

# THE WINE CLUSTER CHALLENGE IN BULGARIA - MISSION (IM)POSSIBLE

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## **Abstract**

*In the Bulgarian wine industry, where micro, small and medium-sized enterprises predominantly function, the formation of new methods of competitive behavior becomes an almost axiomatic condition for adapting to changes in the environment and positioning in the competitive market. This is a prerequisite for redirecting the individual efforts of the winemakers to cooperate in order to create sustainable associations, to achieve a synergetic effect from their joint activities and to increase their competitiveness. In this regard, the purpose of the report is to reveal the efficiency of the integration processes in the sector, as an opportunity to utilize the competitive potential and as the basis for the construction and sustainable function of wine clusters.*

**Keywords:** *wine industry, wine clusters, integration processes, competitiveness*

## **Introduction**

Due to its favorable geographic location, good soil and climate conditions, rich experience and traditions, wine tradition emerges as one of the main branches of the Bulgarian economy. However, while in the 80s our country is one of the major exporters of wine, during the 90s, as a result of climate changes and a complete rearrangement of the world wine map, the market situation changes sharply. The reasons can be sought both in connection to the entry of new competitors (China, Chile, USA, etc.) and in a change in the nature of the demand itself, in response to the newly imposed consumer tastes and preferences. There are also "internal industry processes" related to the privatization of the winemakers and the land reform. As a result of the changes in the national and international markets, nowadays serious structural transformation and high levels of competition may be observed in the sector.

A large number of micro-, small- and medium-sized enterprises predominantly operate on the fragment Bulgarian market, without any of them standing out with significant market shares. There is a monopolistic competition, with a strong emphasis on product differentiation of wine producer products. The focus is towards the establishment of local varieties, quality wines and authentic tastes.

Changes in the environment imply an adequate response from the wine producers, in terms of seeking and forming new ways of competitive behavior. Independent organizations are increasingly focusing on redirecting their strategies towards

diversification and the realization of joint and co-operational activities. New kinds of inter-relations and relationships are being created, in which competing companies combine their efforts to adapt to the changes in the environment and the competitive positioning on the market.

In that regard, the **purpose of this publication** is to reveal the possibilities of implementation of integration processes, related to the realization of joint activities within the sector and the effectiveness of their implementation as a prerequisite for the creation and sustainable function of wine clusters.

**The subject of the study** are micro- and small wine-producing enterprises (along lines of the Plovdiv District).

It is assumed that in the modern market reality, in which “*micro- and small companies predominantly exist, who due to their limited resources and capacity are uncompetitive*”<sup>1</sup>, individual winemakers are increasingly oriented towards co-operation with each other and other organizations, with the aim of increasing competitiveness in the long term. The choice of a particular region is predetermined by a concept of terroir adopted as sector leading or the “sense of place”, which includes not only certain qualities, but also the way in which the local environment affects the production of a given product<sup>2</sup>. Assuming that wine is distinguished by authenticity, provided to it by the terroir, the significance of the “place” for the production of regional wines and the focus on the establishment of the identity of the region is also determined. In-depth and structured interviews along the lines of the expert assessment method were performed for the purposes of the study.

### **The Concept of Industrial Clusters**

The cluster theory is gaining an increasing number of followers and is being established as “a new approach to economic development”<sup>3</sup>. Despite being related to the name Michael Porter - one of the leading researchers of competitiveness, its founder is considered to be Alfred Marshall<sup>4</sup>, who first reveals (as early as 1890) the importance of “*local concentrations*” for the specialization of an industry and the development of the national economy. Marshall explains industrial specialization with the existence of specific for a given geographic region natural resources and focuses on the forming of **industrial regions**, which function as a “self-reinforcing development system”<sup>5</sup>. It is evident that the necessary conditions for the formation of the said system are: The existence of **interconnected organizations** that are **from one industry** and operate **within the same geographic region** (geographically localized).

Porter builds on Marshall's idea and introduces the cluster approach to competitiveness research as a form of tying various organizations in a value chain, in which they combine their competitive edges and realize a synergetic effect from their joint ventures. In his work “The Competitive Advantage of Nations” the author explains “*the sources of sustained*

<sup>1</sup> Genova, Zh, Tsv. Kotsev Synergy and the synergetic effect as a company strategy. Synergy and competitiveness of Bulgarian enterprises, ISBN 978-954-423-703-5, 2011, p. 13-14.

<sup>2</sup> Сайт на Wineinbg: <http://wineinbg.net/bin/wbg.nsf/vkn/DASP-7R3JCH>, 19.07.2018.

<sup>3</sup> Marinov, G. Velev, Geraskova, O. Economy and competitiveness of entrepreneurial activity, BZ “Informa Intellect”, S., ISBN 978-954-8492-69-0, 2009, pp. 223.

<sup>4</sup> Marshall, A. Principles of Economics: An Introductory Volume. Ninht (Variorum) Edition (1st Edition 1890), London, Macmillan, 1962.

<sup>5</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softrade, ISBN 978-954-334-045-3, 2007, pp. 10.

*prosperity*”<sup>6</sup>, focusing not on the “*macroeconomic conditions for growth and well-being*”, rather than on the microeconomic foundations for competitiveness, focusing attention on company competitiveness and the research of industries. Porter complements Marshall's mention of natural resources as an element of factor conditions with the determinants: company strategy, structure and competition; conditions of internal demand; related and supportive productions forming the so-called “Diamond of National Advantage” and creating the conditions, which form the environment, in which the individual companies (sectors) are “*born and learn to compete*”<sup>7</sup>. With the determinant of “**related and supportive productions**”, the theoretical scope of the term “cluster” goes out beyond the borders of an industry and adopts a wider definition, which defines it as a “*geographic concentration of interconnected companies, specialized suppliers, service providers, companies from related industries and associated institutions...., which compete, but also co-operate*”<sup>8</sup>. It also determines its essential features, including:

- **interconnection** of organizations through established relationships and a new type of **relationship** involving both competition and co-operation;
- **geographic concentration**, because the connected organization operate in a specific geographic region;
- **relationship between organizations from different industries**;

This illustrates the features that distinguish the concept of an **industrial cluster** and Marshall's proposed **industrial region**, which could essentially be seen as integrated into the **industrial cluster**.

Fisher and Schornberg<sup>9</sup> present the sectoral competitiveness indicators as two main groups of determinants: **The structure of the environment** and **the processes in the sector**, each of which is determined by a set of indicators, which are at the “*core of the interaction between economic actors and institutions, in the established national conditions in their overall broad-based scope using the cluster approach*”<sup>10</sup>.

At the core of the clustertization as an approach stand the integration processes in the studied sector, in terms of the forming of a vertical (VMS - along the supply chain) and horizontal (HMS - through connections between organizations at a hierarchic level) marketing systems. **VMS** is associated with the chain of value (in accordance with the suggested Michael Porter model, connecting activities in the organization in a value chain) and is created along a vertical, along the overall supply chain (supplier - manufacturer - vendor - customer). **The value creation chains** of all connected units are reviewed as a part of the total value chain, including the value chains: of the supplier; of the company; of the distribution channels, of the buyer<sup>11</sup>. Porter points out that “*the competitive advantage*

<sup>6</sup> Porter, M. E., *The Competitive Advantage of Nations*. S., Publishing house “Klasika i stil”, ISBN: 9789543270934, 2004, Introduction.

<sup>7</sup> Porter, M. *The competitive advantage of nations*, London, Macmillan, 1990, pp. 875.

<sup>8</sup> Porter, M. *On Competition*, Boston, Harvard Business Review `books, 1998.

<sup>9</sup> Fisher, Ch., S. Schornberg. Determinants of sector competitiveness and implications for the EU food & drink manufacturing industries, IAMA, 2007, p. 24.

<sup>10</sup> Dimitrova, D. *Competitiveness of the production of desert grape*, dissertaion, Sofia, Agricultural academy, Agricultural Economy Institute, 2015.

<sup>11</sup> Porter, M. *The Competitive Advantage of Nations*. S., Publishing house “Klasika i stil”, 2004.

*is increasingly a function of the extent to which the company can manage the whole system*<sup>12</sup>.

It is necessary to clarify that the value supply chains are an essential part of building the industrial cluster, but not completely exhaustive as a category, at the least due to two essential features that should be taken into account:

**First** - the value chains are mostly associated with the supply chains (vertical connections), which are an essential element of the cluster, but it, in its entirety, also contains other elements, related to the relationships established along the horizontal.

**Second** - the value chains may “go out” of the borders of the “geographically concentrated cluster” and be grow into national and international clusters, as well as into interconnected clusters.

Mladen Velev presents some significant distinctions between clusters and other entities with which they often synonymize (apart from the already mentioned industrial region and value chain) such as:

- **business networks** which, despite their seemingly similar characteristics with the industrial cluster, by contrast, are most often created on a contractual basis and are characterized by limited membership of related organizations<sup>13</sup>;
- **industrial complex** - as a group of industries, related with similar products and services and “*as an addition, having a similar localization*”<sup>14</sup> and with the clarification that every cluster is an industrial complex, but not vice-versa<sup>15</sup>.

It should be taken into account that the concept of industrial clusters “*acquires almost axiomatic importance in seeking ways to locate global production processes, attracting foreign investment, mobilizing local resources, building a sustainable environment for SMEs and promoting innovation*”<sup>16</sup>. and “SMEs play an essential role in economic processes and therefore optimization of their operation is extremely important to enhance their competitiveness and sustainable development.”<sup>17</sup>

In this regard, the idea of forming industrial clusters is particularly relevant for industries where micro- and small-sized enterprises predominantly operate, with regard to enhancing their individual competitiveness on one hand, and, on the other, to delivering positive effects for the entire system of related organizations and increasing the competitiveness of the industrial sector and the region in which they operate; clustering occupies an intermediate and central place in the formed inter-connections. Co-operations between organization during their participation in joint activities leads to the creation of sustainable clusters, the achievement of a synergetic effect and an enhancement in

<sup>12</sup> Porter, M. The Competitive Advantage of Nations. S., Publishing house “Klasika i stil”, 2004, pp. 68.

<sup>13</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softrade, ISBN 978-954-334-045-3, 2007, pp. 18.

<sup>14</sup> Czamanski, S., L. A. de Ablas, Identification of industrial clusters and complexes: a comparison of methods and findings, Urban studies 16, 1979, pp. 61-80 - cited under Velev, M. Cluster approach for enhancing competitiveness, 2007, pp. 18.

<sup>15</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softrade, ISBN 978-954-334-045-3, 2007, pp. 18.

<sup>16</sup> Kotsev, N. Industrial clusters and competitiveness of the Bulgarian economy in the EU (Financial framework 2007-2013), Author's Summar, Sofia, UNWE, Faculty of International Economy and Politics, International Economic Relations and Business department, 2013.

<sup>17</sup> Angelova, M., Pastarmadzhieva, D. *Challenges and opportunities for flexible crediting of small and medium-sized enterprises in Bulgaria*, Journal “Fundamental Sciences and Applications”, ISSN 1310-8271, vol. 23/2017, 2017, pp.167-170;

competitiveness. Globally these kinds of practices are successfully implemented, while in our country such attempts are also present in a number of sectors in the economy.

### **Wine Clusters - opportunities and perspectives**

The conceptual design for the construction and sustainable functioning of wine clusters is gaining more and more supporters.

The processes of clusterization within the wine industry are manifested as an opportunity to highlight the competitive potential of micro- and small-sized winemaking enterprises, resulting from co-operation with connected organization in relation to the promotion and realization of the product, including in the development of wine tourism, the formation of logistics chains and in attempts to establish a common identity of the region and offer an aggregate product on the international markets. The formation of a wine cluster is viewed as a major factor for the creation of sustainable aggregate competitive advantages.

The methodology proposed by Velev is used to identify a wine cluster<sup>18</sup>, according to which:

**The first step** is to determine the leading industry<sup>19</sup> with the focus being placed on the industry where the final product to be realized is produced, i.e. in the formation of a wine cluster - it is on the wine industry, focusing on micro- and small-sized winemaking enterprises.

The second step is related to an analysis of the already identified wine cluster (incl. determining the industries, which are part of the cluster and the relationship between them) and validating the cluster (in accordance with the stages of the methodology proposed by Velev<sup>20</sup>).

The micro and small-sized winemaking enterprises are viewed as a strategic group with the following common characteristics: they are enterprises from the same type; they operate within the same region (i.e. they are affected by the same environmental factors); they produce similar products; they fulfill the demand of the same customers (market); they use the same suppliers, vendors and other partner organizations, in regard to the similar activities, which they perform.

In today's market conditions, despite the seemingly similar strategies that define **homogeneity** in their strategic actions (differentiation, innovation, marketing, including promotional activities), wine cellars are differentiated in the way that they interpret market opportunities, their attitude towards joint activities, product logistics, etc. There is a difference in the implementation of their strategic intentions, as well as in relation to the tools used - exports, technologies, investments, product modifications, new brands, distribution, etc. This is predetermined by **heterogeneity** in their strategic decisions. The challenge is to reveal what is common (trends) and what is different (differentiation) between the various winemaking enterprises and, therefore, the actual and/or used opportunities for joint and related activities, which are fundamental to the formation of wine clusters, in regard to increasing competitiveness.

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<sup>18</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softrade, ISBN 978-954-334-045-3, 2007, pp. 83-95.

<sup>19</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softrade, ISBN 978-954-334-045-3, 2007, pp. 87.

<sup>20</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softrade, ISBN 978-954-334-045-3, 2007, pp. 84.

## Factor conditions

There are two separate wine regions within the country: The Danube Plain and the Thracian Lowland, 5 wine-growing regions<sup>21</sup> and 51 wine-producing regions with a guaranteed and guaranteed controllable PDO (protected designation of origin)<sup>22</sup>. To a great extent the specialization of the individual regions is determined by their natural resources, soil, climate, landscape, water, etc., of which the production processes in the sector depend. This is related to factor conditions and fits into the concept of "terroir" or "sense of place", involving both the way in which the local environment affects the production of a product (17), incl. production conditions, area resources, its uniqueness, specific features and cultivated varieties, as well as the production practices typical for a given region, relationship networks and joint activities demonstrating the existence of integration processes and the consolidation of enterprises in the sector. The concept of terroir corresponds with the belief that certain products are non-reproducible in the same form outside of the environment of their origin. Thus, the qualities and characteristics of such products, incl. of wine are considered to derive from their specific connection with their place of origin. Wine is distinguished by authenticity given to it by the terroir, so its role is considered to be decisive for the production of regional wines. In view of the above, in the context of the ever-changing marketing environment and in particular the wine market, producers are gradually changing the direction of their marketing strategies, directing them to the creation of a local identity through the establishment of regional products.

Therefore, the focus is on winemaking enterprises operating on a certain territory - the Plovdiv district, and the focus is on micro- and small-sized enterprises in the area<sup>23</sup> in order to highlight the interconnections between them in the development of joint activities for the promotion and realization of the product, as an opportunity to highlight their competitive potential, incl. the one related to building a common identity of the region or an aggregate product - a common brand based on the possibility of *"creating and using the common brand of the region as a destination of unique and very specific wines and food, boutique wineries, historical architecture and the crossroads of cultures shaping the local tradition"*<sup>24</sup>.

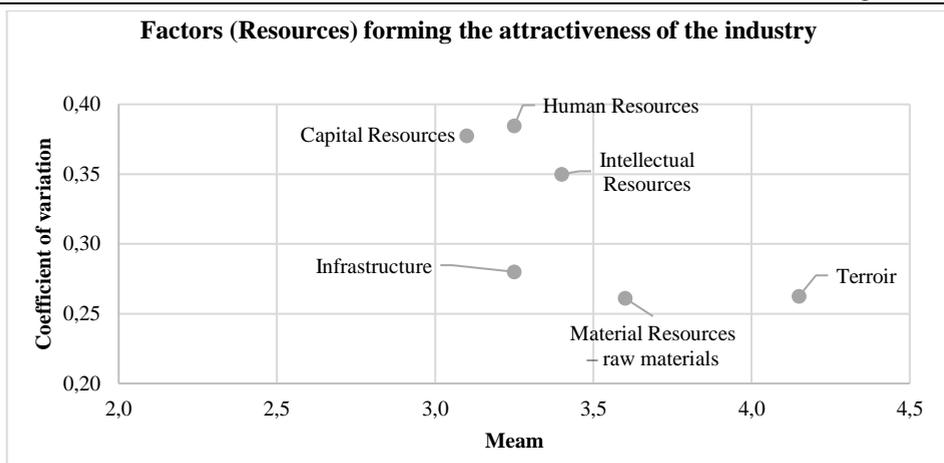
The assessment of the determinant **“factor (resource) provision” (in particular the terroir)** is based on the average assessments and the coefficients of variation of the elements of the studied factor and their impact on the attractiveness of the sub-industry, obtained through a descriptive analysis. The assessment scale of each element (indicator) is from 1 (highly unattractive) to 5 (highly attractive).

<sup>21</sup> <https://bulgariandrinks.com/видове-напитки/вино/186-лозаро-винарски-райони-в-българия>, 25.06.2017.

<sup>22</sup> Wine and Spirit Drinks Act - <https://www.lex.bg/laws/ldoc/2135798102>, 10.12.2017.

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<sup>24</sup> Rafailova, G., Dzabarova, J. Marketing approach for development of cross-border routes for wine and cultural tourism in south Bulgaria and North Greece. Cultural Corridor Via Adriatica: Cultural Tourism without Boundaries : International Scientific Conference, 15.10.2014 - 19.10.2014. - Sandanski, Bulgaria and Corfu, Greece: SWU Neofit Rilski Publ. House, 1, 2014.



**Fig. 1** Descriptive analysis of the factors of the macro-environment

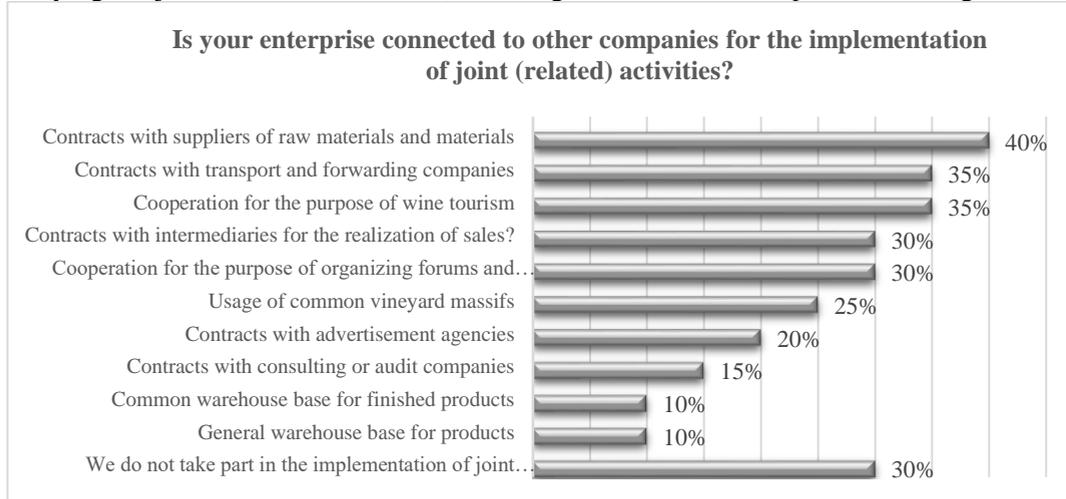
The highest assessment is given to the **"terroir"** - 4.15, followed by **"material resources (raw material provision)"** - 3.6, which is not accidental:

First: With regard to confirming the leading role of the terroir and the way in which the local environment affects wine production.

Second: Regarding the fact that wine production depends entirely on the production of grapes (raw material) - vineyards, harvests (yield), varieties, quality, etc., and in turn from natural conditions, geographical location, climate, soils, etc., i.e. of the terroir, which justifies the relationship between the two elements of the factor.

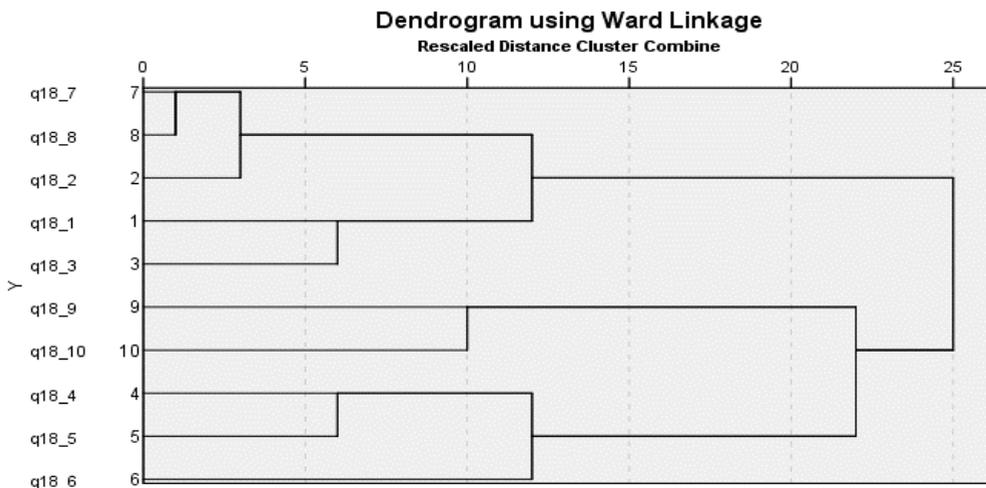
### Related and supportive productions

Participation in marketing systems for the production, promotion and realization of wine is seen as a prerequisite for increasing competitiveness, with nearly 70% of micro- and small-sized winemaking enterprises indicating that they are tied to other companies in carrying out joint (related) activities (according to the information presented in figure 2):



**Figure 2**

The interrelationships in performing joint activities, analyzed through cluster analysis, highlight their grouping in the following strategic directions:



**Figure 3** Cluster analysis

1) Winemakers who **combine their activities towards the realization of PR activities** in connection with the realization of their products, incl. cooperation in wine tourism (10) and organization and participation in forums and tastings (9).

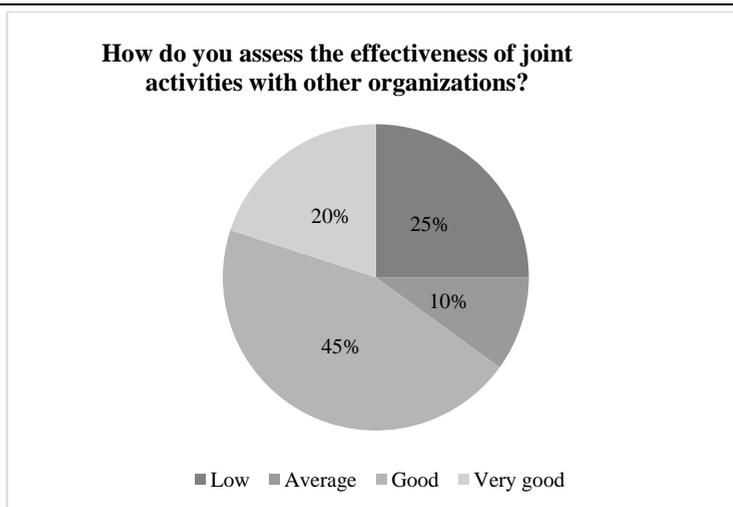
The benefits of such initiatives are not only apparent, but they are also one of the leading joint initiatives of winemakers, but it is unanimously noted that the strength and meaning of organizing such activities is precisely in joint activities.

2) Winemaker **who integrate with each other in terms of the logistics of their products**, incl. the supply of raw materials and materials (4), transport (5) and their marketing (6).

This is a signal of the existence of integration processes along the supply chain and a prerequisite for co-operation through the development of placement and distribution.

3) The third group, identified through the analyzes, directs its **strategic efforts towards building relationships with stakeholders** and implementing joint activities related to advertising (8), consultancy and auditing services (7) and among them for the use of common warehouse bases (2) for their products.

**Effectiveness in the implementation** of the joint activities is estimated at 2.6 on a scale of 1 to 5 and a standard deviation of 1.1, i.e. 45% of respondents give a "Good" rating.



**Figure 4**

Building on both their own, as well as on global experience, wine experts define joint activities both as a prerequisite and a factor for enhancing both their own competitiveness, as well as that of the marketing system as a whole. Cooperation is defined as a mandatory condition for the promotion and realization of Bulgarian wine and for the building up and establishment of the local identity of the region of its origin. This is evidence of the already matured idea of focusing not on individual winemakers and their wines, but on promoting the wine region and the wines in a region, and hence on building its identity in the consumer's consciousness. The above is defined as an opportunity to establish Bulgarian wine on the international market, where everything else is known, and our wine is different and without analog, particularly to its local (regional) varieties. On their part, joint activities should be seen as an established practice and a prerequisite for achieving competitiveness. Expert unanimously agree that *"everybody wins from such a symbiosis."*

It is also noted that the adoption of such good practices surely requires government support, as the government is the one that can help establish the image of Bulgarian wine on the global market, provide funding and facilitate the procedures under which similar initiatives take place.

As the development of marketing systems and ongoing integration processes in the sector are seen as the basis for clustering, the issue of building and sustainable functioning of **wine clusters** is one of the leading in terms of taking into account the specialization of the individual business units, collaboration during co-operation between them and the establishment of the identity of the region. Wine experts expressly unite around the opinion that in Bulgaria the implementation of such intentions ends only as a conceptual project. Much of the mistrust is related to the accumulated unsuccessful experience and unfairness that most of them have encountered. A common opinion is that in the sector there is a lack of awareness and culture of lasting co-operation between organizations that are usually competitors. The benefits are being taken into account, especially in terms of establishing an international image of Bulgarian wine, but skepticism is predominant.

### Conclusion:

Based on the typology proposed by Velev to identify a cluster<sup>25</sup> it can be noted that the presence of a formed wine cluster with the following features is confirmed within the researched region:

1. A wine cluster has been discovered, formed by the linking of organizations that are functioning in different industries, but are geographically localized. It includes: raw material suppliers, winemakers, tourist agencies, stakeholders, etc.

2. The wine cluster is **latent (underdeveloped)** in regard to its development phase. It functions far below its existing potential, with most activities growing at about 30% of their potential.

3. The wine cluster is **localized**, because it was formed on a regional basis, i.e. it can be defined as a **regional** cluster.

4. The wine cluster was formed on the basis of geographic position and factor conditions - the terroir (the environmental conditions). According to Porter, this is typical for developing countries.

5. The cluster is formed based on horizontally and vertically built marketing systems (**HMS and VMS**) and is developing at a **meso-level** of competitiveness management.

6. Cluster activities cover a significant part of the activities in the industry and along the value chain with related industries, in regard to forming its competitiveness.

7. According to the activity of the cluster relationships, it can be defined as a **cluster with underdeveloped cooperative relationships**.

8. Because of fragmentation in the research sector, its focus is on building and establishing a common identity of the region

In the context of the hypothesis - is a "wine cluster in Bulgaria" a possible mission, the results of the research clearly confirm not only the prerequisites for the emergence but also the presence of a formed wine cluster with the potential for development, as well as realized benefits from its functioning, in regard to the establishment of an aggregate image of Bulgarian wine worldwide. Although Bulgarian winemakers do not account for its realization - the existence of the cluster is a fact, however it is still in its early stages of development and it's operating below its potential.

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<sup>25</sup> Velev, M. Cluster approach for enhancing competitiveness, S., Softtrade, ISBN 978-954-334-045-3, 2007, pp. 24-33.

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