety of the regions under study (Bairrada 91% and Dão 79%, Fig. 3). Aligned to the consumers’ opinion, in the labelling promotion the heraldic is also well accepted by the producers from Dão.

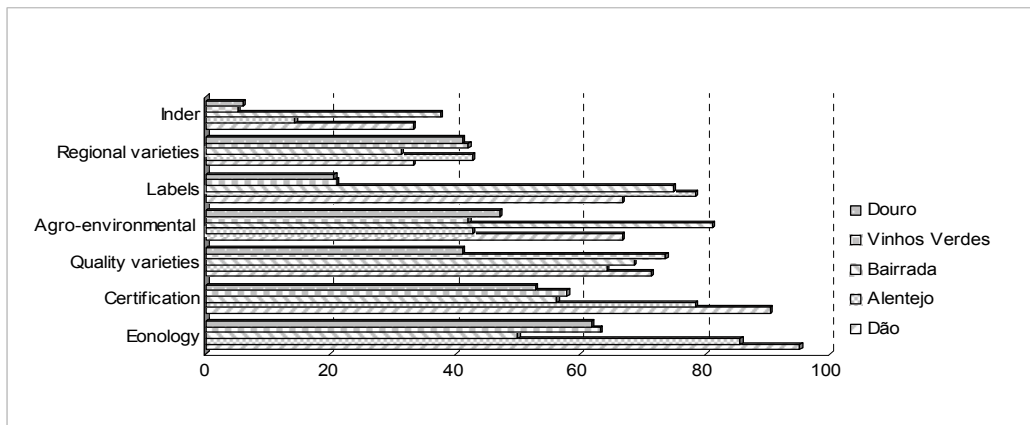


Figure 3 – The labelling in the marketing of the producers

Attending the landscape, the producers of the two demarcated regions under study overestimate the vine monoculture (Dão 88%; Bairrada 81%), both in attention to the consumers opinion (Dão 37% e Bairrada 46%) and the characteristic mosaic of these two regions - the association of the vines and the forest. Takinto into consideration the consumers’ evaluation, the other landscape elements are in deficit in the producers’ marketing, namely: a) the monumental patrimony, the most interesting for the consumers (mean=94%) has little expression for the producers (mean=19%), particularly in the *Dão* (13%); b) The manor houses, *quintas* and *montes* have little promotional interest in the producers’ opinion (mean=32%, slightly more in *Dão* 38%, comparing to the consumers’, mean=54%); c) the vine mosaic is scarcely considered by the producers (mean=18%), particularly in *Bairrada* (13%), firmly above the consumers (mean=79%); d) The traditional cellars are also depreciated by the producers (modern, mean=16% and traditional, mean=15%), especially in *Bairrada* (zero responses for the traditional cellars). The producers of the *Dão* are more fond of the traditional cellars (38%). The divergences are limited to the natural and naturalized areas (mean=7% for the producers and mean=91% for consumers) and to vernacular patrimony (producers’ mean=5% and consumers’ mean=37%), far from its identity and symbolic values in those wine regions (Lavrador Silva, 2008). Aligned to the consumers’ opinion, the

producers emphasise realistic images (mean 66%), over stylized representations (mean 24), detaching the vines' elements (mean 77%), of the landscape in the wine promotion.

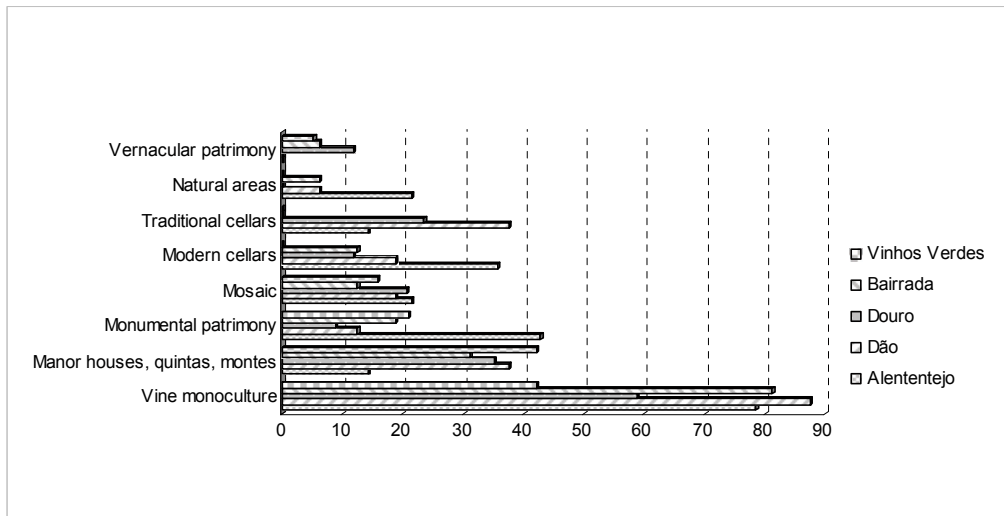


Figure 4 – The landscape in the marketing of the producers

In the representation study and concerning the AFCM (b), the Dão is linked to the tourism sector, opposing to the Porto/Douro and Alentejo associated to the winegrowing sector (Axis 1). In axis 2, the Bairrada and the Dão are joined in the promotion of leisure tourism and enotourism, represented mainly by gardens and gastronomy, but also by belvederes, festivals, traditional and modern cellars, vintages and cultural events (Fig 5).

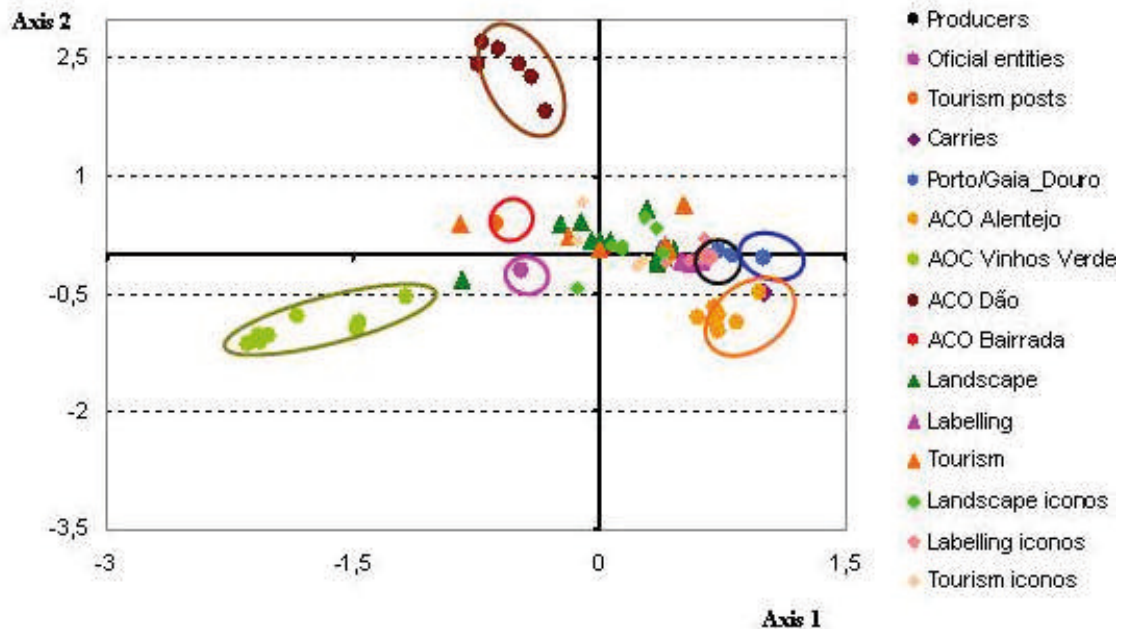


Figure 5 – In promotion, the Dão representing the tourism sector (Axis 1); The Dão and Bairrada are joined representing leisure tourism and enotourism (Axis 2).

The results of the AFCM (c) allow the analysis at a sub-region scale, including the definition of some regions and sub-regions' identity (Figure 6). In axis 1, the sub-region Serra da Estrela (Dão), integrated in the largest Portuguese Natural Park,

emerges as a touristic region, represented by maps, itineraries and pleasant environments, promoted by the local tourism posts. The landscape figures are always at a second level, “weak” landmarks, namely: traditional cellars, villages, forests, rivers and monuments. In the landscapes’ illustration what stands out are nice environments presented in photography. Also recognised is the other category of images, as legends, religion and mythological features, somehow looking for transcendence, one of the characteristics of the Dão landscapes that should be better explored, in our opinion. In axis 2, the Bairrada joins the sub-regions Terras de Senhorim and Silgueiros (Dão), Borba and Reguengos (Alentejo), Cávado and Monção (Vinhos Verdes) all affirmed as winegrowing regions, represented by the following “weak landmarks”: soils, traditional cellars and the mosaic vines and forest³ association. The producers, the tourism posts and the official entities are involved in the promotion. In the opponent half-axis, exceptional landscapes are represented, namely: the Serra da Estrela (Dão), represented by forest and thermal waters; the Porto/Douro, whose unique landscape is a World Heritage cultural value (UNESCO, 2000) and the sub-region Moura (Alentejo), recently changed by the construction of the Alqueva dam.

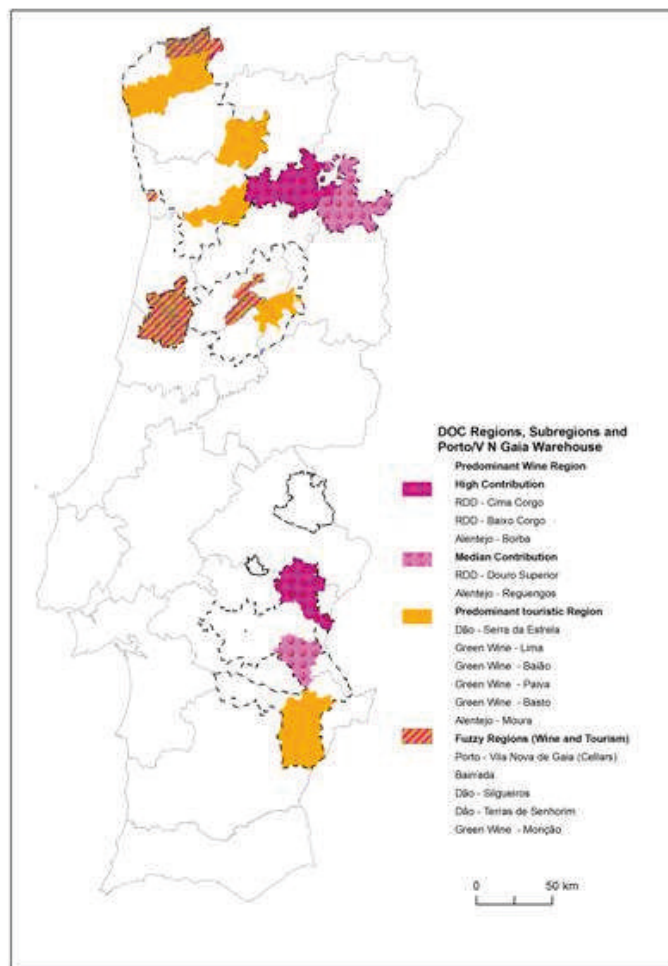


Figure 6 – Tourism prevails in the Serra da Estrela sub-region (Dão) in opposition to the sub-regions Silgueiros and Terras de Senhorim (Dão) and Bairrada where winegrowing and tourism are mixed, proving both its wine character and enotourism relevance.

³ In the Alentejo the forest is replaced by the *montado*.

4. BRIEF CONCLUSION AND RECOMMENDATIONS

The perception, the market and the representation studies point out to a lack of recognition in landscape value in the notoriety of the Dão and the Bairrada demarcated regions. The similarity of the two regions is also detected, through the AFCM application. The landscape values always take a secondary role to the regions' visibility, or are even considered as negative landmarks, in the opinion of some producers. Many landscape values recognized in the perception study and appreciated by the consumers in the wine promotion, are ignored by the producers and have little representation in the wine and tourism promotional brochures. This fact points out to the need to better explore the landscape as promotional value, and the development of an eventual unified external promotion of the two demarcated regions, both wines and tourism. In the perception and market studies, the notoriety of the Dão and Bairrada remains in the wine quality. It is important to deeply explore the tourists' and visitors' opinions, as well as the tendencies of the international markets. It urges the stabilization of a landscape image for both regions, valuable in the wines and in the landscapes qualification and promotion, in order to increase the role of the landscape in the regions' development.

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