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TRENDS IN THE REGIONAL DEVELOPMENT OF THE WINE INDUSTRY IN BULGARIA

ABSTRACT

This article is an attempt to bring the wine sector as one of the alternatives for rural development in Bulgaria. The introductory part presents a simple global picture with the development of the wine sector and the opportunities for countries like Bulgaria to develop the wine industry. Justifies the development of viticulture in Bulgaria and its zoning, as well as an overview of available varieties and species. The capacity and condition of the wine industry is shown, outlining its specifics and features. In methodological terms, the article presents the importance of the wine industry on the territorial development of Bulgaria. The institutional side of the formation of the regional institutional and economic model of development of viticulture and the integration of Bulgarian producers in it is substantiated. The tendencies in the development of viticulture and its economic expediency in general European plan are outlined. The need for the wine sector to influence the regional development, respectively the development of the rural areas is stated. Relevant conclusions have been made, which outline the main challenges facing the industry. Relevant conclusions have been made and new trends for the development of viticulture in Bulgaria have been outlined.

KEY WORDS

viticulture, winemaking, development, management, modeling, region, rural, economy

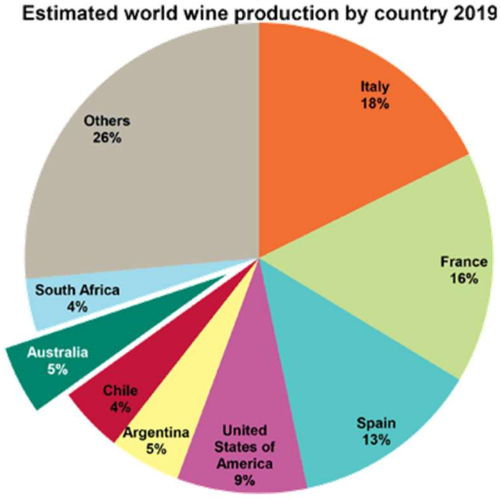
INTRODUCTION

In today's world, as electronic technology advances, the Covid-19 pandemic presents humanity with new challenges, more and more environmental problems are flooding us, and the world is facing new challenges. In addition to the challenges mentioned, the new geoeconomic realities focus global development on food issues. This presupposes in spatial terms the individual regions of our planet to be restructured in such a way as to improve the ecological picture and to successfully solve the problems with the nutrition of the population. In this regard, the focus of our study is focused on the Bulgarian state as part of the European space and highlighting the possibility of the wine sub-sector to expand its added value in the national economy. Like Bulgaria, the wine sector may develop in countries such as Serbia, Northern Macedonia, Croatia, Greece and Romania, which have similar problems in the wine sector. We must be clearly aware that the development of the wine sector at European level can be more important for the development of local economies by expanding the scope and economic activity. Additional application of the viticulture industry can be found in the tourism industry, food and chemical industries, pharmaceuticals and perfumes and cosmetics. This aspect of the development of the wine sector is an opportunity to give new potential to large regions in the European space, which are defined as rural regions in a depressed socio-economic situation. In the European Union, the problems in rural areas regarding their regional development are deepening and their solution is passing through the development of such industries as viticulture. It is worth noting that the EU's rural areas are home to 56% of the Community's population, covering 92% of the Union's territory [1]. We can add that around 19% of the EU population lives in 'predominantly rural areas' and 37% in 'predominantly rural areas'. In these areas, 45% of gross value added is created and 53% of jobs in the EU-25 are located there. At the same time, however, rural areas lag significantly behind in a number of socio-economic and infrastructural indicators compared to urban areas. In practice, to illustrate these processes, we will focus our presentation on the territory of Bulgaria, because this country is part of the European space and since the early 90s of the twentieth century has undergone socio-economic changes that allow us to see the dynamics of the change in the wine sector in recent years. The Bulgarian state has been part of the European Union since 2007 and it is expected that with the help of European funds in the period 2007-2021, it will achieve significant regional economic development. In practice, however, the country is experiencing serious difficulties in adapting to European markets. Thus, at the end of 2020, it is the poorest country in the European Union with increased regional contrasts in the territory, a demographic collapse in most regions of the country [2]. This gives us reason to determine the purpose of this study to determine the opportunities for rural regions and in particular in those regions where there are conditions for the development of the wine sub-sector to improve development and form a new sectoral profile of these regions. This means assessing and analyzing the opportunities for the wine sector to take its rightful role in the regional development of Bulgaria. On the other hand, bringing the wine sector to the forefront means undertaking a number of government policies and activities to support development and investment in the wine sector. This presupposes the introduction of a new approach and framework of the conducted policy for regional development in the field of viticulture related to the promotion of economic activity of the population, as well as measures to improve the condition and varietal structure of vineyards without significantly expanding them. It is necessary to identify activities that will promote local economic development and create conditions for achieving a new orientation of the sub-sector towards the production of quality wines and the development of related industries. The development of the wine industry within the rural areas of Bulgaria will be able to bring to the fore the accumulation of experience for targeted impact on underdeveloped regions within the European Union. In addition, with better implementation of the policies for the development of the wine sector, it will be able to develop a methodology for the development of other regions in the European area related to the wine industry. As well as the opportunity to compare it with the production of beer or see the importance for rural development. [6].

The competitive environment of the wine sector in global and European terms

In the 21st century, the competitive environment for wine and wine production is at a very high level. Citation of experts shows that there is a serious competitive environment in viticulture, for example Figure 1 shows that half of the world's wine is produced from Italy, France, Spain and the United States, but nearly 26% from smaller producer countries. This shows that there is an opportunity for small producers to compete with world leaders in wine production. In practice, the emergence of new and unexpected countries such as Bulgaria have the opportunity to improve wine production and the high quality of wines produced and the development of related industries.

Figure 1: Global wine production share by country 2019

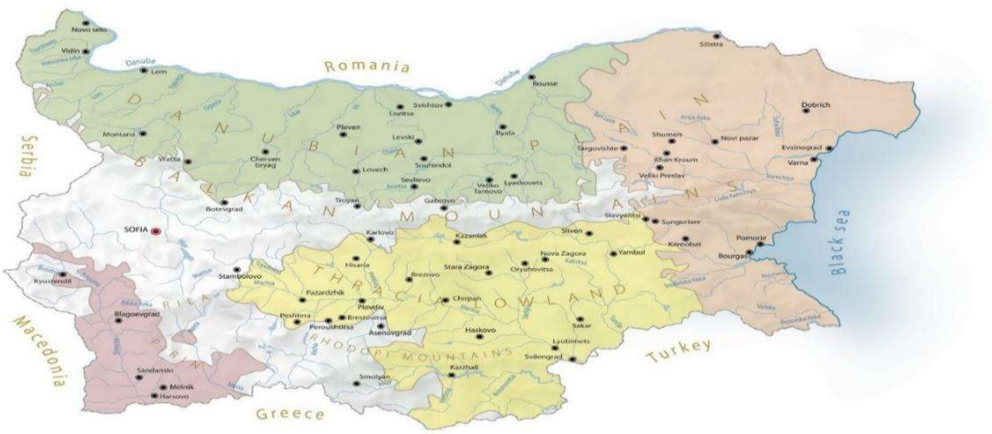


Source: OIV (https://www.wineaustralia.com/news/market-bulletin/issue-183)

In 2020, despite the Covid-19 pandemic, world wine production in 2020 is estimated at 260 million hectoliters (Mhl). This is an increase of 1%, almost 3 Mhl, compared to 2019, according to the International Organization of Vine and Wine. However, the data from 2019 are important given that we do not yet have a pandemic crisis. It can be assumed that the wine sector after the end of the pandemic has every reason to develop further and, if possible, to expand its geography. According to experts, in 1990 about 78% of world wine production came from Europe, in 2000 it fell to 71.5% and now to 67%. In return, the share of wines from Asia and Oceania has increased from 1.5% and 1.6% to 5% and 5.4% over the last ten years [3]. In fact, by 2020, just over 45% of the world's wine-growing regions are located in the European area. Within the European Union, 65% of wine production, 57% of world consumption and 70% of world exports are concentrated, which determines local wine production to develop in a highly competitive environment (national, European and international). More than 200,000 are direct jobs in the EU created by the viticulture and wine sectors. This general picture of the development of viticulture shows that there is strong competition within the EU on the one hand, but on the other hand European wine producers can be leaders in the development of this industry. According to Eurostat, in 2019 the European Union produced wine (including sparkling wine, port and grape must) nearly 16 billion (billion) liters. The largest wine producers are Italy, Spain and France, followed by Portugal, Germany and Hungary. In recent years, there has been an increase in the area under vines in France (794 kha), Italy (708 kha), Portugal (195 kha) and Bulgaria (67 kha). The area of vineyards in Spain (966 kha), Hungary (69 kha) and Austria (48 kha), on the other hand, decreased slightly compared to previous years [4]. These data show that the wine industry has its dynamics within the European Union. In addition, the use of wine for other industrial purposes (including the production of vinegar and vermouth) can be estimated between 9-12 Mhl in the European market during each campaign. Also, estimates from outside Europe, including South Africa, Argentina and Chile, use just over 3 Mhl per campaign for distillation and other industrial purposes. The sum of other parts of the world shows that the industrial use of wine worldwide can be estimated at about 32 Mhl per year [5]. In this direction, it is clear that the wine sector has its potential for development and the creation of new industrial production in individual industries for which it can be a raw material. This means improving the quality of wines produced, not only on the basis of cultivated varieties, but also on the basis of modernization of the technologies used in wine production. Creating all the necessary conditions for a closed production and distribution cycle along the integrated chain - viticulture - wine production - wine tourism in order to reach the end customer with the final product. In addition, it is necessary to create quality staff in the wine sector. This means training of highly specialized vine growers and wine experts, agronomists specializing in the cultivation and pruning of vines and technologists, specialists in the production of high quality wine. Training of highly specialized vine growers and wine experts, agronomists specializing in the cultivation and pruning of vines and technologists, specialists in the production of high quality wine. Here is the place to emphasize that the wine sector has its prestige and it can play a significant role in the development of the regions. It has a social role to play in rural and less developed regions, which face serious problems such as depopulation, population aging, high unemployment and poverty. In essence, there is scope for local development in these areas, and in addition to wine, beer or other spirits can be produced [6]. The wine sector can have an impact on local life, contributing significantly to society from a socio-economic and environmental point of view. The construction of vineyards favors the landscape, provides significant employment, helps to improve the quality of life and preserve local identity. The changing economic environment is also a challenge, efforts to invest at all stages of production and modernization of vineyards pose daily challenges to organizations in the sector and they are often related to the qualification of human resources. In this direction, within the European Union, it is necessary for the development of new programs that are specifically targeted at backward and rural areas, to support the processes of socio-economic development. Precise viticulture involves collecting a large amount of data and summarizing them in detailed scales thanks to various tools - satellite images and sensors that track various indicators such as climate, soil, ultraviolet rays and more. These new technologies also require new competencies, and hiring qualified staff is key to the effective existence of organizations. There is potential for employment in economic activities related to wine production, such as wine trade and marketing, production of oak barrels, bottles, labels, capsules, corks, etc., development of wine tourism (hotels, bars, restaurants, etc.), wine distillation, production of wine spirits and wine by – products [7]. The modernization of the sector and its sustainable development, as well as the market presence of the products produced, will certainly contribute to reducing regional disparities within the European area.

Features in the structuring of the wine industry in Bulgaria.
The wine industry in Bulgaria has its own tradition and development. It is called to influence local life, contributing significantly to society from a socio-economic and environmental point of view. Based on the national and expert assessment, as can be seen from Figure № 2, the Bulgarian area is divided into five wine regions. These are North, South, East, Sub-Balkans and Southwest.

Image 2 The separate wine-growing regions in Bulgaria by 2020



Sources: https://lozaivino.org/

In the structuring and division in some areas smaller sub-regions are created. For example, the Eastern wine-growing region includes most of Strandzha, the Black Sea coast, Dobrudja, parts of the Eastern Stara Planina and Ludogorie, which makes it very diverse in grape production. Other regions also have their own specifics and features, which are expressed in the presence of different and diverse grape varieties. The main problem in Bulgaria in recent years is the creation of young vines. The emerging shortage of young vines is not enough to replace the old ones. All this leads to a decline in wine production. This decline is both in quantitative terms (over 3 times for the period 2000 - 2019). and in qualitative terms. Although the number of registered wine producers in the country is more than 300, and the number of grape producers is even ten times higher, the reported decreases in the volume of production and quality of wines are significant [8]. This finding shows that the wine sector in Bulgaria needs reforms and the implementation of new policies to improve its competitiveness.
In addition, given the demand for world development in line with the "green deal" for countries such as Bulgaria, the further development of the wine sub-sector may be a significant alternative that would bring a new sectoral focus of the country's regional economy in wine-growing regions. In addition, the appropriate natural and climatic conditions in the country, the technologies for production and processing of grapes improved over the years, the selected varieties and the rich traditions are prerequisites for good competitiveness of viticulture on the domestic and international market [9]. The Bulgarian state needs to turn to the development of viticulture, which will create additional employment in rural areas and new productions that will promote regional development throughout the country. It is important to mention that competition, both in the market and climate change, confronts businesses with the need for quality process analysis and a more focused investment process. That is why it is crucial for economically active people in the wine industry to properly structure their business model in order to realize their investment intentions, so that they can forecast and control their cash flows over time.

The importance of the wine sector for sustainable development of the regions in Bulgaria
The pulling socio-economic development of countries like Bulgaria on the basis of new geoeconomic challenges also implies the development of sectors and industries in which countries have traditions and opportunities to achieve sustainable results. In this direction, bringing to the forefront of the wine sector creates primary and secondary effects on the socio-economic development of the regions and on their ecological status. In the last few years, in many parts of the country, viticulture is the main or only industry that guarantees employment for the local population and is the engine of regional economic development [10]. Achieving competitive production directly affects employment, profitability and the development of related industries. Secondary effects can be sought on the reduction of migration flows, leading to depopulation of rural areas, attracting investment, development and valuation of the cultural and historical heritage of individual regions in the production and trade of wine. In addition, through the development of viticulture, opportunities can be sought for development and the perfume market. At the regional level on the basis of viticulture to create and related industries and production, driven by consumers and dictated by fashion and cosmetic trends. This determines the possibility of viticulture to acquire a purely regional character and, depending on the individual territories to develop its three pillars - economic, social and environmental; productivity of production factors. It is important to note that the development of the varietal structure of Bulgarian viticulture is not dynamic. On the other hand, it affects the changes in the wine varieties in demand on world markets, but must also take into account changes in climatic conditions that pose new challenges for Bulgarian viticulture. It is important to note that in general Bulgarian vineyards are older. The inspection of the vineyards in the period 2015-2018 shows that the old vineyards still predominate. This structure is evident from Table №3, which shows the importance of the different types of varieties.

Table 1 Age structure of vineyards in 2017-2019

Color of the nipple	Age structure (years), in ha to 3,	between 3 and 9	from 10 to 29,	30 and more	Area total (ha)
White	1665	4812	1793	16943	25 213
Red	1229	6325	5037	20403	32 994
Other color	440	536	192	181	1 349
Total	3334	11673	7022	37527	59 556
White	49,95%	41,22%	25,5%	45,1%	40,48%
Red	36,86%	54,18%	71,7%	54,4%	54,28%
Other color	13,19 %	4, 60 %	2,7%	0,5%	5,24%

Sourse: Ministry of Agriculture, Agrostatistics Department

It should be noted that in the period 2018-2021 efforts are being made to rejuvenate a number of vineyards, because the areas with young vineyards are not enough to replace the old plantations, which is naturally reflected in reducing the size of productive vineyards and increasing the size of unmaintained vineyards. farms. In the future, this may affect the grape varieties and the development of existing vineyards. In this direction, for the needs of regional development in Bulgaria, we can highlight the production of grape varieties in individual wine-growing regions and regions. For example, the production of "Muscat Otonel", "Gamza", "Cabernet Sauvignon", "Merlot", "Chardonnay", "Aligote" and "Pamid" is specific. It mainly develops in the central and western part of the Danube plain [11]. This area mainly produces dry white wines, sparkling wines using classic technology and quality red wines, which are characterized by a rich fruity aroma and fresh taste. The Black Sea region is also important, covering almost 30% of the vineyards with a concentration of about 53% of white grape varieties. The varieties "Dimyat", "Riesling", "Uni Blanc", "Muscat Otonel", "Traminer", "Sauvignon Blanc", which gives excellent quality grapes, are important in it. This region produces some of our best dry and semi-dry wines, which combine a pleasant fruity aroma, rich taste and elegant freshness. The next important region is that of the sub-Balkan valleys, better known as the Rose Valley. It is divided into East and West and extends south of the Balkan Mountains. On the southern slopes of the Balkan Mountains and in the valley between it and Sredna Gora, the varieties "Red Muscat", "Riesling", "Rkatsiteli", "Cabernet Sauvignon" and "Merlot" are grown. It produces mainly white dry and semi-dry wines, less red and aromatized wines. The wines have a characteristic pleasant fruity aroma, fresh and harmonious taste. Those from the local variety "Red Muscat" are one of the best representatives of white wines in our country and are characterized by a rich fruity aroma, elegant body and delicate, memorable aftertaste. The Upper Thracian Lowland wine region, which is located in southern Bulgaria with a typical temperate-continental climate, including the central parts of the Thracian Lowland and parts of the Sakar Mountains, also has a strategic role. Most of the red grape varieties are concentrated in this area. Mavrud, Merlot, Cabernet Sauvignon, Red Muscat, Pamid and others are grown. The climatic conditions of the area, protected from sharp northern winds, favor the production of rich, dense, memorable red wines from the Cabernet Sauvignon and Mavrud varieties. The other key region is the Struma-Local Region. This area includes mainly the southwestern parts of the country. It is not large in size, but has specific climatic features that bring it closer to the Mediterranean areas. The local varieties "Shiroka Melnishka Loza", "Cabernet Sauvignon" and "Merlot" are grown in the valley of the river Struma. The resulting wines are characterized by warm southern tones in the aroma, with fullness in taste and richness of general impressions [13]. We can summarize that in the formed 5 wine regions in Bulgaria there are nearly 64 thousand hectares of vineyards, which can be seen from table №4. Nearly 50,000 hectares are grown on agricultural holdings and nearly 15,000 hectares on private farms. This potential of the vineyards at this stage is sufficient to create conditions in Bulgaria for the sustainable development of this sub-sector. In the last two years it is planned to increase the vineyards by nearly 3,200 hectares, which by 2022 makes them nearly 67,320 hectares. Of course, according to expert estimates, it is estimated that about 4,000 hectares of vineyards are virtually deserted, but are managed as cultivated by individual owners.

Table 2 The vineyards in the Republic of Bulgaria

Year	Areas with vineyards on farms	Vineyards outside agricultural holdings	Total areas with vineyards
	Hectares	Hectares	total in hectares
2018	50 727	13 673	64 400
2019	50 100	13 912	64 012
2020	47 00	16 646	63 647

Source: MAF, Department of Agrostatistics - survey "Monitoring of grape and wine production - harvest "2020"

It is important to note that so far the measures for the development of the regions are not yielding the necessary results. In practice, as a member of the European Union in the Bulgarian state has the opportunity to receive funds from programs to support and develop the wine industry. The Rural Development Program in Bulgaria has an important role in this area. In this direction, in recent years' conditions have been created for the reclamation of nearly 10 thousand hectares of vineyards, experimental fields for new varieties and cultivation of obsolete vineyards have been created. The result of these activities and measures is not good, although such measures are justified when we see the condition of the vineyards by planning regions in Bulgaria. Spatially, the available vineyards are located mainly in less populated regions, with the exception of the South Central Planning Region. This affects the model of regional development in the country and especially the productivity in the Bulgarian wine sector, although the new production facilities are high-tech and the workforce is not large. However, the reduction of the quantity and larger arrays becomes the main prerequisite for the formation of its overall efficiency. It is presented through the dynamics in the values of the efficiency ratio, expressed as the ratio between total revenues and total expenditures generated at the sectoral level on an annual basis in the individual planning regions and their municipalities in Bulgaria. In this direction, in order to develop the wine industry, it is necessary to better plan and forecast the ongoing processes, which in Bulgarian conditions is very difficult. Separately, the investments already made in technologies, additional productions and capacities, as well as the expansion of the production sphere have the necessary regional distinctiveness. On the other hand, viticulture has its difficulties and problems that are not solved in time and this creates instability in its development. The business in this sector has all the prerequisites for it to continue investing and to be successful, provided that the state establishes lasting rules and regulatory framework for its development and management. In practice, the wine industry needs a new type of programs, contractual financing and leverage for the management of individual projects with all their sustainable development [12].

Research Methodology

The current study assumes that the business environment is complex, changeable, imperfect and requires the state to set mechanisms for the development of the wine sector. In addition, the public sector lags far behind in terms of refining regulations and managing ongoing processes in the wine industry. In this direction, the study of the behavior of wine enterprises is not essential if there is no optimal environment for their operation. In this direction, the spatial approach means to determine at the territorial level the factors that make up the business environment [12]. The necessary focus is on competitiveness in the wine sector. This requires us to perceive the peculiarity of viticulture as a process that is determined by changes in the business environment. In order to monitor whether all requirements are met, a vineyard register is maintained and operated in Bulgaria. In practice, the development of the wine sub-sector is in line with European regulations, which define the organization of the wine and wine market by complying with the country's commitments under

Regulation (EC) №479, which amends Regulation (EC) №1493/1999. The main objective of this Regulation is to increase the competitiveness of European Community wine producers and to enhance the reputation of quality wines. An important place in this regulation is occupied by measures that promote the development of competitiveness as part of national support programs to enhance the competitive environment. In this direction, our rural areas are underestimated, which in turn creates an opportunity for them to develop this industry [14]. In addition, creating a business environment in rural areas is an opportunity for local communities to profile regional development in an area that has its own environmental focus. In addition, it will allow rural areas to develop competitive productions based on the development of the wine sector. Here is the place to note that competitiveness is a complex social phenomenon that can be considered in socio-economic, political and environmental aspects, and in our case in purely regional and local terms. Thus, for rural areas, promoting development and competitiveness can be a major driver of social development, removing anything and everyone who cannot adapt to market demands. It is a higher form of knowledge and ability to adapt and dominate the market, leading to economic and social prosperity. Competitiveness is determined by a combination of different competitive factors [18]. These factors are resources, knowledge, experience and motivation for their use in a given market situation, which can set the pace of rural development in Bulgaria. The development of the wine sector can develop the local initiative to create an economic environment that meets the needs of its staff and consumers of its goods and services. Competitiveness in rural areas may be the main mechanism for ensuring economic growth and employment. From a political point of view, it can be argued that the framework for the development of a more targeted wine sector, both at the macro and micro level, can be a function for pulling regional development of more than 150 Bulgarian municipalities. The policy in the sector must have its liberal, but also competitive basis. In the political aspect, competitiveness is formed and developed taking into account the interest of stakeholders. Very often the interests of the stakeholders in the wine sector contradict each other when there is no clear vision for development and transparency in the management of the sector.

Table 3 Development and yield of the wine-growing sub-sector in the period 2015-2019

Year	Registered areas with varieties suitable for wine [xa]	Yield [kg / ha]	Produced quantities of grapes [t] for vinification under industrial conditions	Price [BGN / t]	Unit price [BGN / kg]
2015	599 880	670,20	195 860	589,97	0,59
2016	604 180	577,70	173 503	605,24	0,61
2017	605 830	581,90	165 818	561,89	0,56
2018	612 470	621,40	151 938	594,62	0,59
2019	608 620	588,00	129 311	545,17	0,55

Source: NSI, EAVW and MAF

This leads to decisions and regulations of the sector, which give precedence to the interests of one group of actors in the value chain at the expense of another. In other cases, a consensus can be reached that satisfies all parties, but does not allow for the development of sectoral competitiveness, taking into account market trends. It must not be forgotten that the market is that element of the system which removes unadaptable players in the industry free of charge and rationally. Any government intervention distorts this mechanism and makes it subjective, working a certain group of stakeholders, the price being paid by all. Politically, competitiveness still remains misunderstood as a process and phenomenon in human life, leading to its unsustainable and volatile development [13]. In environmental terms, competitiveness is associated with understanding the specifics and functioning of ecosystems. This predetermines in methodological terms to assess the capacity of the Bulgarian wine production. Table 3 shows that the wine sector has its own patterns and features that do not allow it to show a lasting trend. In practice, this corresponds to the fact that in recent years in Bulgaria there has been no significant change in the structure of cultivated varieties. The ratio of cultivated and harvested white and red wine varieties remains relatively constant. In 2015, 57% of the areas were red wine varieties. Of these, four main varieties are of leading importance - Merlot, Cabernet Sauvignon, Pamid and Shiroka Melnik vine. Going back to 2001, when the Pamid variety occupied about 35% of all areas with red wine varieties, in 2009 and 2015 it occupied 20% of the area and was third among the most popular for cultivation. The Merlot variety is in first place, followed by 1% of Cabernet Sauvignon in 2015. Interest is also observed in other red varieties - traditionally grown Mavrud and Gamza, and in recent years there has been increasing interest in several non-traditional varieties for Bulgaria - Syrah, Cabernet Franc and Pinot Noir [15]. This is dictated by the demand from winemakers who rely on modern and sought after on the world market varietal wines. The white wine varieties also have a relatively strong concentration - 75% of the areas are occupied by 5 main varieties in 2001 and 2009. Over the years, a certain dynamic has been reported, which leads to even greater concentration, as in 2015 these 5 varieties make up 90% of the varietal structure of the areas. These most common varieties are Rkatsiteli, Muscat red, Muscatotonel, Chardonnay and Dimyat. The areas with Sauvignon Blanc are also increasing. Although the percentage of varieties remained the same during the three years under review, the areas expressed in ha changed significantly [16]. The age structure of the vineyards is also an important indicator for assessing the potential for development of viticulture in Bulgaria. Unfavorable is the fact that both white and red wine varieties have a larger relative share of vineyards over 30 years old.

Table 4 The age structure of the vineyards in Bulgaria as of 2017

Age structure Areas (ha)% of the total area	Age structure Areas (ha)% of the total area	Age structure Areas (ha)% of the total area
up to 3 years	2481,1 4,1	4,1
from 4 to 10 years	5588,3	9,2
from 11 to 29 years	11646,5	19,2
Over 30 years	40867,3	67,5

Source: Executive Agency for Viticulture and Enology (EAVW)

In the Bulgarian conditions the development of viticulture has its important periods and processes. First of all, the socio-economic change since the early 1990s, when the state liberalized the sector and most state-owned enterprises were privatized. In practice, however, this process complicates the development of viticulture, on the one hand the lack of sufficient financial resources to adapt the industry, and on the other hand the gradually changing environmental conditions [18].
In the wine sector, the factor determining the variability of enterprises is competition. It is a permanent mechanism for removing the insufficient and the unadaptable. The main requirement for achieving a competitive state of a system is to ensure its adaptation to changes in the environment. The environment creates conditions for uncertainty, threatening the sustainable state of the system. This requires the wine sector to be environmentally friendly - to save natural capital and create opportunities for its preservation for future needs. The wine sector is a production system created and managed by man in order to produce and trade products necessary for his survival. Increasing the productivity of the sector leads to simplification and standardization of production. This requires the use of a new management approach, relying on the experience of natural ecosystems to achieve a competitive wine sector, by maintaining diversity in the ways of doing business processes of business organizations in their participation in the network of values. In practice, it is necessary in the assessment and analysis of economically active persons in the wine sector to assess the comparative advantages of finished products through indicators such as the Export Advantage Comparative Index

(RXA), market orientation coefficient (CS), commodity production ratio, the value of the commodity production in the sector, the value of the total production in the sector and others, which provide equipment to carry out a comprehensive analysis of the state of the wine-growing sub-sector [14]. In this direction, the problem of restructuring and zoning of the wine industry is also important. The differences in the natural and climatic conditions of the different districts of the country lead to differentiation of the parameters, characterizing the production potential of viticulture, as well as to the presence of territorial peculiarities in its specialization and concentration. Zoning in the wine sector of Bulgaria is an important prerequisite for the development of modern viticulture and increasing the efficiency of production and marketing of products. The zoning is a territorial distribution of the vine varieties, as the aim is to provide a good terroir - the most suitable soil, relief, climatic and economic conditions for cultivation [17]. The first modern zoning in Bulgaria was made in 1951, with a decree of the then government, according to which the country was divided into North Bulgarian, Rila-Rhodope, Sub-Balkan, Black Sea and Melnik wine regions. In the following years, a comprehensive study of the wine-growing regions, vine collections and soil-climatic conditions was carried out, and the most suitable varieties for them were determined. Based on many years of research on the combination of natural and climatic conditions, technological characteristics and agrobiological properties of vine varieties and experience gained in the process of grape production and processing into wine, 4 wine regions are distinguished: Eastern, Southern, Northern and Southwestern. and a total of 116 neighborhoods. At the beginning of the 21st century, 5 wine-growing regions have been identified. The territorial scope of the wine-growing regions is determined on the basis of the administrative-territorial division in the country. The exact scope of the wine-growing regions is clarified in the Ordinance on the terms and conditions for establishing and maintaining a register of vineyards and a specialized map of vineyards (2005), which lists the specific municipalities within the relevant wine-growing regions [15]. The regulations affect both the areas and varieties of vineyards in each Member State and the quality standards of wine production. On the other hand, this allows the extraction to be used for the needs of other sub-sectors and industries. The importance of viticulture for the country's economy is also reflected in the state's policy. With the adoption of the National Strategy for Development of Viticulture and Wine Production 2005-2025 and the National Strategy for Sustainable Development of Agriculture of the Republic of Bulgaria 2014-2020, the state declares the importance of the sector for agriculture [16].

Features and phases in the development of the wine industry in Bulgaria

The wine sector faces the need to analyze the strengths and weaknesses of farms. The analysis in the development of the sector shows that the wine industry is difficult to define as a major in the development of the individual region by local business. For the most part, this business is perceived as an opportunity to export finished products mainly to foreign markets. Careful review shows insufficient use of opportunities to conquer new markets for organic and delicate products, diversifying consumer preferences and on this basis positioning new branded wines, as well as exploiting opportunities to participate in the national wine market. Another important point is the low competitiveness of our producers, as is the cost of labor of technologists and workers in the wine industry. Weaknesses are still great in the development of wine tourism. To a large extent, sustainable strategies for the development of wine tourism are still lacking at the regional level. In this direction, it is difficult to integrate the wine industry in local economies, which hinders their integration into common tourism policies. In recent years, it has been proposed for the development of rural areas to impose a cluster approach that will allow the development of the right development strategies, respectively to structure sustainable investment programs to follow [14]. For economically active people at the regional level in the wine industry it is necessary to achieve strategic differentiation, largely related to the selection of individual vine varieties, as well as opportunities for their rational use not only in wine production and related production. This process is related to its development, programming and planning. The business planning process takes place in the following phases: The first phase outlines the need to choose a product to be produced by the company. Each product is a carrier of value if it satisfies a certain need of the customer. For this purpose, during this phase, market segmentation, selection of market segments and positioning of the company's products are performed. The second phase involves determining the prices, quantity and quality of manufactured products and methods of distribution. The third phase involves product advertising. The purpose of strategic planning is to form, model and change the model of the business enterprise and its products so that it can realize satisfactory profits and growth. The specific characteristics of this type of planning are determined by three key ideas: profit centers, profit potential and strategy. The object of strategic business planning is the wine enterprise [15]. This is an economic and organizational form of concentrating the means of production that the labor force uses for production. The wine-growing enterprise can be characterized as an independent, legally, economically, organizational-technological and territorial organizational-economic form, which in a certain way combines the elements of the production process, depending on the goals and objectives. in front of the economically active person. Modern market reality puts companies in a highly competitive and dynamically changing environment in which they must fight to survive and increase the efficiency of their operations. Given the fact that logistics is a key element of globalization of markets, the formation of supply chains is an important factor for the survival of companies. Their survival depends on their ability to constantly adapt to the changing environment and maintain their competitive advantages over other market participants. It is necessary to look for opportunities for optimization of business activities related to the production chain, supply and sale of products, such as optimization and control over supply and distribution. In this direction, it is important in territorial terms where it is good to develop enterprises in the wine sub-sector. This is often related to the objective picture at the macro level (region, district, municipality) by analyzing the population density indicator. It is assumed that municipalities with a population density below 20% are the municipalities most at risk of depopulation. At the micro level, this certainly affects the development of the wine sector in areas and lands at risk of depopulation, mainly including settlements of up to 100 inhabitants or those without population. This gives us reason to seek and implement specific regional development policies related to the wine sector, especially the creation of a model for evaluation and analysis at the level of planning regions. Through this model, opportunities will be sought to preserve the potential of a wine-growing region by creating a gravitational model of management and connectivity between vineyards and settlements. Table 5 shows the available vineyards by planning regions in Bulgaria.

Table 5 Available vineyards by planning regions in Bulgaria by 2020

with vineyards in Statistical regions	Areas with vineyards on farms	Harvested from them	Relative share
	Xa	Xa	%
Northwest	4 113	1875	45%
North Central	2490	1241	50%
Northeast	4303	2524	59%
Southeast	15 345	9907	65%
South central	17608	10817	61%
Southwest	3122	2380	76%

Source: MAF, Department of Agrostatistics - survey "Monitoring of grape and wine production - harvest "2020"

The distinction by planning regions shown in Table № 5 of wine producers can help to purposefully include the wine industry in a number of strategic programs and projects related to the implementation of regional development policies in Bulgaria. In addition, Bulgarian winemakers will have higher opportunities for access to funds, which will make them competitive, which will reflect on the brand image, consumer connectivity and production differentiation. Of course, in regional terms, some regions will give better results, while others will lag behind, but this will arouse competition. It is important to point out that by 2022, perhaps the South Central Region and the South-East Planning Region have the necessary conditions to develop the wine-growing sub-sector in terms of demographic potential and professional competencies. In the South-West planning region, the opportunity for the development of viticulture is available only in part of the region, but with the right investment, a number of ancillary productions can be created. The difficulty in the South-West region is the lack of sufficient staff and the emerging problems of a technological nature, mainly due to the reduced investment interest in its periphery. In this region, the city of Sofia as the capital has a centrifugal role, which collects the entire investment flow within a radius of about 30 kilometers around it. Thus, the periphery in the Southwestern region, including the area with a gravitational potential of 50 to 150 kilometers around the city of Sofia, has entered a depressed economic state and so far finds it difficult to attract investment, especially to develop its viticultural potential. Socio-economic development also reflects on the development of the wine sector in the North Central Planning Region. It should be noted that viticulture has its own tradition and capabilities, but it is necessary to achieve balanced sustainable development in the North Central region. This means supporting some rural cities, which are centers for the development of the wine sector, through the instruments of regional development policy, as well as providing public and business services for the population living in smaller settlements in rural areas. Such are the cities such as Strazhitsa, Pavlikeni, Elena, Tryavna, Tutrakan, Kubrat and Isperih. Moreover, in this region cities such as Lyaskovets, Suhindol and Svishtov have a lasting tradition in the development of viticulture. Special support programs need to be set up to make these regions more attractive for people to live in and to develop the regional economy. This can be done by expanding the economic, social and administrative functions of these cities. It must work to stabilize the demographic processes in them by limiting the depopulation of small settlements by giving new meaning to the wine industry, as well as fruit growing, and why not Ferrer livestock. Programs for the development of viticulture and other related branches of agriculture can be adapted. The situation and the development of the wine sector in the North-West planning region are particularly difficult. The development of these cities and other cities of local importance, which have the potential to attract non-agricultural investment or use the agricultural potential of the surrounding areas (as a market and place for processing agricultural products), stimulates the development of surrounding settlements. Measures are needed in these municipalities to support backwardness in socio-economic development and living standards. Municipalities such as Boynitsa, Gramada, Dimovo, Kula, Makresh, Ruzhintsi, Apriltsi, Vulchidrum, Georgi Damyanovo, Metkovets, Chuprene, Chiprovtsi and Yakimovo have similar problems, which gives grounds to be placed in a single category of "problem areas". They are characterized by low population density inhabiting these areas, unsatisfactory accessibility and accompanying economic backwardness, low level of access to important social (institutional) services. The situation is similar in the Northeast Planning Region, where strong tourism potential and development of agriculture. In practice, the Northeast region has significant potential for the development of viticulture and related industries, but does not have the necessary educational and research and development activities to set priorities in this direction. Cities such as Balchik, Kavarna, General Toshevo, Veliki Preslav, Popovo, Targovishte and many of the larger villages can become major centers of the wine industry. In conclusion, we can say that at the level of planning regions it is necessary to apply an integrated approach to planning the regional and spatial development of the regions. The development of sub-sectors such as viticulture can help promote regional development in response to the identified needs and potential for rural development in Bulgaria. It is necessary for the state to direct measures and policies in this direction, which should be coordinated and provide for interaction with the factors, conditions and potential for the specific development of the region, the network of settlements and individual sectors of the economy.

Trends in the development of the wine sector in Bulgarian municipalities

In practice, the development of the wine sub-sector is of strategic importance in 55 municipalities in Bulgaria. The country's membership in the EU and the implementation of the Common Agricultural

Policy (CAP) creates an opportunity for the development of the wine industry in at least 120 more municipalities. of specialization, concentration and integration. Viticulture is an important sector for Bulgarian agriculture, as Bulgarian producers have experience and traditions in the cultivation of vineyards and grape production, as well as in wine production. However, the current socio-economic conditions pose a number of challenges to the wine sector in Bulgaria, complemented by difficulties related to the biological nature of grape production. It is a fact that the derived social role of the sector in rural municipalities facing serious problems such as depopulation, population aging, high unemployment and poverty. The wine sector has an impact on local life, contributing significantly to society from a socio-economic and environmental point of view. This is because the vineyards favor the landscape, provide substantial employment, help to improve the quality of life and preserve local identity. Vineyards are characterized by low stocks due to the small size of vineyards that cultivate small vineyards with diverse varietal composition. As a result, the raw material base in the sector is diverse in variety composition and quality [13]. Wine production needs large batches of homogeneous raw materials to enable large-scale production to take place and to use the "economies of scale" effect, a major source of competitive advantage in a highly price-intensive market. The seasonality of viticulture requires the allocation of significant financial resources during the grape harvest, while the use of imports and wine and cognac materials in production determines easier financial planning. Experience has shown that the sectoral specialization of wine regions shows that region specializes in the production of red and white table wines. At the same time, the Southwest Planning Region specializes in the production of red quality wines. The specialization of the Northeastern wine-growing region, which is oriented towards the production of quality white wines, is similar. Bulgaria clearly stands out on the world market as a country traditionally developing exports of bulk wine (which has low added value). As a result, the market orientation of the branches of the wine sector has been declining in recent years. Only 63% of the produced quantities (for 2018) are sold on the international market from the production of quality and table wines. Only 50% of the production of special wines. This determines the relatively low commodity value of the industries, measured on the basis of exports of products produced by them. The reasons for this are the high size of domestic wine production, which consumes more than half of the raw material - a product of viticulture. The export of bulk wines, in which Bulgaria specializes within the EU, requires quality raw materials, which are grape products (grapes or grape must), the result of viticulture; - Bulgaria, in the conditions of the common agrarian policy of the EU has specialized in the export of bulk wines. Exports of bottled wine are not as competitive, as Bulgarian bottled wines are mainly sold in the low price segment, where competition is fiercest. The links between viticulture and wine production have not yet been clarified in order to increase the sector's competitiveness [16]. The vineyards that provide the raw material base have a low return on investment, which stops their expansion and innovative development. While wineries that have created large vineyards with EU funding are seeking to control the raw material base. In these production structures, banks find good conditions and generously grant loans for their development. The main critical factor for the rapid achievement of a high level of sectoral competitiveness of the wine sector is the creation of technology transfer and the attraction of capital that will value this technology transfer in competitive products. At this stage, technology transfer is weak and does not lead to a boom in applied innovation. Achieving an innovative and competitive wine sector requires R&D expenditure, as well as promoting technology transfer from research and education organizations to vineyards and wine enterprises. The link between science and the wine business, innovation and technology transfer in the sector are poorly developed. Expansion of direct cooperation between research organizations and enterprises and increasing the share of private funding in research and development are key issues. The main reasons for this are the slow return on research and development costs and the weak protection of intellectual property in our country. In terms of statehood, we can mention that, with the exception of about 40 mountain municipalities, the remaining 226 municipalities can often develop viticulture. By 2021, the production of wine grapes in Bulgaria is carried out by a large number of vineyards - 3,471, the main part of which manage plantations up to 30 ha (94% of all farms) [17]. At the same time, the total area they manage is only 35% of the total area with registered vineyards. This predetermines the weak market positions of most of the raw material producers in the country. Winegrowers who do not have their own processing facilities are further hampered by the fact that a significant proportion of wine producers produce the grapes they need on their own, or have established trade relations with grape growers. The smallest and smallest farms are often unable to sell the raw material produced, which hinders their effective existence. In addition to the quantity of grapes produced, significant factors for the positioning of the vineyard on the market are the quality of the harvested product, its varietal composition, and last but not least - the entrepreneurial skills of the farmer. Wine tourism is also one of the ways to raise awareness of the sector, and its advertising and promotion could be part of the planned information platform. Wine tourism is one of the fastest growing forms of specialized tourism and is among the most common methods for diversification of production in vineyards and wineries. Many of the existing wine cellars are open for visits and opportunities to buy wine on site, have tasting rooms, some with a hotel part, have annual traditional events and tourist tours. This is not enough, because in practice the industry lacks cooperation with other sectors in agriculture. This means that the wine sector needs to integrate with other industries while maintaining its identification, strengths and experience. Indeed, the present study identifies to some extent the main competitive advantages of Bulgarian wine production, but it is important to note that the wine sector cannot develop on its own. However, it is necessary to combine agricultural and viticultural activities with tourism, as well as support for rural areas and promotion of rural tourism. Bringing out the leading role of viticulture means the territorial identification of the cultural and historical heritage and the range of wine products for advertising on rural areas in Bulgaria and attracting investors in them. The added value is in the combination of wine traditions and cultural heritage in the field of tourism, as well as the utilization of natural resources plus responsible protection of the environment and promotion of life in rural areas [9]. In Bulgaria there are conditions for the development of the model of the integrated chain "viticulture - wine production - wine tourism-regional development", which involves supporting the modernization of rural areas, attracting investment in them and structuring the wine industry as an important factor for attractive economic development of a number of Bulgarian regions.

CONCLUSION

The model of regional development of Bulgaria also goes through bringing to the forefront of sub-sectors such as viticulture and winemaking. In practice, however, we must take into account that achieving sustainable competitive development of the industry is a complex process. The wine sector in Bulgaria has a specific structure, which includes primary production of raw materials (wine grapes), processing and production of excise goods with high added value (wines, brandies and distillates). The economic units in the sector (grapes and wine producers, as well as producers of grape brandies and distillates) are closely linked and have the potential to create a closed production cycle from the field to the final product. It is essential for the development of the sector to maintain the viticulture potential - growing massifs with market-oriented grape varieties, applying appropriate methods and modern techniques for vineyard cultivation, as well as maintaining the wine potential of the country - companies with high technology equipment and sufficient capacity for processing of the production into quality wines. Another essential element of the sector's development policy is the encouragement of farmers and raw material processors to develop their activities in accordance with ever higher environmental standards, aiming to keep the available natural resources in optimal condition for as long as possible. Promoting environmental practices in the development of agricultural activity is an approach that not only has a beneficial effect on the environment, but also helps producers to position themselves in competitive niches. Careful consideration of market requirements is needed, as well as compliance with specific factors in the sector, such as varietal and age structure of vineyards, production capacity, product range and adequate marketing for the sale of goods. It is important in the territorial plan in the wine industry to work on the construction of vineyards, processing facilities, logistics base and quality human resources for the products and the development of viticulture. This means at the regional level to create a capacity of professional skills in choosing the varietal structure of vineyards, diversification of production, imposing a model of quality processing of products and quality of finished products in accordance with market requirements. This will certainly, on a territorial scale, require cooperation or consolidation of vineyards in order to increase the specialization, intensification and concentration of grape production. This will increase the innovation and investment activity in the industry, as well as the better varietal and age structure of the vineyards. The creation of consortia of vineyards and their joint cultivation would lead to higher quality of production, as a prerequisite for accelerating the process of conversion of varietal composition in accordance with market requirements. This is determined by the fact that cooperation on the one hand, and on the other hand economically active people strive to manage larger vineyards, will need more efficient and high-quality processing capacity, thus achieving higher added value. from its activities. Such production units, other things being equal, would be easier to attract capital to the industry needed to renew vineyards. We must clearly assess that in Bulgaria the production of grapes, grape juice and raisins is not traditional, although the country has the necessary soil and climatic conditions. Given the available quantities of grapes, the regional business must also develop these productions, as well as supporting the development of the food industry and pharmacy. In this market situation, Bulgaria can take advantage of developing other sub-sectors related to grape production and fruit growing. It is clear that the production and trade of grape products requires additional investments for the construction of warehouses and logistics centers to ensure the good quality of the products offered - table grapes, grape juice and raisins, but this is the way to expand business opportunities. In a number of rural areas one can think of introducing new productions based on several branches close to viticulture, which would also use its raw material. Investing in this direction of development of the sector will enable it to increase its competitiveness and better integration into the regional economy. In this way, the country can, through the development of the potential of the wine industry, develop other agricultural industries and productions, making the rural areas in Bulgaria modern developing territories with a quality public environment.

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