Study
ANALYSIS OF THE REGULATORY FRAMEWORK AND ECONOMICS OF THE WINE SECTOR

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<tr>
<td>CEFTA</td>
<td>Central European Free Trade Association</td>
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<td>G.I.</td>
<td>Geografska indikacija (Serbian equivalent to PGI – Protected Geographical Indication in EU)</td>
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<td>K.G.P.K.</td>
<td>Kontrolisano poreklo i garantovan kvalitet (equivalent to PDO – Protected Designation of Origin in EU), the highest Serbian quality category for wine with geographical indications</td>
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<tr>
<td>K.P.K.</td>
<td>Kontrolisano poreklo i kvalitet (equivalent to PDO – Protected Designation of Origin in EU), higher Serbian quality category for wine with geographical indications</td>
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<td>MAFWM</td>
<td>Ministry of Agriculture, Forestry and Water Management</td>
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<td>SORS</td>
<td>Statistical Office of the Republic of Serbia</td>
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<td>RAH</td>
<td>Register of Agriculture Holdings</td>
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<td>CVO</td>
<td>Center for Viticulture and Oenology</td>
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<td>ha</td>
<td>Hectare</td>
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<td>hl</td>
<td>Hectoliter</td>
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<td>kg</td>
<td>Kilogram</td>
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<td>OIV</td>
<td><em>Organisation Internationale de la Vigne et du Vin</em> (International Organization for Vine and Wine)</td>
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<tr>
<td>PDO</td>
<td>Protected Designation of Origin</td>
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<td>PGI</td>
<td>Protected Geographical Indication</td>
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1. ANALYSIS OF THE REGULATORY FRAMEWORK OF THE WINE SECTOR

1.1. Wine Legislation in Serbia

Legislation in Serbia regulating the viticulture and wine production sector is modelled after and mostly harmonized with EU legislation\(^1\), which is the basis for some standards applied for wine/wine products and aromatized wine products. The current legislation regulating the viticulture and wine production sector is presented below through a brief review of laws and by-laws.

Viticulture and wine production (Common Market Organization and Quality Policy of wine and aromatized wine products)

- The Law on wine (Official Gazette of the RS, No. 41/09 and 93/12);
- The By-Law on the content and the manner of maintaining the Vineyard Register, as well as on the registration application form for the Vineyard Register (Official Gazette of the RS, No. 33/10 and 9/14);
- The By-Law on technical and staff requirements to be fulfilled by the Expert organization for maintaining the Vineyards Register, as well as on the methods for performing tasks relating to the Vineyards Register (Official Gazette of the RS, No. 46/10 and 27/15);
- The By-Law on the format, content, and manner of displaying registration marks for wines with geographical indications (Official Gazette of the RS, No. 67/10);
- The By-Law on the manner and procedure for the production and quality of wines without geographical indications and wines with geographical indications (Official Gazette of the RS, No. 87/11);
- The By-Law on conditions to be fulfilled by an authorized laboratory which analyses the quality of must, wine and other products and regarding technical and professional equipment, reference methods for physical, chemical and microbiological analyses of wine, as well as sensory assessment (Official Gazette of the RS, No. 100/11);
- The By-Law on the packaging, declaration, and labelling of still wine, certain special wines and other products in production and on the market (Official Gazette of the RS, No. 38/12, 50/15, 62/16 and 24/17);
- The By-Law on the conditions for recognition, procedure of recognition of designations for still wines and certain special wines with geographical indications, as well as the method of production and labelling of still wines and certain special wines with geographical indications (Official Gazette of the RS, No. 121/12, 102/14, 78/15 and 94/17);
- The By-Law on the List of wine evaluators and the amount of compensation for the work of the evaluators (Official Gazette of the RS, No. 31/12 and 10/2017);
- The By-Law on parameters and analysis methods, as well as determining the quality of grape must, wine and other products from grapes, must, grape marc and wines used in the production of wine (Official Gazette of the RS, No. 107/14);
- The By-Law on the zoning of wine-growing geographical production areas in Serbia (Official Gazette of the RS, No. 45/15);
- The By-Law on oenological practices and oenological means for the production of grape must, wine and other products (Official Gazette of the RS, No. 26/15, 93/15, 41/17 and 84/2018);
- The By-Law on the procedure and methods for sensory testing of wine and the manner of training and assessment of professional competencies of sensory evaluators (Official Gazette of the RS, No. 93/15);
- The By-Law on the conditions for the production and market of aromatized wine (Official Gazette of the RS, No. 110/16 and 20/2018);
- The By-Law on conditions to be met by the Control organization, as well as manner and procedure of work of Control organization (Official Gazette of the RS, No. 30/17).

\(^1\) Not including the new EU regulations from 2018 and 2019
Quality Policy (Geographical Indication) for aromatized wine-based drinks and aromatized wine-product cocktails

- The Law on geographical indications (Official Gazette of RS, No. 18/2010 and 44/2018).

General regulations (including wine and aromatized wine products)

- The Law on food safety (Official Gazette of RS, No. 41/2009 and 17/2019);
- The By-Law on declaring, labeling and advertising food (Official Gazette of RS, No. 19/2017 and 16/2018);
- The By-Law on aromas (Official Gazette of RS, No. 52/2018) (for aromatized wine products);
- The By-Law on nutritional additives (Official Gazette of RS, No. 53/2018);
- The By-Law on food enzymes (Official Gazette of RS, No. 51/2018).

1.2. EU Wine Legislation

The viticulture and wine production sector in EU is a well-regulated area with numerous requirements and conditions for the establishment of administrative, control and other systems. The EU legislation on wine/wine products and aromatized wine products is presented below.

Wine (products originated by grape)

- Commission Regulation (EC) No. 555/2008 of 27 June 2008 laying down detailed rules for implementing Council Regulation (EC) No. 479/2008 on the common organization of the market in wine as regards support programs, trade with third countries, production potential and on controls in the wine sector (only the production potential is regulated, and most of the regulation is not in the force);

**Aromatized wine products (aromatized wines, aromatized wine-based drinks, aromatized wine-product cocktails)**


**General regulations**

1.3. Compliance of Serbian Wine Legislation with EU Regulations

Serbian legislation is mostly harmonized with the EU legislation, but not all of the systems and standards required by provisions of EU regulations have been established. The European Commission has enacted new regulations in 2018 and 2019, so it is necessary to make adjustments in the coming period. The presented review of compliance with EU legislation takes into account compliance with the previous EU legislation (not the latest EU regulations from 2019).

Basic issues

- **Definitions** (Regulation (EU) No. 1308/2013) – Harmonized (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12 – some definitions and different by-laws depending on the topic)).

- **Categories** (Regulation (EU) No. 1308/2013, Annex VI, Part II) – Harmonized – but not in the Law on wine (The By-Law on the manner and procedure for production and on the quality of wine without geographical indication as well as of wines with geographical indication (Official Gazette of the RS, No. 87/11) - parts of the definitions of some categories; The By-Law on packaging, declaration and labelling of still wine, certain special wines and other products in production and on the market (Official Gazette of the RS, No. 38/12, 50/15, 62/16 and 24/17); The By-Law on oenological practices and oenological means for the production of grape must, wine and other products (Official Gazette of the RS, No. 26/15, 93/15, 41/17 and 84/2018) - indirect definitions of categories through definitions of oenological practices and means).

- **Controls** (Regulation (EC) No. 882/2004 / Regulation (EU) 2017/625) - Partly harmonized/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and No. 93/12 and different by-laws depending on the topic)).

Production and marketing of grape and wine products

- **Vineyard Register** (Commission Delegated Regulation (EU), No. 2018/273, Commission Implementing Regulation, No. 2018/274, Connected with Regulation (EU), No. 1308/2013, Article 145) – Harmonized with old legislation/Harmonization with the new regulation has not been carried out (The By-Law on the content and the manner of maintaining the Vineyard Register, as well as on the registration application form for the Vineyard Register (Official Gazette of the RS, No. 33/10 and 9/14); The By-Law on technical and staff requirements to be fulfilled by the Expert Organisation for maintaining the Vineyards Register, as well as on the methods for performing tasks relating to the Vineyards Register (Official Gazette of the RS, No. 46/10 and 27/15)).

- **Harvest declarations** (Commission Delegated Regulation (EU), No. 2018/273, Commission Implementing Regulation (EU), No. 2018/274) – Harmonized with old legislation/Harmonization with the new regulation has not been carried out (The By-Law on the content and the manner of maintaining the Vineyard Register, as well as on the registration application form for the Vineyard Register (Official Gazette of the RS, No. 33/10 and 9/14)).

- **Production declarations** (Commission Delegated Regulation (EU), No. 2018/273, Commission Implementing Regulation (EU), No. 2018/274) – Harmonized with old regulation/Harmonization with the new regulation has not been carried out (The By-Law on the content and the manner of maintaining the Vineyard (Winery) Register, as well as on the registration application form for the Vineyard (Winery) Register (Official Gazette of the RS, No. 67/11 and 61/17)).

- **Stock declarations** (Commission Delegated Regulation (EU), No. 2018/273; Commission Implementing Regulation (EU) No. 2018/274) – Harmonized with old legislation/Harmonization with the new regulation has not been carried out (The By-Law on the content and the manner of maintaining the Vineyard (Winery) Register, as well as on the registration application form for the Vineyard (Winery) Register (Official Gazette of the RS, No. 67/11 and 61/17)).

- **Oenological practices** (Regulation (EU), No. 1308/2013, Commission Regulation (EC), No. 606/2009 / OIV publications) – Harmonized (The By-Law on oenological practices and oenological means for the production of grape must, wine and other products (Official Gazette of the RS, No. 26/15, 93/15, 41/17 and 84/18); The By-Law on the manner and procedure for the production and on the quality of wines without geographical indications as well as of wines with geographical indications (Official Gazette of the RS, No. 87/11)).

- **Oenological means (substances)** (Commission Regulation (EC), No. 606/2009, Article 9 / OIV publications) – Harmonized (The By-Law on the manner and procedure for the production and on the quality of wines without geographical indications as well as of wines with geographical indications (Official Gazette of the RS, No. 87/11); The By-Law on oenological practices and oenological means for the production of grape must, wine and other products (Official Gazette of the RS, No. 26/15, 93/15, 41/17 and 84/18)).


- **Conditions and restrictions for sweetening of wines** (Commission Regulation (EC), No. 606/2009) – Partly harmonized (The By-Law on the manner and procedure for the production and on the quality of wines without geographical indications as well as of the wines with geographical indications (Official Gazette of the RS, No. 87/11); Not regulated: administrative rules for the sweetening).

- **Enrichment** (Regulation (EU), No. 1308/2013) – Partly harmonized (The By-Law on the manner and procedure for the production and on the quality of wines without geographical indications as well as of the wines with geographical indications (Official Gazette of the RS, No. 87/11); Not regulated: processes).

- **Acidification and de-acidification** (Regulation (EU), No. 1308/2013 - Partly harmonized (The By-law on the manner and procedure for the production and on the quality of wines without geographical indications as well as of the wines with geographical indications (Official Gazette of the RS, No. 87/11); Not regulated: processes).

- **Restrictions on blending and coupage** (Commission Regulation (EU), No. 606/2009, Article 7; Regulation (EU), No. 1308/2013, Annex VIII, Part II, C; Commission Regulation (EU) No. 606/2009, Article 8) - Partly harmonized (Not regulated in line with the EU legislation (blending and coupage with imported wine allowed for domestic wine without GIs)).

- **Laboratories** (Regulation (EU), No. 1308/2013) – Harmonized (The By-Law on conditions to be fulfilled by an authorized laboratory which analyses the quality of must, wine and other products and regarding technical and professional equipment, reference methods for physical, chemical and microbiological analyses of wine, as well as sensory assessment (Official Gazette of the RS, No. 100/11)).

- **Laboratory methods** (EU / OIV methods) – Harmonized (The By-Law on parameters and analysis methods, as well as determining the quality of grape must, wine and other products from grapes, must, grape marc and wines used in the production of wine (Official Gazette of the RS, No. 107/14)).

- **Sensory assessment** (EU / OIV publications) – Harmonized (The By-Law on the procedure and methods for sensory testing of wine and the manner of training and assessment of professional competencies of sensory evaluators (Official Gazette of the RS, No. 93/15); The By-Law on the List of wine evaluators and the amount of compensation for the work of the evaluators (Official Gazette of the RS, No. 31/12 and 10/2017).
- **Requirements on Standard ISO/IEC 17025** (Regulation (EU), No. 1308/2013) – Harmonized (The By-Law on conditions to be fulfilled by an authorized laboratory which analyses the quality of must, wine and other products and regarding technical and professional equipment, reference methods for physical, chemical and microbiological analyses of wine, as well as sensory assessment (Official Gazette of the RS, No. 100/11)).

**Labeling and presentation**

- **Compulsory and Optional particulars** (Regulation (EU), No. 1308/2013; Commission Regulation (EC) No.606/2009) – Harmonized (The By-Law on packaging, declaration and labelling of still wine, certain special wines and other products in production and on the market (Official Gazette of the RS, No. 38/12, 50/15, 62/16 and 24/17)).

**Market**

- **Prohibition of lead-based capsules or foil** (Commission Delegated Regulation (EU), No. 2019/33) – Harmonized (The By-Law on packaging, declaration and labelling of still wine, certain special wines and other products in production and on the market (Official Gazette of the RS, No. 38/12, 50/15, 62/16 and 24/17)).

- **Accompanying documents** (Regulation (EU), No. 1308/2013; Commission Delegated Regulation (EU), No.2018/273; Commission Implementing Regulation (EU), No.2018/274) – Partly harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12) – only common rules regulated).

- **Transport of unpackaged wine products** (Commission Delegated Regulation (EU), No. 2018/273) – Partly harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12) – common national rules (not EU rules)).

**Records (Inward and Outward register)**

- **Inward and Outward register** (Regulation (EU), No. 1308/2013; Commission Delegated Regulation (EU) No.2018/273; Commission Implementing Regulation (EU), No. 2018/274) - Partly harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12) – only common rules regulated).

- **Operations (oenological practices) to be recorded in the Record** (Commission Delegated Regulation (EU), No. 2018/273; Commission Implementing Regulation (EU), No. 2018/274) - Partly harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12) – only common rules regulated).

**Quality Policy**

- **Protected designation of origin and Protected geographical indication** (Regulation (EU), No. 1308/2013, Commission Regulation (EC), No. 607/2009) – Harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12; The By-Law on the format, content and manner of displaying registration marks for wines with geographical indications (Official Gazette of the RS, No. 67/10); The By-Law on the manner and procedure for the production and quality of wines without geographical indications and wines with geographical indications (Official Gazette of the RS, No. 87/11); The By-Law on the manner of packaging, declaration and labelling of still wines, certain special wines and other products in the production and trading (Official Gazette of the RS, No. 38/12, 50/15, 62/16, and 24/17); The By-Law on the conditions for recognition, procedure of recognition of designations for still wines and certain special wines with geographical indications, as well as the method of production and labelling still wines and certain special wines with geographical indications (Official Gazette...
of the RS, No. 121/12, 102/14, 78/15, and 94/17); The By-Law on the zoning of wine growing geographical production areas in Serbia (Official Gazette of the RS, No. 45/15)).

- **Traditional terms** (Regulation (EU), No. 1308/2013, Commission Regulation (EC), No. 607/2009) – Harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12; The By-Law on the format, content and manner of displaying registration marks for wines with geographical indications (Official Gazette of the RS, No. 67/10); The By-Law on the manner and procedure for the production and quality of wines without geographical indications and wines with geographical indications (Official Gazette of the RS, No. 87/11); The By-Law on the manner of packaging, declaration and labelling of still wines, certain special wines and other products in the production and trading (Official Gazette of the RS, No. 38/12, 50/15, 62/16, and 24/17); The By-Law on the conditions for recognition, procedure of recognition of designations for still wines and certain special wines with geographical indications, as well as the method of production and labelling still wines and certain special wines with geographical indications (Official Gazette of the RS, No. 121/12, 102/14, 78/15, and 94/17); The By-Law on the zoning of wine growing geographical production areas in Serbia (Official Gazette of the RS, No. 45/15)).

- **Control / certification/control bodies** (Regulation (EU), No. 1308/2013, Commission Regulation (EC), No. 607/2009) – Harmonized with old legislation/Harmonization with the new regulation has not been carried out (The Law on Wine (Official Gazette of the RS, No. 41/09 and 93/12; The By-Law on the List of wine evaluators and the amount of compensation for the work of the evaluators (Official Gazette of the RS, No. 31/12, and 10/2017); The By-Law on the procedure and methods for sensory testing of wine and the manner of training and assessment of professional competencies of sensory evaluators (Official Gazette of the RS, No. 93/15); The By-Law on conditions to be met by the Control organization, as well as manner and procedure of work of Control organization (Official Gazette of the RS, No. 30/17)).

**Analytical Databank of Isotopic Data**


**Aromatized Wine Products**


- **Categories, description, presentation and labeling of aromatized wine products** (Regulation (EU) No. 251/2014) - Partly harmonized (The Law on Wine (Official Gazette of RS, No. 41/09 and 93/12); The By-Law on the conditions for the production and market of aromatized wine (Official Gazette of the RS, No. 110/16); Regulated: aromatized wines; not regulated: aromatized wine-based drinks and aromatized wine-product cocktails).

- **Geographical indications** (Regulation (EU) No. 251/2014) - Partly harmonized (The Law on Wine (Official Gazette of RS, No. 41/09 and 93/12) – *for aromatized wines*; The Law on Indications of Geographical Origin (Official Gazette of RS, No. 18/10 and 44/18) – *for aromatized wine-based drinks and aromatized wine-product cocktails*; The By-Law on the format, content and manner of displaying registration marks for wines with geographical indications (Official Gazette of the RS, No. 67/10) – *for aromatized wines*; The By-Law on the conditions, manner and procedure for quality control and special characteristics of agricultural and food products with geographical indications of origin (Official Gazette of the RS, No. 73/10) – *aromatized wine-based drinks and aromatized wine-product cocktails*; The By-Law on the content of the application for
registration of geographical indications of origin, and the content of the application for recognition of authorized user status of geographical indications of origin (Official Gazette of the RS, No. 93/10) – *aromatized wine-based drinks and aromatized wine-product cocktails;* The By-Law on the list of wine assessors and the fees for the work of assessors (Official Gazette of the RS, No. 31/12 and 10/17) – *for aromatized wines;* The By-Law on the form and content of geographical indications of origin, as well as the method of controlling the labelling of agricultural and food products with geographical indications of origin (Official Gazette of the RS, No. 92/12 and 19/13) – *aromatized wine-based drinks and aromatized wine-product cocktails;* The By-Law on the zoning of wine growing geographical production areas in Serbia (Official Gazette of the RS, No. 45/15) – *for aromatized wines;* The By-Law on conditions to be met by the Control organization, as well as manner and procedure of work of Control organization (Official Gazette of the RS, No. 30/17) – *for aromatized wines."

1.4. Basic Problems in Serbian Viticulture and Wine Production and Major Obstacles for Implementation of EU *acquis* in the Wine Sector

1.4.1. Basic Problems in Serbian Viticulture and Wine Production Sector

Basic Problems Related to Vine Planting Material

- Poor possibility of production of planting material of higher phytosanitary categories of autochthonous and regional vine varieties. Considering that scientific research institutions did not work on clonal and phytosanitary selection of autochthonous and regional vine varieties seriously, there is an insufficient number of *initial* plants and plants of pre-basic category from autochthonous and regional vine varieties;
- Insufficient number of vine seedlings of the certified category, ie a small number of mother plants of the basic category, as well as the lack of satisfactory capacities for implementation of certification schemes for vine plant material (facilities for premultiplication and conservation of planting material and other facilities and equipment);
- Difficulties for purchasing basic planting material, especially clones of certain vine varieties, due to the policy of foreign producers of planting material to sell ready-produced certified seedlings which are used for planting production vineyards, and not the basic category seedlings used for production of planting material.

Basic Problems Related to Vineyard Support

The main problems of grape producers are related to providing support for vineyards at appropriate prices. The high cost of vineyard support is one of the obstacles to intensive planting of vineyards and development of viticulture. Also, many producers do not have sufficient funds for annual amortization of the support, which is necessary in order to repair the damage to machinery and plants.

Basic Problems Related to Plant Nutrition

- Poor application of soil analysis, even when planting vineyards;
- High price of some fertilizers;
- Poor quality of some fertilizers, resulting in unused nutrient elements;
- Failure of producers to use optimal quantities and proper fertilizer formulations;
- Failure of producers to use foil fertilizers and microelements fertilizers.

Basic Problems Related to Phytosanitary Status of Vineyards and Protection of Vines

- Mostly outdated equipment and machinery used for application of plant protection products;
- Inadequate application of plant protection products (terms of application);
- Inadequate and insufficient application of plant protection products used in suppression of the vector of vine phytoplasma diseases (Flavescence dorée);
- Significant areas under abandoned vineyards where no measures of protection against diseases and pests are applied, so they are the source of infection for the surrounding healthy vineyards;
- Permanent danger of spreading phytoplasma diseases (Flavescence dorée and Bois Noir) is present in certain wine-growing areas. Especially dangerous for regions where the production of planting material is concentrated.

**Basic Problems Related to Planting of New Vineyards**

- Inability to rent or buy large parcels for planting larger complexes of vineyards in certain wine-growing areas;
- High investment costs for planting vineyards and their care until full fertility in conditions of weaker economic power of producers of grapes and wines;
- Lack of turning plows and outdated heavy machinery for soil preparation for planting vineyards;
- Insufficient use of mechanization adapted to modern newly-planted vineyards, that is, to a larger number of vine plants per ha (fruit-viticulture tractors and other machinery for carrying out agro-technical and ampelotechnical measures).

**Basic Problems Related to Production of Grapes**

- Insufficient production of grapes and wines for self-sufficiency;
- Fragmentation of parcels under vineyards, which increases the costs of grape and wine production;
- Lack of labor, primarily for pruning vineyards and for grape harvesting;
- Adverse age structure, i.e. the dominance of old members of households in most wine-growing areas;
- Lack of clones of autochthonous, regional and domestic new created vine varieties and suitable rootstocks for production of high-quality grapes and wine;
- Presence of certain incurable and economically damaging diseases, such as viruses, phytoplasma diseases, ESCA disease and others in certain wine-growing areas.

**Basic Problems in Processing of Grapes, Wine Production and Storing**

- High cost of equipment, devices, vessels, etc. for processing of grapes, production of high-quality wines, as well as storage of produced products;
- Obsolete technology and lack of modern grape processing technology, as well as technology for production of high-quality wines in a number of wineries;
- Insufficient supply and high price of quality packaging, oenological means and other inputs in wine production;
- A small number of professional staff with experience in producing high-quality wines;
- Poor control of use of unauthorized oenological practices and means (non-existence of systemic control of the application of isotopic methods of analysis);
- Low participation of production of wine with geographical indications.

**Basic Problems Related to Pricing in Production of Grapes and Wines**

- Poor price competitiveness of domestic wine in relation to imported wines of the same or similar wine quality and high price competitiveness of grapes and wines from the CEFTA region;
- Generally low purchase price for grapes in large wineries, which causes grubbing-up of vineyards and abandonment of grape production by small producers who do not have their own processing capacities;
- The formation of grape prices by a small number of wineries without a contract system between grape producers and grape processors like the one applied in certain EU countries.

**Basic Problems Related to Price Formation in Production of Grapes and Wine**
- Unorganized grape market;
- High price competitiveness of grapes and bulk wine from the CEFTA region;
- Slow charge of sold grapes and wines, as well as the unorganized and individual promotion of wineries on the market through unreliable distributors;
- Small series of high-quality wines from family wineries can be found only in restaurants or specialized wine shops, causing such wines to remain insufficiently available and unrecognizable to common consumers;
- Wine declarations of certain producers are not in accordance with the legislation, which contributes to the abandonment of wine production with geographical indication by other groups of wine producers;
- Significant presence of wine in packaging other than glass bottles.

Primary Problems in Consumption of Grapes and Wines

- Poor purchasing power of consumers;
- Weak assortment, i.e. a small number of table vine varieties in production that dominate the domestic market resulting in a short season of consumption of domestic table grapes;
- Lack of adequate capacities for storing table grapes, due to which low costing table grapes from imports appear in Serbia after the season;
- Poor offer of local wines in retail/distributor shops, where imported wines dominate;
- Low level of awareness of domestic consumers about wine quality and wine labeling with geographical indications.

1.4.2. SWOT analysis²

Strengths

Level of competitiveness:
- Favorable agroecological conditions for viticulture and wine production;
- Tradition of viticulture and wine production in Serbia;
- Potential of free favorable areas for planting vineyards;
- Low price of land in certain wine-growing areas;
- Good quality of grapes and wines;
- Favorable international agreements.
State of the environment and natural resources:
- Favorable agroecological conditions for production of high-quality and health-safety grapes and wines;
- The existence of domestic new created vine varieties favorable for integral and organic production;
Potential of rural areas:
- Tradition of cultivating vines;
- Great possibility for planting new vineyards in rural hilly areas;
- Potential for development of other activities connected to wine production (agro tourism, rural tourism, etc.).
Creating and transferring knowledge:
- Existence of scientific-educational institutions and extension service;
- Domestic new created vine varieties.
Political and institutional framework:
- Existence of certain subsidies;
- Harmonization of the legislation on wine with EU legislation.

Weaknesses

² The basis for this SWOT analysis was the SWOT analysis that was made during the development of the Strategy for Agriculture and Rural Development of the Republic of Serbia for the period 2014-2024 (Official Gazette of Republic of Serbia, No.85/2014)
Level of competitiveness:
- Extensiveness of production and fragmentation of parcels under vineyards;
- Poor association of producers (professional producer organizations);
- Variations in quality, quantity, and continuity of the production;
- Insufficient knowledge regarding the chain of grape and wine production, marketing and wine promotion, and geographical indications;
- Insufficient financial support for large investments in the viticulture and wine production sector.

State of the environment and natural resources:
- Insufficient utilization of natural resources (surfaces for planting new vineyards, various sources of irrigation water, above all vineyards with table vine varieties);
- Low ecological awareness and knowledge, primarily in the field of vineyard protection and regarding necessity of processing by-products from wine production;
- Undeveloped recycling system for chemical waste;
- Insufficient care of genetic resources (autochthonous and regional vine varieties).

Potential of rural areas:
- Undeveloped infrastructure, primarily in mountainous wine-growing areas;
- Unfavorable age structure of the population, especially in the southern and southeastern viticulture areas;
- Lack of expertise in small grape and wine producers;
- Fragmentation of vineyard parcels and small average surface of vineyards per producer;
- Weak financial situation and high costs for viticulture and wine production;
- The obsolescence of mechanization and equipment in individual producers, as well as the inadequate mechanization of modern vineyards with a higher number of vine plants per ha.

Creating and transferring knowledge:
- Lack of practical training (especially in wine production);
- Insufficient continuous connection between agricultural extension services, scientific and educational institutions and producers;
- Lack of appropriate education profiles (department: viticulture and wine production in basic studies);
- Poor support from the state for the development of science in the field of viticulture and wine production in relation to the EU measures for support of development of innovations in the wine sector;
- Insufficient training of producers, primarily regarding production of wine, training might become a requirement;
- Insufficient use of high-level equipment and poor financial situation in agricultural extension services.

Political and institutional framework:
- Insufficient financial resources for development of viticulture and wine production in relation to the EU and some neighboring countries;
- Poor implementation of procedures regulated by legislation;
- Insufficiently effective coordination and connection between certain state bodies and organizations;
- Difficult and complicated individual administrative procedures.

Opportunities

Level of competitiveness:
- Intensification of production using modern technologies in viticulture and wine production;
- Strengthening the reputation of domestic wine and promoting Serbian geographical indications;
- Availability of international financial funds;
- Opening new markets (eg China and other countries with high-level of wine consumption);
- Association of producers in different types of professional producer organizations;
- Increasing the number of products with geographical indications;
- Using dietary changes (wine and health).

State of the environment and natural resources:
- More efficient use of natural resources, above all uneven terrains and slopes favorable for planting vineyards and introduction of irrigation systems in vineyards alongside large water areas;
- Favorable ecological conditions for development of integral and organic production;
- Improving the level of ecological awareness;
- Use of genetic resources (autochthonous and regional vine varieties, as well as domestic new created varieties suitable for organic and integral production).

Potential of rural areas:
- Improvement and valorization of health safety products originated of grapes;
- Development of different forms of tourism related to production of wine;
- Development of family business in viticulture and wine production sector;
- Solving social, economic and demographic problems in wine-growing areas;
- Possibility of activating abandoned capacities (former social or cooperative wineries);
- Use of favorable conditions for investments in viticulture, wine production and vine nursery sector.

Creating and transferring knowledge:
- Training of young professional staff in viticulture, wine production and vine nursery sector;
- Adaptation of new educational profiles to production needs;
- Implementation of results of scientific and research projects in the viticulture, wine production and vine nursery sector;
- Use of EU and domestic funds for scientific research;
- Transfer of knowledge within the country and from the EU;
- Planting of experimental vineyards and demonstrating production vineyards and wineries.

Political and institutional framework:
- Ongoing EU association process and use of EU funds for the viticulture and wine production sector;
- Increase of the agricultural budget for the viticulture sector (including nursery production) and wine production sector;
- Formation of funds for development of the viticulture and wine production sector;
- Providing certain professional services to professional organizations in order to increase efficiency regarding implementation of procedures;
- Establishment of departments for viticulture and oenology in faculties.

**Threats**

Level of competitiveness:
- Market liberalization and high price competitiveness of grapes and wines from the region;
- Climate changes;
- Insufficient promotion of local wines and geographical indications;
- Higher levels of state and EU financial support in countries which export wine to Serbia;
- Slow adaptation to new technologies in viticulture (including nursery) and wine production sector;
- Slow infrastructure development;
- Hyperproduction of grapes and wines in other countries, primarily in the region.

State of the environment and natural resources:
- Pollution of the environment (pesticides, mineral fertilizers, landfills, packaging, etc.);
- The impact of climate change on the environment and natural resources;
- Degradation of significant natural resources, especially in hilly wine-growing areas;
- Poor implementation of legislation;
- Urbanization of rural areas (primarily since wine-growing areas are attractive for construction of touristic settlements).

Potential of rural areas:
- Continuation of rural deterioration and migration of young people from villages to cities;
- Poor social policy and natality;
- Lack of awareness of the importance of rural areas.

Creating and transferring knowledge:
- The outflow of professional staff;
- Incorrect application of experimental production and novelties in viticulture and oenology.

Political and institutional framework:
- Political instability;
- Non-implementation of new laws and by-laws;
- Harmonization with EU regulations without gradual adaptation to Serbian conditions, as well as legally prescribed requirements that do not exist in EU legislation;
- Insufficient increase of the agrarian budget.

1.4.3. Major Obstacles for Implementation of EU acquis in the Wine Sector

There are several main obstacles for implementation of EU acquis for wine in the Serbian viticulture and wine production sector. Firstly, EU legislation is not transposed in Serbian legislation entirely or in sufficient detail, and not all of the systems, requirements and databases (software) mandatory in the EU are set up, domestic producers are still faced with certain barriers and difficult conditions regarding production and marketing of wine, and there is insufficient knowledge on the significance of modern grape and wine production, geographical indications, product marketing and promotion, etc.

Controls
The MAFWM is responsible for controls in the viticulture and wine sector, more precisely the Sector for Agriculture Inspection, Department for Wine, Spirit Drinks, Alcoholic and Non Alcoholic Beverages. EU requirements are not transposed in Serbian legislation in their entirety, and some EU systems (eg certification bodies for control of production of wine with GIs) are not set up. The inspectors’ familiarity with EU control requirements is on a low level.

Vineyard Register
The new legislation is not transposed and not all of the systems for the Vineyard register are set up, most importantly the graphic/GIS part of the software for the Vineyard register, connection with spatial databases of the Geodesic Institute of the Republic of Serbia, connection with software RAH, etc. There are also some issues concerning the Winery Register, as part of Vineyard Register. There are some requirements for Serbian producers that are stricter than in the EU.

Winery Register and requirements for wine producers
This is not an obligation prescribed in the EU. There are also requirements for Serbian producers that are stricter than in EU. The inspectors’ familiarity with EU control requirements is on a low level.

Harvest declarations
The new EU legislation is not transposed. There are requirements for Serbian producers that are stricter than in the EU.

Production declarations
The new EU legislation is not transposed and the fast system for collecting production declaration data is not established.

Treatment and marketing declarations
The EU legislation is not transposed and the system is not set up.

Stock declarations
The new EU legislation is not transposed and the fast system for collecting stock declaration data is not established.

Oenological practices
The EU legislation is transposed, but the electronic system (software) for record of using the oenological practices which could be supported to the control system on the fast way is not set up. The knowledge about prohibited oenological practices is not on a high level.

**Oenological means (substances)**
The EU legislation is transposed, but the electronic system (software) for record of using the oenological means which could be supported to the control system on the fast way is not set up. The knowledge about prohibited oenological means is not on a high level.

**Experimental use of new oenological practices**
The EU legislation is not transposed and the system for approval and control of the use of new oenological practices is not set up. The knowledge about the possibility of using experimental oenological practices is not on a high level.

**Conditions and restrictions for sweetening of wines**
The EU legislation is partly transposed, but the records (hard paper version) and electronic system (software) to record using the sweetening which could be supported to control system is not set up.

**Enrichment**
The EU legislation is partly transposed, but the records (hard paper version) and electronic system (software) to record using the enrichment which could be supported to control system is not set up. There are stricter requirements for enrichment than in the EU legislation. The knowledge about prohibited oenological practices is not on a high level.

**Acidification and de-acidification**
The EU legislation is partly transposed, but the records (hard paper version) and electronic system (software) to record using the acidification and de-acidification which could be supported to control system is not set up.

**Restrictions on blending and coupage**
The EU legislation is partly harmonized and transposed, but the records (hard paper version) and electronic system (software) to record blending and coupage which could be support to control system is not set up. The knowledge about prohibited oenological practices is not on a high level.

**Laboratories**
The EU legislation is transposed, but the system for education and practical training of new candidates and exams for sensorial evaluators is not implemented in the proper way. The knowledge and practice of laboratory staff could be improved.

**Laboratory methods**
The EU legislation is transposed and the system is implemented, but there is no national laboratory within the MAFWM responsible for leading, coordinating and training authorized laboratories, as well as to organizing tests for oenological laboratories. The knowledge and practice of laboratory staff could be improved.

**Sensory assessment (EU / OIV publications)**
The EU legislation is harmonized and transposed, but there is no system for effective training of new sensorial evaluators and including sensorial evaluators in the work of laboratories. The knowledge and practice of laboratory staff could be improved.

**Requirements on Standard ISO/IEC 17025**
The EU legislation is harmonized and transposed and the system is implemented.

**Labeling and presentations**
The EU legislation is harmonized and transposed, but there is no body tasked with support and education of wine produces on labeling and presentation. There are stricter requirements for labeling (marks of wine with GIs) than in the EU legislation. The knowledge about labeling and presentations is in not on a high level.

**Prohibition of lead-based capsules or foil**
The EU legislation is harmonized and transposed, but the records (hard paper version) and/or an electronic system (software) to record using the packaging and inputs in wine production which could be support for the control system is not set up.

**Accompanying documents**
The new EU legislation is not transposed, and the system and software of accompanying documents are not set up. The knowledge about the system of accompanying documents is not on a high level.

**Transport of unpackaged wine products**
The new EU legislation is not transposed, and the system and software of accompanying documents are not set up. There are some stricter requirements for transport of unpackaged wine products than in the EU legislation.

**Inward and Outward register**
The new EU legislation is not transposed, and the register (hard paper version) and/or electronic system (software) to record inwards and outwards is not set up. The knowledge about the system of Inward and Outward register is not on a high level.

**Operations (oenological practices) to be recorded in the Record**
The new EU legislation is not transposed, and the register (hard paper version) and/or an electronic system (software) to record operations are not set up.

**Protected designation of origin and Protected geographical indication**
The old EU legislation is transposed, but not the new one. Lack of registered new geographical indications in line with EU requirements (PDOs and PGIs) and not protected GIs on the EU and international level. There are some stricter requirements for geographical indications than in EU legislation. The knowledge about geographical indications is not on a high level.

**Traditional terms**
The old EU legislation is transposed, but not the new one. Lack of registered new traditional terms in line with EU requirements and not protected traditional terms on the EU and international level. There are some stricter requirements for traditional terms than in the EU legislation. The knowledge about geographical indications is not on a high level.

**Control/certification/control bodies**
The new EU legislation is not transposed and the system of certification bodies is not set up. The knowledge about certification bodies is not on a high level.

**Analytical databank of isotopic data and samples for checking purposes**
The EU legislation is not harmonized or transposed and the system is not set up.

**Definitions of aromatized wine products**
The EU legislation is partly harmonized (just for aromatized wines).
Categories, description, presentation and labeling of aromatized wine products
The EU legislation is partly harmonized (just for aromatized wines).

Geographical indications for aromatized wine products
The EU legislation is partly harmonized (just for aromatized wines) and the system of certification bodies for aromatized wines is not established. There are some stricter requirements for geographical indications than in the EU legislation. The knowledge about geographical indications is not on a high level.

1.5. Strategic Policy Directions for Viticulture and Wine Production Sector and Recommend Regulatory Changes

1.5.1. Official Strategy for Harmonizing the Wine Sector and Time Table and Costs for Harmonizing

Strategy of Agriculture and Rural Development
Within the EU negotiations process and in order to develop agriculture, food industry and rural areas within the framework of EU integration, Serbia has adopted the Strategy of Agriculture and Rural Development for 2014 - 2024 (Official Gazette of the RS, No. 84/14).

National Program for Agriculture
National Program for Agriculture for the period 2018-2020, which represents a further elaboration of the Strategy of Agriculture and Rural Development at the medium-term level and brings concrete solutions in the field by defining and implementing agricultural policy in the period of 2018-2020 was adopted in 2017 (Official Gazette of the RS, No. 120/17). The main objective of this National Program in the wine sector is complete harmonization of Serbian wine legislation with the EU acquis through adoption of the Law on Wine and Other Products of Grapes and Wines and all by-laws by the end of 2020. Second, the Wine Support Program is planned to be adopted by 2020, as a legal basis for implementation of support measures for producers in the wine sector. The third objective of the National Program is the establishment of the electronic system by 2020 for the purpose of implementation of the Common Market Organisation of Wine (first of all system of accompanying documents).

Action Plan for the transposition, implementation and enforcement of the acquis in agriculture and rural development
Upon completion of the screening process for Chapter 11 - Agriculture and Rural Development, the Council of the EU has submitted a benchmark for opening negotiations on Chapter 11 - creating the Action Plan for the transposition, implementation and enforcement of the acquis in agriculture and rural development. The Government of the Republic of Serbia adopted the Conclusion on the adoption of the Action Plan for the Transposition, Implementation and Enforcement of the acquis in Agriculture and Rural Development on 18/10/2018.
The Action Plan provides for the following adoption dynamic of laws and by-laws (adoption of new or amendment of existing legislation):
- The Law on Wine and Other Grape and Wine Products (Q4 2018);
- The By-Law regulating content and method of handling winery records and the conditions of transport, storage and marketing of grape and wine products (Q2 2019);
- The By-Law regulating categories of grape and wine products, oenological practices and applicable restrictions, experimental application of new oenological procedures and handling of products which do not conform to the Law (Q3 2019);
- The National support program for the wine sector and by-laws regulating aid measures in the wine sector (Q4 2019);
- The By-Law regulating producer organizations in agriculture (Q4 2019);
- The By-Law regulating the area of isotopic analyses (Q4 2020);
- The By-Law laying down detailed regulations on the Vineyard Register, compulsory declarations, gathering of information and documentation to monitor the wine market, accompanying documents and records maintained for the wine sector, marketing of grape and wine products, as well as trade with third countries (Q1 2021);
- The By-Law on the amendment of the By-Law on the conditions for the production and marketing of aromatized wine (Q1 2018);
- The By-Law regulating aromatized wine-based drinks and aromatized wine-product cocktails (Q4 2019).

On the basis of the above-mentioned data, it can be determined that there are delays in the realization of the Action Plan regarding the adoption of Law on Wine and Other Grape and Wine Products.

### 1.5.2. Budget for Harmonizing Wine Sector with EU Acquis

The budget for realization of activities related to harmonization and establishment of systems in the viticulture and wine sector foreseen in the Action Plan, ie for the transposition, implementation and enforcement of the *acquis* in agriculture and rural development is presented below.

#### Viticulture and production of wine products

2019 – total 33,717,380 RSD:
- Cost of administrative capacities/activities (new employments) – 2,047,950 RSD,
- Cost of administrative capacities/activities (training) – 500,000 RSD,
- Office premises and equipment – 61,500 RSD,
- Hardware – 922,500 RSD,
- Software – 6,061,440 RSD,
- Services – 23,001,000 RSD,
- Information campaign and communication – 1,122.900 RSD;

2020 – total 35,879,426 RSD:
- Cost of administrative capacities/activities (new employments) – 3,072,000 RSD,
- Cost of administrative capacities/activities (training) – 500,000 RSD,
- Office premises and equipment – 61,500 RSD,
- Hardware – 61,500 RSD,
- Software – 6,061,440 RSD,
- Services – 24,999,996 RSD,
- Information campaign and communication – 1,122.900 RSD;

2021 – total 36,071,960 RSD:
- Cost of administrative capacities/activities (new employments) – 3,072,000 RSD,
- Cost of administrative capacities/activities (training) – 500,000 RSD,
- Office premises and equipment – 0 RSD,
- Hardware – 0 RSD,
- Software – 3,999,960 RSD,
- Services – 28,500,000 RSD,
- Information campaign and communication – 0 RSD.

#### Aromatized wine products (including spirit drinks)

2019 – total 3,202,620 RSD:
- Cost of administrative capacities/activities (new employments) – 1,023,975 RSD,
- Cost of administrative capacities/activities (training) – 264,450 RSD,
- Office premises and equipment – 61,500 RSD,
- Hardware – 61,500 RSD,
- Software – 1,291,500 RSD,
- Services – 0 RSD,
- Information campaign and communication – 499,995 RSD;
2020 – total 2,253,975 RSD:
- Cost of administrative capacities/activities (new employments) – 1,023,975 RSD,
- Cost of administrative capacities/activities (training) – 0 RSD,
- Office premises and equipment – 0 RSD,
- Hardware – 0 RSD,
- Software – 1,230,000 RSD,
- Services – 0 RSD,
- Information campaign and communication – 0 RSD;
2021 – total 2,253,975 RSD:
- Cost of administrative capacities/activities (new employments) – 1,023,975 RSD,
- Cost of administrative capacities/activities (training) – 0 RSD,
- Office premises and equipment – 0 RSD,
- Hardware – 0 RSD,
- Software – 1,230,000 RSD,
- Services – 0 RSD,
- Information campaign and communication – 0 RSD.

Quality policy (geographical indications)

2019
- Services (annual verification of the compliance of PDO/PGI wine production with product specification) - 31,231,791 RSD;
2020
- Services (annual verification of the compliance of PDO/PGI wine production with product specification) - 12,000,000 RSD;
2021
- Services (annual verification of the compliance of PDO/PGI wine production with product specification) - 12,000,000 RSD.

1.5.3. Recommend Regulatory Changes

Within the current Serbian legislation listed above, there are some inconsistencies with the EU regulations, and some provisions are stricter than the EU wine acquis. For these reasons, we will underline the main details that should be changed to make it easier for local producers to produce and trade grapes, wine/wine products and aromatized wine products.

Definitions

Definitions of product categories and terms are defined in the current Serbian legislation in the Law on Wine (only certain definitions, but some of them are not completed defined) and some By-Laws, but some of the EU definitions have not been transposed into domestic legislation, so it is necessary to clearly define all EU wine/wine products and aromatized wine products definitions. In order to harmonize all legislation and eliminate stricter conditions for certain definitions, we recommend harmonization of next definitions:
Definitions related to the viticulture
- Grubbing up (currently not regulated),
- Planting (currently not regulated),
- Grafting-on (currently not regulated);

Definitions related to the products
- Fresh grapes (currently the definition is not exactly the same as in Regulation (EU), No. 1308/2013, Annex II, Part IV),
- Fresh grape must with fermentation arrested by the addition of alcohol (currently not regulated in the Law on Wine),
- Grape juice (currently not regulated in the Law on Wine),
- Concentrated grape juice (currently not regulated in the Law on Wine),
- Wine less (currently not regulated in the Law on Wine),
- Grape marc (currently not regulated in the Law on Wine),
- Piquette (currently not regulated),
- Wine fortified for distillation (currently the definition is not exactly the same as in Regulation (EU), No. 1308/2013, Annex II, Part IV),
- Cuvée (currently not regulated in the Law on Wine);

Definitions of alcoholic strengths
- Actual alcoholic strength by volume (currently not regulated in the Law on Wine),
- Potential alcoholic strength by volume (currently not regulated in the Law on Wine),
- Total alcoholic strength by volume (currently not regulated in the Law on Wine),
- Natural alcoholic strength by volume (currently not regulated in the Law on Wine),
- Actual alcoholic strength by mass (currently not regulated in the Law on Wine),
- Potential alcoholic strength by mass (currently not regulated in the Law on Wine),
- Total alcoholic strength by mass (currently not regulated in the Law on Wine);

Definitions related to the wine market
- Winegrower (currently the definition is stricter and not fully harmonized with the definition in the Commission Delegated Regulation (EU), No. 2018/273, Article 2),
- Wine products (currently the definition is not the same as in the Commission Delegated Regulation (EU), No. 2018/273, Article 2),
- Vineyard parcel (currently not regulated in the Law on Wine),
- Harvester (currently not regulated),
- Processor (currently not regulated),
- Retailer (currently not regulated),
- Bottler (currently not regulated like in the Commission Delegated Regulation (EU), No. 2018/273, Article 2),
- Merchant (currently not regulated),
- Wine year (currently not regulated in the Law on Wine),
- Accompanying document (currently not regulated),
- Consignment (currently not regulated),
- Certification bodies (for wine with geographical indications) (currently not regulated as certification bodies with full responsibilities for the certification process),
- Laboratories (current definition in the Law on Wine is not in line with the EU requirement about Standard ISO/IEC 17025),
- Labelling (currently not regulated in the Law on Wine as in the Regulation (EU), No. 1308/2013, Article 117 (a)),
- Presentation (currently not regulated in the Law on Wine as in the Regulation (EU), No. 1308/2013, Article 117 (b)),
- Lot (currently not regulated in the Law on Wine);
Definitions related to aromatized wine products
- Sales denominations (currently not regulated in the Law on Wine),
- Description (currently not regulated in the Law on Wine),
- Food additive (currently not regulated in the Law on Wine),
- Flavorings (currently not regulated in the Law on Wine),
- Flavoring substance (currently not regulated in the Law on Wine),
- Natural flavoring substance (currently not regulated in the Law on Wine),
- Flavoring preparation (currently not regulated in the Law on Wine),
- Thermal process flavoring (currently not regulated in the Law on Wine),
- Smoke flavoring (currently not regulated in the Law on Wine),
- Flavor precursor (currently not regulated in the Law on Wine),
- Other flavoring (currently not regulated in the Law on Wine),
- Food ingredient with flavoring properties (currently not regulated in the Law on Wine),
- Source material (currently not regulated in the Law on Wine),
- Appropriate physical process (currently not regulated in the Law on Wine);

Categories of grapevine products
Categories of grapevine products are not systematized in the Law on Wine in the way that they are systematized in the EU legislation, and the current legislation does not cover all aromatized wine products. We are proposing to regulate definitions of the following grapevine products within the future Law on Wine and Other Wine Products.
- Wine (a full definition of wine is not provided in the Law on Wine),
- New wine still in fermentation (currently not regulated in the Law on Wine),
- Liqueur wine (currently not regulated in the Law on Wine, classification through special wines),
- Sparkling wine (currently not regulated in the Law on Wine, classification through special wines),
- Quality sparkling wine (currently not regulated in the Law on Wine, classification through special wines),
- Quality aromatic sparkling wine (currently not regulated in the Law on Wine, classification through special wines),
- Aerated sparkling wine (currently not regulated in the Law on Wine, classification through special wines),
- Semi-sparkling wine (currently not regulated in the Law on Wine, classification through special wines),
- Aerated semi-sparkling wine (currently not regulated in the Law on Wine, classification through special wines),
- Grape must (harmonized in the current Law on Wine),
- Grape must in fermentation (currently not regulated in the Law on Wine),
- Grape must in fermentation extracted from raisined grapes (currently not regulated in the Law on Wine),
- Concentrated grape must (current definition in the Law on Wine is not fully harmonized with the definition in the Regulation (EU), No. 1308/2013, Annex VI, Part II),
- Rectified concentrated grape must (current definition in the Law on Wine is not fully harmonized with the definition in the Regulation (EU), No. 1308/2013, Annex VI, Part II),
- Wine from raisined grapes (currently not regulated in the Law on Wine),
- Wine of overripe grapes (currently not regulated in the Law on Wine),
- Wine vinegar (currently not regulated in the Law on Wine),
- Aromatized wines (currently not regulated in the Law on Wine, classification through special wines),
- Aromatized wine-based drinks (currently not regulated in Serbian legislation),
- Aromatized wine-product cocktail (currently not regulated in Serbian legislation);

Distribution of tasks (division of competencies)
With the aim of setting up EU requirements in a more efficient way and organizing the best services to grape and wine producers, it is recommended that the new legislation defines the division of tasks (competences) through the establishment of authorized organizations for specific professional tasks.
The introduction of the following bodies/professional organizations which would work faster and more efficiently in the viticulture and wine production sector would definitely be a great benefit for domestic producers of grapes and wines/wine products and aromatized wine products that will have better services.

- Certification bodies – responsible for controlling production of wines/wine products and aromatized wine products with geographical indications and with full competence,
- Expert organization/s for the Vineyard Register – with full competence for activities related to the Vineyard Register and Compulsory declarations,
- Professional organization/s supporting producers in the issue of labeling and presentation of wine products,
- Professional organization/s for training sensory assessors/evaluators,
- Authorized organization/s for organizing the national wine competition,
- Professional organization/s for viticulture zoning of wine-growing areas,
- Professional organization/s for preserving and affirmation of local vine varieties and wines,
- Professional organization/s for isotopic analysis.

Viticulture zoning of wine-growing areas and wine-growing zones

Introducing the above recommended specialized Professional organization/s for viticulture zoning of wine-growing areas that would conduct examination of ecological and anthropogenic factors, and first of all the examination of vine varieties and rootstocks in different wine-growing areas would enable the innovation of lists of recommended vine varieties and rootstocks and would have an impact of improving the quality of Serbian wines, as well as reducing the possibility of errors and unnecessary costs in the planting the new vineyards with insufficiently exanimated vine varieties. Also, since climate changes are taking place, the proposed system would enable corrections of boundaries of existing wine-growing areas and finding new locations ideal for the planting new vineyards. This would have a direct impact on the improvement of Serbian viticulture and wine production.

Vine varieties

In addition to the necessity of aligning domestic legislation with the EU legislation on classification of vine varieties regulated by Regulation (EU), No. 1308/2013, Article 81, we are proposing to introduce the Program on Autochthonous and Regional Vine Varieties. This multi-year program published by the MAFWM would serve the purpose of preserving, protecting and promoting autochthonous, regional and domestic new created vine varieties, selection and conservation of plant material of these varieties, maintenance of the list of vine genetic resources and locations with these varieties, as well as education and promotion of these varieties and wines. These very important activities could be carried out by professional organization/s for preserving and affirmation of local vine varieties and wines.

Use of wine not conforming to the categories of grape and wine products

There are no special legislation/provisions in Serbia concerning use of wine which does not conform to the categories of grape and wine products. Such legal disorder hinders the business of legal wine producers through unfair competition, so it is suggested that domestic legislation be aligned with the provisions of Regulation (EU), No. 1308/2013, Article 82.

Marketing standards

Since wine marketing standards are not clearly outlined in the Serbian legislation, it is suggested to regulate that grape and wine products can be placed on our market only if they fulfill wine standards defined in the Regulation (EU), No. 1308/2013, Article 74 and Article 75, Paragraph 3, (f), (g), (h), (k) and (m).
Such provisions will ensure a better position for domestic wine producers that abide by exclusively defined standards in own production.

Vineyard Register

The European Commission has published new regulations that deal with the issue of the Vineyard Register: Commission Delegated Regulation (EU), No. 2018/273 and Commission Delegated Regulation (EU), No. 2018/274. It is necessary to align domestic legislation with the new EU regulations. However, the problem that affects Serbian wine producers is that the procedure for registration in the Vineyard Register is currently being divided between the MAFWM (responsible for applications and final certificates for registration) and the Expert organization for the Vineyard Register (responsible for professional activities and precise viticulture). The administrative procedure could be accelerated if the Vineyard Register is fully (from beginning to the end) entrusted to authorized organizations that would perform tasks in a faster and more efficient way.

The reconciliation of some administrative procedures within the Vineyard Register would also be achieved if it is regulated that some data for the Vineyard Register can be collected, processed and downloaded from the RAH and other available registers, databases and WEB portals. Particularly helpful to wine producers in order to reduce administration would be introducing the system that requests for registration within the RAH implies that the producer requires to be registered at the same time in the Vineyard Register.

Harvest declarations

The European Commission has published new legislation that regulates the issue of grape harvest declaration, so it is necessary to align domestic legislation with the new EU regulations Commission Delegated Regulation (EU), No. 2018/273, Article 33, and Commission Delegated Regulation (EU), No. 2018/274, Article 24. It would be beneficial for producers if the legislation would permit the electronic application of harvest declarations and the use of the WEB application by grape producers and/or their associations. Also, providing a legal exception for members of cooperatives to not submit the declarations individually would be beneficial for members of cooperatives and would help animate grape producers to join cooperatives.

Production of wine products

Within the Law on wine, Article 17, there are provisions laying down stricter rules than in the EU, which make production difficult for domestic producers and make them less competitive in relation to wine producers from the EU and the region.

Persons which could produce wine
- Paragraph 1 and 2: “Grape must, wine and other products may be produced by a legal person (enterprise) and an entrepreneur (hereinafter: producer), registered in the Business Register and in the Winery Register kept by the MAFWM. The producer mentioned in paragraph 1 hereof shall be registered into the Business Register in accordance with the law prescribing registration of enterprises and entrepreneurs.”
- The condition that the production of wine can be undertaken only by enterprises and entrepreneurs prohibits wine production by natural persons - registered agricultural holdings, faculties, institutes, foundations and other legal entities that deal with production of wine, ie they cannot put that wine on the market.
- It is proposed to enable production of wine by all legal entities (not only enterprises and entrepreneurs), as well as to natural persons-registered agricultural holdings that produce wine from their own grapes or to enable production for these natural persons with the annual limit on wine production of 10,000 l or 5,000 l.

Conditions for wine production
- Paragraph 3: “The producer shall be registered in the Winery Register if he meets (fulfils) conditions related to structures, premises, technical conditions, equipment, vessels and instruments as well as related to professional staff.”
- The conditions prescribed for wineries which are not related to food safety purposes make wine production more difficult and make domestic producers less competitive, as they have to invest more in order to comply with requirements from this legal provision, and employ professional staff (which is not necessary in small wine production).
- It is proposed that all mentioned conditions (in the Law on wine and in the By-laws) for the production of wine be abolished, since in any case the producers are responsible for the safety and quality of the products.

**Special conditions for the wineries**

- Paragraph 4: "The producer shall have separate premises for production of wine that are not interconnected with the premises for production of distillate, as well as premises for storing of oenological means and inputs."
- Mentioned special conditions are not obligatory in EU and are increasing necessary investments by domestic producers and, in this way, making them less competitive.
- It is proposed to abolish these provisions and By-laws which regulate these unnecessary and burdensome conditions of production.

**Conditions for professional staff**

- Paragraph 6 and 7: "The producer is considered to meet conditions related to professional staff if he has a person of adequate level of education and professional experience employed full time on activities related to production of wine. The producer – entrepreneur may secure expert managing of the production process through another legal person registered for provision of extension services in agriculture and equipped with a full time employee fulfilling the conditions related to education."
- These conditions are not obligatory on the EU, and over the years of experience it turned out that small producers are forced to make fictitious contracts with legal persons (extension services), and that they actually conduct the wine production themselves.
- It is proposed to abolish these provisions and By-laws which regulate these unnecessary and burdensome conditions, primarily for small wine producers.

**Production declarations**

The European Commission has published new legislation that regulates the issue of wine/wine products production declaration, so it is necessary to align the domestic legislation with the new EU regulations Commission Delegated Regulation (EU), No. 2018/273, Article 31, and Commission Delegated Regulation (EU), No. 2018/274, Article 22.

Producers would benefit if the legislation would permit electronic application of the production declaration and use of the WEB application by wine producers and/or their associations. Providing a legal exception for small producers and members of cooperatives to not submit the declarations individually would be beneficial for members of cooperatives and would animate grape producers to join cooperatives.

**Treatment and marketing declarations**

Treatment and marketing declarations are not regulated in Serbian legislation, so it is necessary to align the domestic legislation with the Commission Delegated Regulation (EU), No. 2018/273, Article 34. The introduction of these declarations will enable easier suppression of unfair competition and will bring big benefits for Serbian producers.

**Stock declarations**
The European Commission has published new legislation that regulates stock declaration, so it is necessary to align the domestic legislation with the new EU regulations, Commission Delegated Regulation (EU), No. 2018/273, Article 32, and Commission Delegated Regulation (EU), No. 2018/274, Article 23. Producers would benefit if the legislation permits electronic application of the stock declaration and use of the WEB application.

**Oenological practices and means (substances)**

Issues concerning oenological practices and means (substances) are harmonized with EU legislation, but it is necessary to regulate conditions for producers of wine products and for production of wine products in line with Regulation (EU), No. 1308/2013, Article 80, Paragraph 3. Also, since experimental use of new oenological practices is not regulated, it is necessary to harmonize domestic legislation with Commission Regulation (EC), No. 606/2009, Article 4 in order to ease conditions for development of innovations in production of wine products.

**Conditions and restrictions for sweetening, enrichment, acidification and de-acidification, as well as restrictions on blending and coupage**

Conditions and restrictions for sweetening, enrichment, acidification and de-acidification are generally regulated, but not administrative rules for carrying out and control of said procedures. It is necessary to harmonize domestic legislation with EU provisions on administrative procedures: Commission Regulation (EC), No. 606/2009, Annex I D, and Regulation (EU), No. 1308/2013, Annex VIII, Part I, B. Establishment of administrative procedures will ensure production of quality wines without unauthorized procedures and better competitiveness of domestic wine producers who produce wines in line with Serbian/EU legislation.

Restrictions on blending and coupage are not fully in line with EU requirements, so it is proposed to implement EU provisions prescribed in the Commission Regulation (EU), No. 606/2009, Article 7; Regulation (EU), No. 1308/2013, Annex VIII, Part II, C; and Commission Regulation (EU), No. 606/2009, Article 8. The introduction of EU rules related to prohibition of wine production from imported grapes will enable better competitiveness of producers who produce wine from domestic grapes.

**By-products**

EU provisions concerning by-products have not been transposed in the Serbian legislation. Since that quantity of alcohol contained in the by-products, prohibition for wine production from wine lees or grape marc, that shall be used only for distillation or for consumption in wine-producers' households, treatments of the by-products, etc. are not regulated, this disorder creates unfair competition for the wine producers, so it is proposed to harmonize domestic legislation with the provisions defined in Regulation (EU), No. 1308/2013, Annex VIII, Part II, D.

**National wine competition**

In order to promote domestic wines and producers, based on examples of some other countries, we propose introduction of the National annual wine competition. In order to solve the problem of misleading consumers about wine quality, such a system would allow that only the best wines which have exclusively domestic origin can use the terms like *the best Serbian wine* and similar in labels. There are numerous competitions and wine testing events in Serbia, but they are not regulated in this way. Some of them can be recognized as a National competition if the authorized organization/s for organizing the National wine competition ensure they include representative wine samples and if they have at least a five-year plan for implementing authorized tasks.
Labeling and presentations

The issues about labeling and presentations, compulsory particulars, optional particulars, languages, etc. in Serbia are harmonized with EU requirements. However, wine producers have no body or organization that would assist them in labeling of wine, so they often make declarations contrary to the legislation and are penalized. For this reason, and in order to give domestic wine producers the opportunity to export labeled wine without problems, it is proposed to establish a controlling and support system through Professional organization/s tasked with supporting producers with issues of labeling and presentation wine products.

Geographical indications

The European Commission published new EU regulations about wine geographical indications: Commission Delegated Regulation (EU) No. 2019/33 and Commission Implementing Regulation (EU) No. 2019/34. With these new regulations, a lot of procedures are simplified, clarified and harmonized in the process of protecting the geographical indications for wines. We are proposing to harmonize Serbian legislation on geographical indications with new EU provisions which eased and lessened administrative requirements for production and certification PDO/PGI wines, in particular:

- To implement new rules that a single wine producer may be considered an acceptable applicant for PDO or PGI protection. In this way, wine producers who are not present in large enough numbers in certain wine-growing areas will not be punished if it is impossible to create an association of producers for a given geographical indication. Of course, since the geographical indication is a group (not an individual) property right, it remains a rule that other producers can always join the wine producer who has protected the denomination in the production of wines with geographical indications in accordance with the rules defined in the product specification. However, this change will certainly ease the protection of new geographical indications and encourage producers who have a positive approach to the geographical indications system to help protect their geographical indications more easily and quickly.

- To set up new rules that single producers do not have to prove that the given wine-growing area is significantly different from the surrounding areas. The producer will be able to register PDO or PGI as a single producer and in cases where the characteristics of wines from such an area are different from the characteristics of wines from the surrounding areas.

- To implement the possibility that certain wineries which have some geographical terms in their name (name of city, place, area, river, etc.) can protect denomination in those cases consisting (in whole or in part) of the name of the holding of the single producer (winery named with some geographical term). However, this does not prevent other producers from using such protected name if they produce wine in accordance with the product specification of this GI (where is the name of the denomination, actually the name of the winery/holding).

- To set up in legislation the opportunity defined in the EU legislation enabling producers of GI wines who do not have production facilities within the wine-growing areas/geographical indications to have the opportunity to process grapes into GI wines in the immediate vicinity of the geographical indication or in the same or neighboring administrative unit.

- To adopt legislation harmonized with new EU provisions which provide an exception for producing PDO/PGI wines not entirely in line with the product specification during a certain transition period. This EU system will make it easier for producers who have current difficulties to achieve compliance with the product specification gradually until the final harmonization of their production with the conditions in the product specification of the given PDO or PGI.

- To set up a simplified administrative procedure concerning changes in the product specifications. In fact, to implement legal provisions based on the EU example to divide the procedure of amending product specifications into two procedures: crucial changes (amendments) and standard changes (amendments). Crucial amendments require a longer period, the implementation of the objection procedure and they could be mandatory when the key elements of the product specification change, such as name of PDO or PGI, product categories covered by product specification, changing the link between terroir and the quality and characteristics of wines, and when it comes to cancellation or when additional restrictions are introduced. In
other cases, when the changes are not crucial, and in order to adapt producers as quickly as possible to scientific and technical innovations and change the natural environment, all changes could be treated as standard changes without objection procedures.

- To set up a new EU instrument of "temporary amendments" of the product specification in cases of natural disasters, unfavorable weather conditions or adoption of mandatory sanitary or phytosanitary measures. Implementation of this system would allow producers to temporarily use the name of PDO or PGI and have the production that is not fully in line with the product specification, so these provisions could be truly useful for domestic producers.

In addition to the mentioned changes, we suggest removing old legal provisions which result in a slow procedure of registration of PDO/PGIs and the process of annual verification of production compliance with the product specification. Namely to regulate and establish a proper system of control of production and marketing of GI wines through certification bodies accredited in accordance with the standard ISO/IEC 17065:2012.

**Marks for wine with geographical indications**

Over time it has been concluded that the current system of marks for wine with geographical indications (in which several authorities are involved) is very slow and overly bureaucratic for producers. For the purpose of setting up an efficient system for marking wines with geographical indications, we suggest that producers themselves mark the logo of PDO or PGI and keep a record of the marked packaging (for inspection controls). This system would increase the number of wines on the market labeled as PDO or PGI wines. This would definitely increase the competitiveness of wine producers with geographical indications.

**Marketing**

The Law on wine, Article 46 contains provisions that are contrary to the principles of free trade and EU legislation, which makes the business of Serbian producers more difficult and makes them less competitive.

- Paragraph 1 and 2: "Wine shall be marketed or offered to end consumers only in its original packaging of the prescribed quality. The wine in the original packaging is that which has been filled into the prescribed packaging and declared as prescribed in accordance with this Law. Exceptionally from paragraph 1 hereof, the producer of wine may offer wine without geographical indications produced from his own grapes to end consumers in bulk within his own winery where the wine has been produced and on wine manifestations registered with the MAFWM."

- These provisions directly impede the wine trade of domestic wine producers and make them uncompetitive, as they are prohibited from selling wine with geographical indications in bulk. In this way Serbian wine producers do not have the ability to easily adapt to market changes and to be competitive. Also, restricting the sale of wine in bulk only to the producer’s own premises and to wine manifestations creates difficult conditions for domestic producers to do business.

- It is proposed to abolish these provisions and By-laws which prescribe these unnecessary and burdensome conditions on marketing.

**Transport on the Market**

The Law on wine, Article 47 defines restrictions for wine trade to be made only by wine producers who must fulfill all conditions of wine production.

Paragraph 2: "A producer may buy or sell bulk wine and other products only from another producer as a raw material for additional processing and production with earlier secured proof of controlled and established quality of that wine or other product."

- This blockade for distributors and traders to transport and trade bulk wine and other wine products is detrimental for free business of domestic wineries, which makes them less competitive than EU and regional wine producers. It is necessary to remove provisions from the domestic legislation obligating traders of wine
to be registered as wine producers and to fulfill all requirements defined for wine producers (including equipment for production).

- It is proposed to abolish these provisions and By-laws which prescribe these unnecessary and burdensome conditions on marketing.

**Prohibitions Related to Marketing**

The Law on wine, Article 50 defines some restrictions related to marketing of bulk wine and providing the services of packaging/bottling.

- Paragraph 1, subparagraphs 1) and 2): „Marketing of the wine and other products is prohibited:
  1) In bulk at open markets and catering facilities, as well as display thereof;
  2) The service packaging/bottling of which was performed by a packager not registered in the Wine Register;“

- The inability to sell wine in bulk in catering facilities reduces the possibility of selling domestic wines, especially in local markets. Also, it is necessary to remove provisions in the domestic legislation that persons who provide services of packaging/bottling need to be registered as wine producers and fulfill all requirements defined for wine producers.

1.6. The Most Important Benefits of Harmonizing the Viticulture and Wine Production Sector with EU Regulations and Removing Obstacles

The most important benefits for wine producers in Serbia from the harmonization of legislation would be:

- Possibility for easier start of production of grape and wine/wine products and aromatized wine products due to the abolition of more stringent conditions for the start of the production;
- Easier business due to the abolition of more stringent conditions for the production and marketing of wine/wine products and aromatized wine products;
- Easier export of wine/wine products and aromatized wine products given that the definitions and conditions for production will be fully harmonized with EU legislation;
- Faster and less demanding procedures and administrative activities in the implementation process of Vineyard Register, Compulsory declarations, Geographical indications, etc.;
- Better competitiveness of domestic producers who produce wine/wine products and aromatized wine products exclusively with approved oenological practices and means, due to the establishment of a system enabling better and more efficient control of production and marketing.
2. ANALYSIS OF THE ECONOMICS OF THE SECTOR AND RECOMMENDATIONS OF THE STRATEGIC POLICY OPTIONS

2.1. Production volume, prices, export and import of wine

2.1.1. Grape production

The grape production sector in Serbia is very specific since it is characterized by a large number of grape producers who have small surfaced vineyards. Based on the 2012 Agricultural Census, 80,341 holdings own vineyards, which is almost 13% of the total number of listed holdings (621,445 listed holdings). Based on the data of the Statistical Office of the Republic of Serbia (hereinafter: SORS), in 2017, the share of wine production in the total value of agricultural production was 7.74%.

Number and size of grape producers

The structure of viticulture and wine production is quite heterogeneous; however, minor family holdings have a major share in the production. According to the inventory of agriculture more than one third of holdings (around 34%) have extremely small vineyards or vineyards smaller than 0.1 ha. The largest groups of grape-growing holdings (about 62%) are grape producers who have vineyards covering small areas, that is, vineyards from 0.1 to less than 0.5 ha. On the other hand, only 6 listed wineries in Serbia covered by the Agricultural Census had vineyards of 100 hectares or more.

Chart 1: Area under vineyards (ha) and number of inventory listed holdings with vineyards; 2012

Data source: SORS

Compared to the total yield of fruits and grapes, grape production participates with about 10% in the total quantity of produced fruits observed by the SORS - pomes (apple, pear and quince), stone fruits (plum, cherry, peach, sour cherry and apricot), berry fruits (raspberries, blackberries and strawberries) and nuts (walnut).

Production

According to the data of the SORS, there were 21,328 ha of fertile areas under the vineyards in Serbia in 2018. In the last ten years, this area changed from 22,702 ha in 2009 to 21,201 ha in the period from 2012 to 2017.

As for the production of grapes, according to the SORS data, in 2018 it amounted to 149,595 t, which is about 10% less in relation to 2017 as well as in relation to the 10-year average (2009-2018). In the last ten-year period (2009-2018), the total production of grapes ranged from 122,489 t in 2014 to 204,369 t in 2009, while the total average annual grape production in this ten-year period (2009-2018) was 167,363 t.
According to SORS data, the average yield of grapes in 2018 was 7.0 t/ha, which is a decrease of 10.26% compared to 2017, and the average yield in 2018 is was 11.12% lower in relation to the 10-year average. The average yield of grapes in the last ten-year period (2009-2018) ranged from 5.8 t/ha in 2014 to 10.6 t/ha in 2009, and the average yield of grapes in the entire ten-year period was 7.88 t/ha.

![Chart 2: Total grape yield (t) by years; 2009-2018](image)

*Data source: SORS*

According to the Vineyard Register, for the last three grape harvest in commercial vineyards kept in this register, the highest yields by grape types were achieved in the following years: for white wine grapes - harvest 2016 (6.182 kg/ha), for black (colored) wine grapes - harvest 2018 (7.820 kg/ha) and for table grapes - harvest 2016 (8.197 kg/ha). The lowest average yield per ha in the last three years was achieved in the harvest of 2017, according to the types of grapes: for white wine grapes 4.734 kg/ha, for black (colored) wine grapes 6.377 kg/ha and for table grapes 5.861 kg/ha.

**Production quality level**

Although there are modern vineyard plantations, due to the high costs of planting and maintaining vineyards, production in some cases is on a lower technological level. Some of the problems of viticulture production in Serbia are: the fragmentation of vineyard parcels, the absence of seedlings of certified clones from autochthonous, regional, and domestic vine varieties, the unsuitability of mechanization and equipment for modern vineyard production (vineyards with a larger number of vine plants per ha), as well as inadequate protection against diseases and pests.

**2.1.2. Wine production**

Serbia has a very long tradition of wine production, which has been based on large socialist systems with vast capacities in the previous period, while nowadays it is mainly based on family wineries with very small, small and medium capacities. A significant portion of processing capacities, that is, former socialist and cooperative wineries, with few exceptions, have not been privatized or have had an unsuccessful privatization during the transition process, resulting in their decay. Together with the collapse of these wine production systems vineyards were abandoned by the co-operatives, that is, natural persons who used to produce grapes, hence this resulted in a great reduction in the area under vineyards in all wine-growing areas of Serbia.

**Number and size of wine producers**
Based on the data from the Winery Register of the MAFWM (data does not include Kosovo), currently (2019), there are 353 wineries in Serbia engaged in wine production. The total maximum grape processing capacities in market-oriented wineries within that Register analyzed in 2019 (310 wineries) amount to 195,073,521 kg of grapes. Moreover, 312 wineries from the Winery Register in 2019 currently have a maximum wine production capacity of 71,520,850 l.

The common structure of wine producers in Serbia is similar to the structure of grape producers, where wineries with very low wine production capacity prevail in the number of producers. Namely, more than half or 136 wineries have limited capacities for wine production, below 20,000 l. A significant number of wineries (93) have slightly higher capacities (from 20,000 l to less than 40,000 l) for wine production, but there are still insufficiently large capacities for competitive wine production.

The largest wine production capacities are in 48 largest Serbian wineries, which have a maximum individual production capacity of 100,000 l and more. This group of wineries also includes 13 wineries that have the capacity for annual production of 1,000,000 l of wine and more.

![Chart 3: Number of wine producers registered in the Winery Register by maximum available capacities for annual wine production; 2019](image)

Data source: MAFWM, Winery Register

General problems in wine production are the insufficient presence of controlled fermentation systems and cold stabilization system of wine, as well as the lack of modern equipment, suitable inert winery vessels, good quality vessels for wine aging and other equipment, appliances and containers. In the case of low-capacity wine producers, there are certain problems in production facilities in terms of maintaining adequate temperature and hygiene of facilities and vessels.

**Production**

According to data of the SORS, wine production registered in the industry in 2017 amounted to 37,500,000 l, which is 3% more than in 2016. However, here we should bear in mind that the registered wine production in the industry does not represent the entire wine production in Serbia, since the Statistical Office of the Republic of Serbia does not follow the production of wines on agricultural farms that produce wine from their own grapes starting from 2014. The average annual production of wine in the period from 2014, when SORS started monitoring production of wine only in the industry, to 2017 was 29,400,000 l.
According to the data from the Winery Register on March 18, 2019, the total production of wine from the 2018 harvest, registered from 249 producers, was 24,979,583 l of wine (without aromatized wine). Based on the same data, the production of red/rose wines participated with 60.25%, while the production of white wines participated with 39.75% in the total production of wines from the 2018 harvest.

**2.1.3. Production of Wine with Geographical Indications**

Although the Serbian system of geographical indications is in compliance with provisions of the EU legislation, currently there is an unsatisfactory share of production of high-quality wines with geographical indications (the so-called PDO/PGI wines). Inadequate conditions and capacities for the production of high-quality wines, i.e. obsolete equipment and vessels in certain wineries, in addition to other technical and administrative obstacles and the absence of a certification bodies system, largely affect the limited production of wines with geographical indications.

In the structure of wine production, based on data from the Winery Register for the last three years (2016-2018), the production of wine without geographical indications was dominant in relation to wines with geographical indications. In the observed period, the production of wine without geographical indications

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3 The compliance does not included new EU regulations from 2019
participated with 87.33%, while the share of production of wine with geographical indications was significantly lower and amounted to 12.67% in relation to the total production of wines registered in the Winery Register.

Table 1: The ratio of production of wine without geographical indications and wine with geographical indications; 2016-2018

<table>
<thead>
<tr>
<th>Quality wine category</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wines without geographical indications</td>
<td>92%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>PGI wines</td>
<td>3%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>PDO wines</td>
<td>5%</td>
<td>8%</td>
<td>7%</td>
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</tbody>
</table>

Data source: MAFWM, Winery Register

According to the data of the MAFWM, the Sector for Agricultural Policy in Serbia, between 2013-2018 (harvest 2013, 2014, 2015, 2016 and 2017), 150 wines with geographical indications were produced, and the total quantity of produced wines from these vintages was only 7,026,899 l. Of the total number of wines produced, 51 wines are PGI (G.I.) wines, while 99 are quality PDO (K.P.K. and K.G.P.K.) wines. The total quantity of produced PGI wines from the mentioned harvest was 5,129,162 l, while the total quantity of produced quality PDO (K.P.K. and K.G.P.K.) wines in the same period was only 1,897,737 l.

Chard 6: Number of produced wines with geographical indications from vintages 2013, 2014, 2015, 2016 and 2017

Data source: MAFWM

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4 February, 2019
According to the data of the MAFWM, for the period 2013-2018 (harvest 2013, 2014, 2015, 2016 and 2017), ending with 18 December 2018, a total of 6,487,976 marks for wines with geographical indications were issued. This total number of issued marks is divided into 4,183,821 green marks for PGI (G.I.) wines, only 1,177,574 red marks for PDO (K.P.K.) wines and only 1,126,581 purple marks for PDO (K.G.P.K.) wines.

The above data indicates that in Serbia there is insufficient production of high-quality wines with geographical indications, as well as labeling of such wines with marks for wines with geographical indications. In addition, the trend of further reducing the production of wine with geographical indications continues, so this kind of situation requires that institutions reduce administrative and technical obstacles, as well as provide better conditions for the production of high-quality wines with geographical indications, and increased promotion of geographical indications.
On the basis of the MAFWM data, in the period between 2010 and December 2017, a total of 40 best wines fulfilled the conditions to be labeled with marks for wine with geographical indications of purple color as premium PDO (K.G.P.K.) wines. Of this number, 29 are white wines, 11 are red wines. There were no rose wines that classified in the highest quality wine category. The largest number of wines that are labeled with purple marks for wines with geographical indications is from the 2013 vintage, which confirms that this year was one of the best years for the production of high-quality wines. The biggest number of highest quality PDO (K.G.P.K.) wines in the observed period was produced within PDO Šumadija (13 wines marked with purple marks) and in the wine-growing region Tri Morave (10 marked wines with purple marks).


<table>
<thead>
<tr>
<th>Year</th>
<th>White</th>
<th>Rose</th>
<th>Red</th>
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<tbody>
<tr>
<td>2010</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2011</td>
<td>5</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2013</td>
<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2014</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2016</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Data source: MAFWM*

2.1.4. Prices of grapes and wines, export and import of wines

**Price of grapes and wines**

The average producer price of table grapes for human consumption in the period 2008-2017 ranged from 0.5 to 0.7 EUR/kg, while the average producer price of grapes for processing in the same period was from 0.2 to 0.3 EUR/kg.

Table 3: Approximate prices of grapes

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</thead>
<tbody>
<tr>
<td>Table grapes (RSD/kg)</td>
<td>46.7</td>
<td>44.7</td>
<td>68.4</td>
<td>62.9</td>
<td>68.6</td>
<td>51.1</td>
<td>73.1</td>
<td>70.6</td>
<td>63.1</td>
<td>75.2</td>
</tr>
<tr>
<td>Grapes for processing (RSD/kg)</td>
<td>20.7</td>
<td>20.1</td>
<td>19.8</td>
<td>26.7</td>
<td>38</td>
<td>27.3</td>
<td>24</td>
<td>39.2</td>
<td>31.3</td>
<td>37.5</td>
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<tr>
<td>Table grapes (EUR/kg)</td>
<td>0.6</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Grapes for processing (EUR/kg)</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
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*Data source: SORS*

The approximate average price of white wines in the period 2008-2017 ranged from 1.5 to 2 EUR/l. In 2017, the price of white wine in retail amounted to 1.98 EUR/l, which is 4.4% higher than in 2016, and 5.5% higher than the average in the period 2012-2016, which was 1.88 EUR/l. The average price of red wine in the same period was from 1.8 to 2.1 EUR/l, and in 2017 was 2.09 EUR/l, which is 4.5% higher than in 2016, and 4.9% higher than the average price in the period 2012-2016 (2.00 EUR/l). Increased production of wines with geographical indications could have the impact of increasing the price of the Serbian wine.

Table 4: Approximate prices of wine

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</thead>
<tbody>
<tr>
<td>White wines (RSD/kg)</td>
<td>122.6</td>
<td>154.7</td>
<td>170</td>
<td>190.7</td>
<td>203</td>
<td>216.2</td>
<td>224.4</td>
<td>228.3</td>
<td>234.1</td>
<td>240.8</td>
</tr>
<tr>
<td>Red wines (RSD/kg)</td>
<td>146.3</td>
<td>181.8</td>
<td>189.3</td>
<td>206.5</td>
<td>216.8</td>
<td>230.7</td>
<td>232.5</td>
<td>244.9</td>
<td>246.4</td>
<td>253.7</td>
</tr>
<tr>
<td>White wines (EUR/kg)</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.9</td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>2</td>
</tr>
<tr>
<td>Red wines (EUR/kg)</td>
<td>1.8</td>
<td>1.9</td>
<td>1.8</td>
<td>2</td>
<td>1.9</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*Data source: SORS*

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7 February, 2019
Export and import of wines

The supply of domestic wine is not sufficient for own needs of the Serbian market, and generally speaking, the import of wine is at least twice larger than export, both in terms of quantity and value of the wine. The Stabilization and Association Agreement with countries of the European Union and the CEFTA Agreement allowed the export of wine to these markets, but due to the decay of wineries and the grabbed up of numerous vineyards in the previous period, Serbia is unable to respond to the demands of these markets in a quantitative manner. On the other hand, the Free Trade Agreement with the Russian Federation resulted in an increase of wine export to this market.

Trade of grapes

In the five-year period (2013-2017), Serbia achieved a negative balance in the trade of grapes (data from the Customs Administration).

Average annual grape imports in this period amounted to 13,055,841.71 kg (with an average value of EUR 7,712,953.90), while exports amounted to 773,792.10 kg (with an average value of 493,436.94 EUR). The largest import of grapes in this five-year period was in 2015, 15,325,307.84 kg (8,629,377.09 EUR), and the largest export was in 2013, 1,558,732.92 kg (907,153.52 EUR). In the trade of grapes, in the observed five-year period (2013-2017), an average negative balance in the amount of -12,282,049.61 kg was achieved, in the value of -7,219,516.96 EUR.

Table 5: Trade exchange of grapes; 2013-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Export (kg)</th>
<th>Export (EUR)</th>
<th>Import (kg)</th>
<th>Import (EUR)</th>
<th>Balance (kg)</th>
<th>Balance (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1,558,732.92</td>
<td>907,153.52</td>
<td>13,664,973.98</td>
<td>7,656,411.86</td>
<td>-12,106,241.06</td>
<td>-6,749,258.34</td>
</tr>
<tr>
<td>2014</td>
<td>305,529.20</td>
<td>276,392.44</td>
<td>12,296,599.74</td>
<td>7,606,914.10</td>
<td>-11,991,070.54</td>
<td>-7,330,521.66</td>
</tr>
<tr>
<td>2015</td>
<td>695,002.11</td>
<td>456,334.53</td>
<td>15,325,307.84</td>
<td>8,629,377.09</td>
<td>-14,630,305.73</td>
<td>-8,173,042.56</td>
</tr>
<tr>
<td>2016</td>
<td>610,346.68</td>
<td>365,937.11</td>
<td>12,158,883.26</td>
<td>7,054,428.13</td>
<td>-11,548,536.58</td>
<td>-6,688,491.02</td>
</tr>
<tr>
<td>2017</td>
<td>699,349.60</td>
<td>461,367.09</td>
<td>11,833,443.72</td>
<td>7,617,638.30</td>
<td>-11,134,094.12</td>
<td>-7,156,271.21</td>
</tr>
</tbody>
</table>

Data source: Customs Administration

Trade of wines

According to the data of the SORS, Serbia also achieved a negative balance in the trade exchange of wine in the ten-year period 2009-2018, both in terms of the quantity of wines and the value of traded wines. In the mentioned period, the average export of wine was 12,622,000 l with the average annual value of 13,397,000 EUR, while the average annual import was 25,482,000 l with the average annual value of 25,721,700 EUR. The total average negative balance in the observed ten-year period was -12,860,000 l in terms of quantity, and -12,325,000 EUR in terms of value.

Table 6: Trade exchange of wines (without aromatized wines) (000 l); 2009-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Import</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>CEFTA</td>
<td>EU</td>
</tr>
<tr>
<td>2009</td>
<td>10,386</td>
<td>7,133</td>
<td>481</td>
</tr>
<tr>
<td>2010</td>
<td>10,755</td>
<td>6,032</td>
<td>1,190</td>
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<tr>
<td>2012</td>
<td>22,717</td>
<td>4,780</td>
<td>14,043</td>
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<tr>
<td>2013</td>
<td>11,445</td>
<td>4,335</td>
<td>2,038</td>
</tr>
<tr>
<td>2014</td>
<td>11,968</td>
<td>5,155</td>
<td>569</td>
</tr>
<tr>
<td>2015</td>
<td>10,583</td>
<td>5,776</td>
<td>595</td>
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<tr>
<td>2016</td>
<td>9,866</td>
<td>4,869</td>
<td>486</td>
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<tr>
<td>2017</td>
<td>11,629</td>
<td>5,255</td>
<td>962</td>
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<tr>
<td>2018</td>
<td>11,792</td>
<td>4,695</td>
<td>1,410</td>
</tr>
</tbody>
</table>

Data source: SORS

38
Table 7: Trade exchange of wines (without aromatized wines) (000 EUR); 2009-2018

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Import</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>CEFTA</td>
<td>EU</td>
</tr>
<tr>
<td>2009</td>
<td>10,091</td>
<td>7,802</td>
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<td>2010</td>
<td>9,974</td>
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<td>2012</td>
<td>16,309</td>
<td>6,281</td>
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</tr>
<tr>
<td>2013</td>
<td>12,774</td>
<td>5,908</td>
<td>1,616</td>
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<tr>
<td>2014</td>
<td>12,880</td>
<td>5,935</td>
<td>1,109</td>
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<tr>
<td>2015</td>
<td>12,839</td>
<td>6,741</td>
<td>1,285</td>
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<tr>
<td>2016</td>
<td>13,451</td>
<td>6,746</td>
<td>1,244</td>
</tr>
<tr>
<td>2017</td>
<td>16,385</td>
<td>7,384</td>
<td>1,519</td>
</tr>
<tr>
<td>2018</td>
<td>17,087</td>
<td>7,471</td>
<td>1,745</td>
</tr>
</tbody>
</table>

Data source: SORS

Serbia has achieved the largest volume of the wine trade (excluding aromatized wines) in the 2009-2018 ten-year period, within the region of South-East Europe (CEFTA market), the import from this market being dominant.

The average import from that market was 23,467,800 l with a value of 20,313,500 EUR, while the average annual export to the CEFTA market was 5,365,500 l (with an average annual value of 6,734,100 EUR). The total average negative balance in the trade of wine within the CEFTA region in the ten-year period was -18,102,265 l (with a value of -12,443,700 EUR).

The biggest part of the wine trade (excluding aromatized wine), in the ten-year period from 2009 to 2018, also took place with countries of the European Union. In this period Serbia exported 2,733,000 l to the market of the European Union (with an average annual value of 1,935,560 EUR), while the average annual import from this market was 1,935,000 l (with an average annual value of 5,167,260 EUR). Looking at the average trade balance with countries of the European Union, Serbia recorded a positive balance of 798,100 l in the volume of exported wine during the observed ten-year period, but looking the value, Serbia had a negative balance which amounted to 3,384,700 EUR.

A significant part of the wine trade (excluding aromatized wines) is taking place with other countries (export to the Russian Federation market dominates). The average export to this market in the ten-year period 2009-2018 was 4,523,500 l with the value of 4,727,300 EUR, while the average annual import from this market was 79,200 l with the value of 240,950 EUR. The average trade balance achieved by Serbia in the observed period with other countries is positive in quantity (4,444,300 l) and in the value of exported wine (4,486,500 EUR).
Trade of aromatized wines

Trade of aromatized wines in the ten-year period 2009-2018 took place on a much smaller scale. In the observed period, Serbia achieved a positive average balance in terms of quantity, but negative in terms of the value. The average quantity of exported aromatized wine in the observed period was 218,500 l (with the average annual value of 229,200 EUR), while the average quantity of imported aromatized wine in this period was 194,560 l (with the average annual value of 301,530 EUR).

A part of the trade of aromatized wines, Serbia realizes with the countries of the European Union, with the dominance of imports from this market. In the observed period 2009-2018, 179,860 l of aromatized wines (281,429 EUR) was imported annually from the European Union, while exports to this market were negligible. In the last two years, the export of aromatized wine to the Russian Federation has increased.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>CEFTA</th>
<th>EU</th>
<th>Others</th>
<th>Total</th>
<th>CEFTA</th>
<th>EU</th>
<th>Others</th>
<th>Total</th>
<th>CEFTA</th>
<th>EU</th>
<th>Others</th>
</tr>
</thead>
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<td>2009</td>
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<td>1</td>
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<td>56</td>
<td>123</td>
<td>0</td>
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<td>-56</td>
<td>-123</td>
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</tr>
<tr>
<td>2010</td>
<td>8</td>
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<td>6</td>
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<td>-1</td>
<td>-168</td>
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<td>233</td>
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<td>-121</td>
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</tr>
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<td>2012</td>
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<td>32</td>
<td>263</td>
<td>32</td>
<td>231</td>
<td>0</td>
<td>-218</td>
<td>-20</td>
<td>-230</td>
<td>32</td>
</tr>
<tr>
<td>2013</td>
<td>34</td>
<td>23</td>
<td>10</td>
<td>1</td>
<td>195</td>
<td>1</td>
<td>188</td>
<td>6</td>
<td>-161</td>
<td>23</td>
<td>-178</td>
<td>-6</td>
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<tr>
<td>2014</td>
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<td>8</td>
<td>4</td>
<td>0</td>
<td>258</td>
<td>0</td>
<td>258</td>
<td>0</td>
<td>-246</td>
<td>8</td>
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<td>12</td>
<td>-223</td>
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<td>1</td>
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<td>175</td>
<td>0</td>
<td>-159</td>
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<td>-175</td>
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<td>0</td>
<td>821</td>
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<td>0</td>
<td>194</td>
<td>0</td>
<td>646</td>
<td>19</td>
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<td>0</td>
<td>111</td>
<td>0</td>
<td>111</td>
<td>15</td>
<td>-96</td>
<td>0</td>
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</table>

Table 9: Trade exchange of aromatized wines (000 EUR); 2009-2018
### Yearly Data on Wine Trade

<table>
<thead>
<tr>
<th>Year</th>
<th>Export Total</th>
<th>CEFTA</th>
<th>EU</th>
<th>Others</th>
<th>Export</th>
<th>CEFTA</th>
<th>EU</th>
<th>Others</th>
<th>Import Total</th>
<th>CEFTA</th>
<th>EU</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
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<td></td>
<td></td>
<td></td>
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<tr>
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<td>-256</td>
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<td>-258</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>2011</td>
<td>213</td>
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<tr>
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<td>368</td>
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<td>26</td>
<td>-363</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>288</td>
<td>0</td>
<td>-250</td>
<td>36</td>
<td>-287</td>
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<td></td>
<td></td>
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<td>47</td>
<td>-235</td>
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<tr>
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<td>0</td>
<td>302</td>
<td>0</td>
<td>537</td>
<td>54</td>
<td>-301</td>
<td>785</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
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<td>0</td>
<td>224</td>
<td>0</td>
<td>625</td>
<td>48</td>
<td>-220</td>
<td>797</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*Data source: SORS*

### 2.2. World Wine Market and Comparison with Selected Countries of the Region and EU Countries

#### 2.2.1. World wine market

**Wine production in the world and in EU**

Based on the data of the *Organization Internationale de la Vigne et du Vin* (OIV), the largest wine producer in the period between 2014 and 2018 was Italy with the average wine production of 47.2 million hl per year. France holds the second place in the volume of produced wine with the average annual production of 44.3 million hl, and Spain is in the third places with the average annual production of 38.1 million hl in this period. In the observed period, these three countries accounted for as much as 48.5% of the total world wine production.
European Union is the biggest wine producer and the biggest exporter of wine and the biggest importer of wine at the same time as well. Between 2013 and 2017, the average annual production was 168 million hl and in 2017 EU accounted for 44.3% of wine-growing areas, 56% of production, 54% of global consumption and 74% of exports in global terms.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>45,616</td>
<td>54,029</td>
<td>44,229</td>
<td>49,996</td>
<td>50,920</td>
<td>48,958</td>
</tr>
<tr>
<td>France</td>
<td>41,548</td>
<td>42,134</td>
<td>46,534</td>
<td>46,977</td>
<td>45,219</td>
<td>44,482</td>
</tr>
<tr>
<td>Spain</td>
<td>31,123</td>
<td>45,308</td>
<td>39,494</td>
<td>37,703</td>
<td>39,670</td>
<td>38,660</td>
</tr>
<tr>
<td>Germany</td>
<td>9,012</td>
<td>8,409</td>
<td>9,202</td>
<td>8,819</td>
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<td>8,891</td>
</tr>
<tr>
<td>Portugal</td>
<td>6,327</td>
<td>6,231</td>
<td>6,206</td>
<td>7,048</td>
<td>6,010</td>
<td>6,364</td>
</tr>
<tr>
<td>Romania</td>
<td>3,311</td>
<td>5,113</td>
<td>3,750</td>
<td>3,628</td>
<td>3,267</td>
<td>3,814</td>
</tr>
<tr>
<td>Greece</td>
<td>3,115</td>
<td>3,343</td>
<td>2,800</td>
<td>2,501</td>
<td>2,490</td>
<td>2,850</td>
</tr>
<tr>
<td>Hungary</td>
<td>1,765</td>
<td>2,644</td>
<td>2,427</td>
<td>2,780</td>
<td>2,820</td>
<td>2,487</td>
</tr>
</tbody>
</table>
In 2018, Italy was the leading European producer of wine with an output of approximately 48.5 million hectoliters, followed by France with 46.4 million hectoliters. Together with Spain, the three countries accounted for most of the wine produced in Europe.

**Wine consumption**

The consumption of wine is the biggest in the United States, with the annual average of 31.3 million hl of wine, more than 20 million hl per year are consumed by residents of France, Italy, and Germany.

![Map 3: World wine consumption (million hl); 2013-2017](Image)

**Export of wine**

When it comes to wine exports in the world, the first three places in terms of both quantity and value are held by France, Spain, and Italy. Spain is ranked first in terms of quantity of wine exported, while France is the first in terms of value of wine exported.
Table 11: World export of wine (left in million hl / right in billion €); 2013 – 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>Spain</td>
<td>18.4</td>
<td>23.1</td>
<td>24.7</td>
<td>22.6</td>
<td>23.2</td>
<td>26.1</td>
</tr>
<tr>
<td>Italy</td>
<td>20.3</td>
<td>20.4</td>
<td>20</td>
<td>20.6</td>
<td>21.4</td>
<td>5.7</td>
</tr>
<tr>
<td>France</td>
<td>14.5</td>
<td>14.3</td>
<td>13.9</td>
<td>14.1</td>
<td>14.9</td>
<td>2.2</td>
</tr>
<tr>
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<td>8.1</td>
<td>8.8</td>
<td>9.1</td>
<td>9.8</td>
<td>11.5</td>
</tr>
<tr>
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<td>7</td>
<td>7.4</td>
<td>7.3</td>
<td>7.8</td>
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</tr>
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<td>4.2</td>
<td>4.3</td>
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<td>3.9</td>
<td>3.6</td>
<td>3.8</td>
<td>-4.9</td>
</tr>
<tr>
<td>USA</td>
<td>4.1</td>
<td>4</td>
<td>4.2</td>
<td>4.7</td>
<td>3.3</td>
<td>-20.9</td>
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<tr>
<td>Portugal</td>
<td>3</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
<td>3</td>
<td>-1.8</td>
</tr>
<tr>
<td>N. Zealand</td>
<td>1.8</td>
<td>1.9</td>
<td>2.1</td>
<td>2.1</td>
<td>2.5</td>
<td>41.7</td>
</tr>
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<td>World total</td>
<td>102</td>
<td>104</td>
<td>106</td>
<td>106</td>
<td>108</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Data source: OIV

2.2.2. Viticulture and wine production sector in the region

Compared to the total agriculture production in the region, viticulture and wine production is the most important sector in North Macedonia, but all counties/territories pay big attention to this sector because of the possibilities for rural development and promotion of region thought wines. Regarding import of wine and the distribution of wine and their competitiveness on the Serbian market, the most important regional countries are Northern Macedonia and Montenegro.

North Macedonia

Viticulture and wine production sector is one of the most important in North Macedonian agriculture. This sector contributes between 17%–20% to the GDP (Gross domestic product). In line with this situation, wine is in the second place, right after the tobacco, in terms of export value of agricultural products. There are 22,612 ha under vineyards in North Macedonia. The wine varieties are represented with 84% and table varieties with 16%. There are 50% white wine varieties and 50% red wine varieties. Most frequent white wine varieties are Smederevka, Chardonnay, Riesling, Sauvignon, Žilavka, etc., while the red wine varieties are Vranac, Merlot, Cabernet Sauvignon, Kratošija, etc.

Wine production is conducted through 74 officially registered wineries with the total capacity of 2,100,000 hl which is twice the total wine production (50% usage of total capacities). This is the structure of the wineries according to the registered capacity: There are 35 wineries with up to 500 hl (41.6%), 6 wineries with capacities from 500 to 1,000 hl (7.1%), 18 wineries from 1,000 to 10,000 hl (21.4%) and 25 wineries with capacities of more than 10,000 hl (29.8%).
The geographical distribution of wineries is identical with the vineyards, meaning that the greatest number of wineries is situated in the Central region in the Vardar river valley, mostly near Skopje, Veles, Tikveš and Gevgelija–Valandovo vineyards. The most significant export market for Macedonian wine is the European Union which participates with around 60% in total wine export. From the European Union member countries, the greatest importer of Macedonian wine is Germany, participating with approximately 90% in total wine export to the European Union. Serbia is also a significant importer of wine from North Macedonia.

**Montenegro**

According to data from the Vineyard Register of the Ministry of Agriculture and Rural Development of Montenegro, there are 501 grape producers recorded in the register, and the total area of registered vineyards units on the territory of Montenegro is 2,561.3301 ha. As for the total area under vineyards, the largest surface is located in the wine-growing region Crnogorski basen Skadarskog jezera, because the big winery „Plantaže 13. Jul "AD Podgorica is located in this region. Wine varieties in Montenegro are in line with warmer climate conditions and the tradition of production of red wines, looking at areas under vines mainly the black (colored) wine varieties are grown. More than two-thirds of vineyards (69.01%) recorded in the Vineyard Register of the Ministry of Agriculture and Rural Development are planted with grape varieties for the production of red/rose wines (Vranac, Kratošija, etc.), while the smaller surfaces are planted with white wine varieties and the smallest with table varieties. Production of wine in Montenegro (primarily „Plantaže 13. Jul "AD Podgorica) is dominantly export-oriented, where in addition to the regional and EU markets, significant quantities of wine are exported to Serbia.

**Bosnia and Herzegovina**

Viticulture and wine production in Bosnia and Herzegovina accounts for a relatively small share in total agricultural production. The main area of wine production is in Herzegovina, close to the Adriatic Sea, even though during the last decades the spread of viticulture and wine production in other parts of the country can be noted. According to the data of OIV and FAOStat, in Bosnia and Herzegovina, there are between 4,000 and 5,000 ha of vineyards, with the annual production of wine which fluctuates between 14 and 22 million litters. According to the estimates of the Federal Agro-Mediterranean Institute in Mostar, the share of vineyards with table grape varieties is estimated at only 5–10% of the total vineyard area in Bosnia and Herzegovina. In the Herzegovina wine-growing area the most cultivated vine varieties are still autochthones varieties Žilavka (white) and Blatina (red), with a significant share of the regionally widespread Vranac variety. In recent years vineyards of major wineries are also being planted with international vine varieties: Cabernet Sauvignon, Merlot, Chardonnay, etc. The main wine production is within the Čitluk winery (HEPOK industrial winery) which is highly developed and very well positioned on the market. There are a lot of family wine producers in Herzegovina also, so there are more than 30 private wineries in the Herzegovinian part of the Federation of Bosnia and Herzegovina. In the Republic of Srpska, a total number of 36 wine producers are registered. Among them, there are four wineries with significant capacities, while others are in the category of small family wineries. Private wineries, especially those of the middle capacity category, are mostly well equipped, with wine production based on their own grape production. Within the Stabilization and Association Agreement (2008), Bosnia and Herzegovina has the possibility to export 40,600 hl per year to EU.

**Albania**

...
Viticulture and wine production sector is not one of the most important sectors of agriculture in Albania. Surface under vineyards is 10,533 ha (2016), while total annual grape production is about 205 thousand t. Albania imports grapes mainly from neighboring countries such as North Macedonia, Greece and Italy. There are no clear figures on how much of this quantity is destined for table grapes and for processing in the wine industry. The area cultivated with vineyards does not exceed more than 2% of agricultural land. According to the data of INSTAT - Institute of Statistics from 2016, import of wine was 27,975 hl and export only 256 hl.

The wine industry in Albania is characterized by enterprises of very different sizes and heterogeneity of the technical and technological level and the strategic position of each.

**Kosovo**

The territory of Kosovo there is 3,298 ha of vineyards according to the Vineyard Register. The entire vineyard sector is privately owned. The two most powerful companies operating in Orahovac ("Stone Castle Vineyards and Winery") and Suva Reka ("Suhareka Verari") have been privatized.

The structure of the vineyards is made up of red wine varieties, white wine varieties, and table grape varieties. Red wine varieties represented 49% (1,630.36 ha), white grape varieties represented 26% (838.83 ha) and table grape varieties represented 25% of the total area under the vineyards. Red wine varieties are represented by 1630.36 ha. The main red wine varieties are Vranac, Prokupa, Zametna, as well as: Gamay, Cabernet Sauvignon, Pino Noir, Merlot, etc. The main white wine varieties are Smederevka, Riesling Italico, Riesling, Chardonnay, etc.

The main market for wine produced on the Kosovo territory is Croatia, Serbia, Albania, etc, and Montenegro and North Macedonia are the main exporters of wine.

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence*

### 2.2.3. The most important markets for Serbian wine and the most important wine exporting country in Serbia

According to the SORS, in the period from 2015 to 2018, Serbia exported largest quantities of wine to the Russian Federation (44,360 hl annually, with the average value of 4,800,800 EUR). Larger quantities of wine are exported to the CEFTA market, primarily to Bosnia and Herzegovina (35,633 hl annually, with the average value of EUR 4,228,870) and Montenegro (15,985 hl annually, with the average value of EUR 2,823,777).
When it comes to importing wines into Serbia, the largest quantities are imported from CEFTA countries, primarily from Northern Macedonia (167,789 hl annually, with the average value of 12,394,681 EUR), then from Montenegro (33,481 hl annually, with the average value of EUR 6,494,988). When it comes to EU members, the largest quantities of wine are imported from Italy (7,640 hl annually, with the average value of 2,335,730 EUR) and France (2,349 hl annually, with the average value of 1,622,296 EUR).
Map 5: An overview of the most important European wine exporting countries in Serbia in terms of quantity (hl); 2015-2018

Data source: SORS
3. REGINAL REPRESENTATIVE WINE ASSOCIATIONS

3.1. Current Capacities and Activities of Wine Associations

At this moment there are about 80 different producer associations registered in the Register of Associations in the Serbian Business Registers Agency which are active in the field of viticulture, wine production, fruit production, and other related agricultural-food areas. Out of those, about 50 are associations of grape and wine producers, and some of those are at the same time also fruit producer associations (taking into account that producers of grape and/or wine are to some extent also fruit and spirit drinks producers). However, the primary focus of these associations is not fruit production, but viticulture and/or wine production. Additionally, some of these associations are not only those of producers but also those of wine enthusiasts, wine culture promotion activists and similar.

Associations of grape producers and/or wine producers are not part of the state structure, they have their own statutory acts (statutes), bodies, voluntary membership, goals defined with foundation and they fulfill the conditions prescribed by the Law on Associations (Official Gazette of the RS, No. 51/09 and 44/18) and secondary legislation. Main goals of founding associations of grape and wine producers are the promotion of broader or local viticulture and wine production, exchange of information, organization of wine-related events/manifestations, and promotion of wine and similar activities. Even though these associations have their statutes, they do not prescribe rules obligating the producers to provide data on production, trade and environmental protection, or that they have to be a member of only one association or to provide information for statistical purposes.

Considering that the EU PDO/PGI system of geographical indication for wine has been established, wine producers have started to form new or transform the already existent associations of producers gathered around wine-growing regions/areas of PDOs with the goal of registering indications, promoting production of wine with geographical indications and similar activities, which would be in accordance with the goal from Article 152 of the Regulation (EU) 1308/2013. All listed associations fulfill the requirement of being representative (through areas under vineyards and/or on the basis of the number of wineries and/or the quantity production of wine).

Table 12: Representative wine associations in Serbia

<table>
<thead>
<tr>
<th>No.</th>
<th>Representative Associations in Serbia</th>
<th>E-mail address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Šumadija”</td>
<td><a href="mailto:zaduzbinat@open.telekom.rs">zaduzbinat@open.telekom.rs</a>, <a href="mailto:branislavavramovic@gmail.com">branislavavramovic@gmail.com</a></td>
</tr>
<tr>
<td>2.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Knjaževac”</td>
<td><a href="mailto:info@vinarijajovic.rs">info@vinarijajovic.rs</a></td>
</tr>
<tr>
<td>3.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Negotinska Krajina”</td>
<td><a href="mailto:nikola78@gmail.com">nikola78@gmail.com</a></td>
</tr>
<tr>
<td>4.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Beograd”</td>
<td><a href="mailto:stojakovic@beotel.net">stojakovic@beotel.net</a></td>
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<td>5.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Toplica”</td>
<td><a href="mailto:topicki.vinograd@gmail.com">topicki.vinograd@gmail.com</a>, <a href="mailto:topicki.vinograd.darko@gmail.com">topicki.vinograd.darko@gmail.com</a></td>
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</tr>
<tr>
<td>7.</td>
<td>Udruženje vinara i vinogradara sa oznakom geografskog porekla „Subotički rejon”</td>
<td><a href="mailto:gordana@vinarijazvonkobogdan.com">gordana@vinarijazvonkobogdan.com</a></td>
</tr>
<tr>
<td>8.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Niš”</td>
<td><a href="mailto:statussvrljig@sezampro.rs">statussvrljig@sezampro.rs</a></td>
</tr>
<tr>
<td>9.</td>
<td>Udruženje proizvođača vina sa oznakom geografskog porekla „Tri Morave”</td>
<td><a href="mailto:sabossdoo@gmail.com">sabossdoo@gmail.com</a>, <a href="mailto:pts_s_trifun@mts.rs">pts_s_trifun@mts.rs</a></td>
</tr>
<tr>
<td>10.</td>
<td>Udruženje proizvođača grožđa i vina sa oznakom geografskog porekla “Srem-Fruška gora”</td>
<td><a href="mailto:info@fruskagorawine.com">info@fruskagorawine.com</a>, <a href="mailto:slobodan@vinarijakovacevic.com">slobodan@vinarijakovacevic.com</a></td>
</tr>
<tr>
<td>11.</td>
<td>Udruženje vinogradara i proizvođača vina sa oznakom geografskog porekla „Mlavski rejon”</td>
<td><a href="mailto:office@vinarijavirtus.rs">office@vinarijavirtus.rs</a></td>
</tr>
</tbody>
</table>
3.2. Possibilities for Strengthening the Capacities of Wine Associations

Since those associations of domestic wine producers mainly deal with promotional activities and less with professional management, in order to strengthen them, the following is necessary:

- Strengthening cooperation in order to fulfill obligations stipulated by the legal regulations in the viticulture and wine production sector, concerning geographical indications, food safety and other,
- Increasing knowledge of marketing and promotion of PDOs and PGIs wines,
- Acquiring knowledge in the issue of geographical indications with the goal of protecting PDO/PGIs on the national and EU level,
- Improving wine production with protected designation of origin, which includes in particular mutual cooperation, exchange of experiences and coordination of activities of members in the application of agrotechnical and ampelotechnical measures, as well as in the application of oenological practices and oenological means.
- Organizing consultations and workshops for the production of grapes, as well as in the production of wines,
- Setting up supply and marketing of wine/wine products and aromatized wine products by the members of associations,
- Acquiring knowledge about optimizing production costs and returns on investments in response to professional standards and stabilizing producer prices,
- Work on developing initiatives, new products, innovative practices, etc.,
- Organizing study trips and tours of wine-growing areas in other countries, in order to acquire new knowledge and experiences in the production of grapes and wines with geographical indications,
- Improving the tourist offer within the PDOs and PGIs territories, etc.

The above mentioned activities aimed at strengthening capacities of associations can be organized through seminars and workshops organized by experts, as well as through study visits to the EU or neighboring countries.
4. WINE QUALITY POLICY

4.1. Common Information about EU PDO/PGI System

Intellectual Property Rights

Protection of intellectual property rights is important for promoting innovation and creativity, providing employment, and improving competitiveness. The European Commission works to harmonize laws on industrial property rights in EU countries to avoid barriers to trade and to create efficient EU-wide systems for the protection of such rights. It fights against piracy and counterfeiting, and aims to help businesses, especially small businesses, gain access to and use intellectual property rights more effectively.

Geographical Indications

According to the World Trade Organization (WTO) regulation, all WTO members have implemented the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs Agreement). The TRIPs Agreement introduced intellectual property law into the international trading system for the first time and remains the most comprehensive international agreement on intellectual property to date. Specifically, TRIPS requires WTO members to provide copyright rights, covering content producers including performers, producers of sound recordings and broadcasting organizations; geographical indications; industrial designs; integrated circuit layout-designs; patents; new plant varieties; trademarks; trade dress; and undisclosed or confidential information. In this framework, the EU has established a protection and control system for GIs, which aims to emphasize the quality of agricultural products and foodstuffs, wines/aromatized wine products and spirit drinks by identifying those products whose excellence and reputation are strictly connected to the geographical area where they are produced and/or processed.

PDO and PGI for wine

Through EU quality schemes, the common agriculture policy (CAP) provides tools to help highlight the qualities and tradition associated with registered products and to assure consumers that these are the genuine products, not imitations seeking to benefit from the good name and reputation of the original. As a result, these schemes and their logos help producers/groups of producers market their products better while providing them legal protection from misuse or falsification of product names. In broader terms, Geographical Indications are part of the wider intellectual properties rights (IPR) of the European Union. In concrete terms, the EU product quality schemes relate to agricultural products and foodstuffs, wines, spirits and aromatized wines, which producers or producer groups have registered according to the rules. The EU promotes quality schemes with campaigns such as "Tastes of Europe". There are also a number of optional quality terms and separate rules on organic farming. A product name identified as a geographical indication is one that is closely linked to a specific production area. This concept encompasses protected designations of origin (PDOs) and protected geographical indications (PGIs) for wines/wine products, while spirits and aromatized wines have only geographical indications.

Protected Designation of Origin (PDO)

Protected Designation of Origin (PDO) identifies products that are produced, processed and prepared in a specific geographical area, using the recognized know-how of local producers and ingredients from the region concerned. These are products whose characteristics are linked to their geographical origin. They must adhere to a precise set of specifications and may bear the PDO logo.
Protected Geographical Indication (PGI)

Protected Geographical Indication (PGI) identifies products whose quality or reputation is linked to the place or region where it is produced, processed or prepared, although the ingredients used need not necessarily come from that geographical area. All PGI products must also adhere to a precise set of specifications and may bear the logo.

Scope of protection

As regards the scope of protection provided by the EU regulations, registered names of GIs are legally protected against imitation and misuse. Protection refers to:
- any direct or indirect commercial use of a registered name in respect of products not covered by registration, where such products are comparable to registered ones or when using the name exploits the reputation of the protected name;
- any misuse, imitation or evocation, even if the true origin of the product is indicated or accompanied by expressions such as 'style', 'type', 'method', 'mode', 'imitation' or similar, including when such products are used as ingredients.

Protection must be assured against any false or misleading indication (related to the origin, or essential qualities of the product, packaging, advertising or related documents) that is capable of implying a false impression about the origin of the product.

The criminal legal protection system exists in most European countries and most national legislations of EU Member States provide for specific criminal sanctions in cases of infringements of GIs, while in some countries general criminal offenses and penalties are envisaged in cases of IPR infringements apply.

Control of production of PDO and PGI wines and PGI aromatized wine products

The EU regulations establish obligations and principles for a system of official controls of users of a registered name that must be implemented by Member States. The scope of protection covers both the production phase and the monitoring of the use of the protected name once the product has been placed on the market. Both kinds of control are the responsibility of the Member States.

EU regulations do not include specific obligations concerning sanctioning and enforcement measures which, as a result, also fall within the competence of national authorities. Therefore, in order to ensure that complete protection is guaranteed for registered names, Member States are also called on by EU regulations to take appropriate measures, in particular administrative and judicial steps, to prevent or stop unlawful use of protected names that are produced or marketed in that Member State. This general obligation falls under what is usually known as ex officio protection measures (although this notion has no legal recognition). Ex officio protection should provide a safeguard for all producers of GIs with actions undertaken without any prior claim or request having been made, including when infringements are committed in another Member State.

Official controls in some European counties before GI products are placed on the market are often delegated to private and public Certification bodies. The rules of accreditation of delegated Certification bodies as established at EU level have to be respected. The national accreditation bodies of Member States delegating certain control tasks provide for the accreditation of Certification bodies in accordance with ISO/IEC standard 17065:2012.

Protection of geographical indications on the international level
Registered names of Geographical indications are legally protected against imitation and misuse. Controls and legal actions against the misuse of GI are carried out by national authorities. Contrary to other intellectual property rights such as trademarks or patents, GIs are available to all producers whose products originate in a defined geographical area and comply with the specifications set out for the GI. The legal concept of a Geographical indication is a way of providing legal protection against imitation for food and agricultural products. Protection through geographical indications focuses on preventing the misuse of names which could mislead consumers as to the origin of agricultural products and their quality or characteristics. Member States take administrative or judicial measures to prevent or stop the unlawful use of geographical indications that are produced or marketed in their territory. The competent authorities of Member States carry out controls to verify the compliance of product specification and to monitor the market in order to detect possible cases of misuse. When the national competent authority identifies non-compliance, it takes appropriate administrative or judicial measures to ensure that the operator remedies the situation.

**Protecting geographical indications at EU level**

Serbia as a third country has the opportunity to protect geographical indications on the EU level. Although Serbia has protected old GIs through the Associating Agreement, till now there is no any protected PDO or PGI for wine/wine products or aromatized wine products on the EU level, so Serbian wine producers need help to protect their PDOs add PGIs within the EU database *E-Bacchus*.

4.2. Benefits of Wine Geographical Indications

There are many benefits to the protection of geographical indications, including economic and cultural. Protected PDO/PGIs can create value for local producers of wine/wine products and aromatized wine products and for communities through products that are deeply rooted in tradition, culture, and geography. PDO/PGIs support rural development and promote new job opportunities in production, processing and other related services in the area where protected products are produced. Over the years European countries have taken the lead in identifying and protecting their geographical indications, for example Champagne, Rioja, Tokaj, Sherry, Chianti, etc. and we are witnesses of the economic growth of regions in which these products are produced and these regions are well-known to everyone. Geographical indications are becoming a useful intellectual property right for developing countries and regions because of their potential to add value and promote rural socio-economic development. The prime purpose of geographical indications is to provide legal protection to geographical indications which encourages local producers to expand their business worldwide. Therefore, the protection of geographical indications boosts future production and export. The protection of geographical indications helps economic prosperity of producers. The marketing of PDO/PGI products enhances secondary economic activities in the geographical indications region which boosts regional economic development. The protection of geographical indications helps in building a good reputation and rewards the producers with incentives. The protection of geographical indications builds a reputation for the PDO/PGI product throughout the world. More and more people notice various PDO/PGI wines/wine products and aromatized wine products from various regions which in turn motivates them to visit those places for accessing those products. This also helps growth of the tourism industry.

For wine producers using PDO/PGI systems of certification, protection and identity, the benefits are numerous and include the following:
- Reputation and added value remain with local wines/wine products and aromatized wine products,
- Higher prices (consumers are willing to pay more) and sales,
- Better market access for local producers and wines/wine products and aromatized wine products,
Protection against unfair competition and imitation,
Protection for intellectual/cultural property of a particular group or place,
A unique form of competitive advantage,
Beneficial spread effects for other products and services of the relevant region.

4.3. Geographical Indications for Wine in Serbia

Geographical indications system in Serbia is mostly harmonized with the EU PDO/PGI system (not including the latest regulations from 2019). The basis for the new PDOs and PGIs viticulture zoning of wine-growing areas was prepared in 2015.

<table>
<thead>
<tr>
<th>Category of wine with geographical indication</th>
<th>Term of wine quality category (traditional terms)</th>
<th>Abbreviated term of wine quality category (traditional terms)</th>
<th>Abbreviated EU indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Regional wine</td>
<td>“Geografska indikacija”</td>
<td>“G.I.”</td>
<td>PGI</td>
</tr>
<tr>
<td>2. Quality wine with geographical indication</td>
<td>“Kontrolisano poreklo i kvalitet”</td>
<td>“K.P.K.”</td>
<td>PDO</td>
</tr>
<tr>
<td>Quality wine with controlled geographical origin and quality</td>
<td>“Kontrolisano i garantovano poreklo i kvalitet”</td>
<td>“K.G.P.K.”</td>
<td></td>
</tr>
<tr>
<td>High-quality wine with controlled and guaranteed geographical origin and quality</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regulated traditional terms in Serbia are: “mlado vino”, “sopstvena proizvodnja”, “arhivsko vino”, “rezerva” or “reserve”, “kasna berba”, “probirna berba” or “selekcija” or “selection”, “odabrane bobice” or “selekcija bobica”, “suvarak”, “sopstvena proizvodnja”, “rujno” vino, “vinica”, “pivnica” or „pimnica”, “poljana”, “vinska kuća”, “kaštel”, “gazdinstvo”, “vila”, “metoh”, “manastir” and “dvorac”.

The control of production of GI wines and control of marketing of GI wines is implemented by the MAFWM, Agricultural inspection responsible for wine, spirit drinks, alcoholic and non-alcoholic beverages. It is planned to set up certification bodies accredited by Standard ISO/IEC 17065 in line with the mentioned Action plan. On the basis of the viticulture zoning of wine-growing areas, there are 101 zoned wine-growing areas which could be protected as geographical indications. Of this number, 3 wine-growing big areas could be protected as PGIs and as much as 99 wine growing regions and sub regions could be protected as PDOs.

Due to the lack of knowledge of wine producers, as well as the demanding administrative procedures and conditions for registration of geographical indications, only six wine-growing regions are registered as PDOs: Knjaževac, Negotinska Krajina, Šumadija, Subotica, Toplica, and Srem.

Although there is a possibility, Serbia has not yet registered any new geographical indication within the PDO/PGI system at the European Union level.
4.4. Suggestions to Help Local Producers in the Protection of PDOs and PGIs

In order to make local wine producers more competitive, there is a necessity for systematic support with registration of PDOs and PGIs on the national designation level, and after on the EU level, as well with promotion of geographical indications, wines, and producers. This can be done through research, collection and preparation of data for product specifications for wine-growing areas where representative associations already exist and where examinations of the soil, grapes, wines, etc. have already been done. In the text below, we refer to wine-growing areas that have the potential to be protected in the following period, and where wine producers have already shown interest in the protection of these areas as geographical indications.
PDO Knjaževac is the first protected geographical indication within the new EU PDO/PGI system. PDO Knjaževac is located in the area around the upper course of the Timok river and it is surrounded by mountains. PDO Knjaževac covers the territory in the municipalities of Zaječar and Knjaževac.

The Knjaževac wine-growing region covers the area of 177,805.70 ha. The biggest wine-growing district is the Zaječar wine-growing subregion.

On the basis of the 2012 Census of SORS, there are 1076.47 ha of vineyards in the Knjaževac wine-growing region (around 1033.47 ha of bearing vineyards, that is, 95.55%), out of which 118.23 ha with table varieties and 958.24 ha with wine varieties.

Considering that new wine producers with new types of wines have been established within this wine-growing region, it is necessary to make changes (amendments) to the current product specification.

Potential beneficiary wine producers:
- Saša Jović PR ”Vinarija Jović”, Knjaževac,
- Vinarski podrum ”Urošević” Zvonimir Urošević PR, Ravna,
- ”Podrum Đervin 1927” DOO Knjaževac,
- ”Vinarija Todorović Potrkanje” DOO, Beograd-Savski Venac,
- Samostalna zanatska radnja ”Nikolas” Ivan Marković PR Zvezdan.

The Potrkanje wine-growing subregion covers the upper and middle courses of the Beli Timok river, on the hills around Knjaževac, and it consists of three sections.

There are 327.63 ha of vineyards in this wine-growing district, mostly of table varieties. 1,645 holdings are active in grape production, as much as 55% of the total number of agricultural holdings.
Potential beneficiary wine producers:
- Saša Jović PR "Vinarija Jović", Knjaževac,
- Vinarski podrum "Urošević" Zvonimir Urošević PR, Ravna,
- "Podrum Džervin 1927" DOO Knjaževac,
- "Vinarija Todorović Potrkanje" DOO, Beograd-Savski Venac.

**Mlava wine-growing region – possible PDO**

The Mlava wine-growing region covers the wine-growing terrains on the right side of the lower course of the Velika Morava and in the basins of the rivers Resava, Mlava and Pek.

The Mlava wine-growing region covers the territory in the municipalities of Požarevac, Veliko Gradište, Golubac, Kučevo, Malo Crnić, Petrovac, Žabari, Svilajnac and Despotovac.

The Mlava wine-growing region covers the area of 272,323.00 ha. The biggest wine-growing district is the Požarevac wine-growing subregion.

According to the 2012 Census of SORS, there are 814.37 ha of vineyards in the Mlava wine-growing region (around 751.90 ha of bearing vineyards or 92.33%), out of which 315.15 ha with table varieties and 499.22 ha with wine varieties.

Potential beneficiary wine producers:
- "Milpeks" DOO Žabari,
- "Vinarija Virtus" DOO Viteževo,
- Nemanja Milošević PR proizvodnja vina "Milanov podrum" Lopušnik,
- Privredno društvo "Pruna" DOO Beograd,
- Samostalna radnja "Vinarija Živković", Miroslav Živković Preduzetnik Kličevac,
- Stefan Nečak Preduzetnik "Vinarija Nečak", Petrovac.
The Niš wine-growing region includes the wine-growing terrains that are located in the broad valley of the lower course of the river Nišava and in the lower courses of the rivers Južna Morava and Moravica. The Niš wine-growing region covers the territory in the municipalities of Sokobanja, Aleksinac, Doljevac, city of Niš and in the municipality Svrljig. The Niš wine-growing region covers the area of 104,084.40 ha. The biggest wine-growing district is the Čegar wine-growing subregion.

According to the 2012 Census of SORS, there are 1311.85 ha of vineyards in the Niš wine-growing region (around 1246.47 ha of bearing vineyards, that is, 95.04%), out of which 246.99 ha are with table varieties and 1064.86 ha with wine varieties.

Potential beneficiary wine producers:
- “Status” DOO Svrljig,
- "VINARIJA MEČAVA" DOO,
- Dragan Petrović PR radnja za proizvodnju rakije "Podrum Petrović" Svrljig,
- Ivan Jovanović PR "Vinarija Izba Jovanović", Vele Polje,
- Milan Živković PR SZR "Podrum Živković" Knjaževac,
- Miomir Vojinović PR “Lindžer”,
- Ninoslav Stojanović preduzetnik, radnja za kompjuterske aktivnosti, računovodstvene usluge, proizvodnju vina i alkoholnih pića "Stojanović CO " Brzi Brod,
- Siniša Živković PR, Proizvodnja i prodaja vina od grožđa "Vinski podrum Živković", Niš,
- Slobodan Todorović PR radnja za proizvodnju vina "Podrum Kratina" Sićevo,
- Ugostiteljska radnja "Restoran Boni" Ljubisavljević Ljiljana preduzetnik, Sokobanja,
- Zemljoradnička zadruga "Kisko" selo Malča.
The Pocerina-Valjevo wine-growing region is situated south of the Sava and east of the Drina river, on the slopes of mountains Cer and Vlašić, in the upper parts of the basins of the rivers Tamnava, Ub, Kolubara and Ljig in the east and in the basin of the Jadar river in the west.

The Pocerina-Valjevo wine-growing region covers the territory in the municipalities of Loznica, Šabac, Vladimirci, Koceljeva, Osečina, Valjevo, Ub, Lajkovac, Mionica, Ljig and Krupanj.

The Pocerina-Valjevo wine-growing region covers the area of 166,989.93 ha. The biggest of the three is the Podgorina wine-growing subregion.

According to the 2012 Census, there are 190.6 ha of vineyards in the Pocerina-Valjevo wine-growing region, out of which vineyards with table varieties account for as much as 49% of the areas. Most of the vineyards are located in the municipalities Valjevo and Šabac.

Potential beneficiary wine producers:
- "Wine Net" DOO Bujačić,
- "Astra ITB" DOO Beograd,
- Sladana Lukić PR, proizvodnja rakije vina usluge rezervacije i smeštaja "Podrum Lukić" Babajić,
- Branimir Ranković PR "Vinarija Puce",
- Dušan Dimitrijević PR, proizvodnja vina "Vinarija Dimitrijević" Lazarevac,
- Miroslav Valčić PR, proizvodnja grožđa i vina "Valčić" Gvozdenović,
- STPUR "Podgorka" Dragan Popović preduzetnik Osečina (Varošica),
- Udruženje vinogradara i vinara "Gradina".

Map 12: Pocerina-Valjevo wine-growing region
Vranje wine-growing region – possible PDO

The Vranje wine-growing region covers the terrains of the Vranje valley around the river Južna Morava.
The Vranje wine-growing region covers the territory in the municipalities of Vladičin Han, Surdulica, Vranje, Bujanovac and Preševo.
The Vranje wine-growing region covers the area of 57,801.82 ha. The biggest wine-growing district is the Vrtogoš wine-growing subregion.
According to the 2012 Census od SORS, there are 421.31 ha of vineyards in the Vranje wine-growing region (around 409.58 ha of bearing vineyards, i.e., 97.22%), out of which 103.58 ha are with table varieties and 317.73 ha are with wine varieties.

Potential beneficiary wine producers:
- "Vinarija Aleksić" DOO, Vranje,
- "Contact" Beograd (winery in Vranje),
- "WALC" DOO Beograd (winery in Zlatokop, Vranje),
- "Navip" AD Beograd - u stečaju (winery in Vranje),
- "Podrum Stari dani" DOO Rakovac.
Beograd wine-growing region – possible PDO

The Beograd wine-growing region covers the areas south from the rivers Sava and Danube, from the confluence of the Kolubara into the Sava until the confluence of the Velika Morava into the Danube, as well as the terrains on the slopes of mountains Avala and Kosmaj. The Beograd wine-growing region covers the terrain in the municipalities of Obrenovac, Savski venac, Stari grad, Vračar, Zvezdara, Palilula, Rakovica, Voždovac, Grocka, Sopot, Mladenovac, Lazarevac and Smederevo.

Beograd wine-growing region covers the area of 241,866.90 ha. According to the 2012 Census of SORS, there are 1,129.55 ha of vineyards in the Beograd wine-growing region (around 1,061.67 ha of bearing vineyards, that is, 93.99%), out of which 703.29 ha are with table varieties and 426.26 ha are with wine varieties.

Potential beneficiary wine producers:
- Dragan Vasić PR radnja za proizvodnju grožđa i vina "Janko" Smederevo,
- "Emporio Consulting" DOO, Beograd (Voždovac),
- "Plavinci" DOO Beograd – Grocka,
- "Revin export - import", preduzeće za proizvodnju, promet roba i usluga DOO, Beograd (Čukarica),
- "Vinokratija", DOO Beograd,
- "Vinovita - Podrum Panajotović“ DOO, Beograd (Vračar),
- "EKO MINERAL" DOO Smederevo,
- "Kosmaj-Komerc" DOO Mladenovac,
- "Bookbridge Import&Export" DOO, Beograd-Vračar,
- "Spare Parts Internacional" DOO Beograd,
- Bojan Janković PR, proizvodnja vinskog i stonog grožđa "Mons Aureus vinogradi" Smederevo,
- Dejan Čvorović PR vinarija "Carpe Diem" Zeoke,
- Jasmina Tomašević PR "Vinarija Tomašević",
- Maja Ilić Mitrović PR "Vinarija Vodnjanka",
- Milan Sušević PR, radnja za proizvodnju rakije i vina "Sučko", Beograd-Voždovac,
- Milomir Ilić PR, proizvodnja vina "Podrum Ilić", Vojdanj,
- Miloš Panjković PR proizvodnja vina i rakije "Podrum Panjković“ Smederevo,
- Mladen Gajić PR proizvodnja i prodaja vina "Podrum Gajić" Lazarevac,
- Momčilo Trišić PR, proizvodnja vina od grožđa "Vinarija Trišić“ Vranić,
- Nikola Karaklić preduzetnik, radnja za ugostiteljstvo i proizvodnju jakih alkoholnih pića "Staro Užice" Beograd (Savski Venac),
- Nikola Vojinović PR, Proizvodnja alkoholnih pića trgovina i ugostiteljstvo "Podrum Vojinović", Pružatovac,
- Poljoprivredni fakultet u Beogradu, O.D. Radmilovac,
- Privredno društvo za proizvodnju, promet i usluge "SRŽ Milovanović" DOO, Lazarevac,
- SZR "Dioniš", Zoran Gitarić PR, Dobri Do,
- Vladimir Petkoski PR, proizvodnja vina "Vinarija podrum Milojević“ Zeoke,
- Zoran Jovanović PR "Vinarija Zorča" Lazarevac.
Smederevo wine-growing subregion – possible PDO

The Smederevo wine-growing subregion covers the hillocky terrains of the Danube valley around the town of Smederevo and its hinterland, and it consists of three sections separated by the valleys of the rivers Ralja and Konjska reka.

In the wine-growing subregion, grapevine is cultivated on 374.75 ha. Table varieties cover 39% and wine varieties cover 61% of the areas under vineyards.

Potential beneficiary wine producers:
- Dragan Vasić PR radnja za proizvodnju grožđa i vina "Janko" Smederevo,
- "EKO MINERAL" DOO Smederevo,
- Bojan Janković PR, proizvodnja vinskog i stonog grožđa "Mons Aureus vinogradi" Smederevo,
- Maja Ilić Mitrović PR "Vinarija Vodnjanka",
- Milomir Ilić PR, proizvodnja vina "Podrum Ilić", Vodanj,
- Miloš Panjković PR proizvodnja vina i rakije "Podrum Panjković" Smederevo,
- SZR "DioniS", Zoran Gitarić PR, Dobri Do.
Vršac wine-growing subregion – possible PDO

The Vršac wine-growing subregion is situated in the north-east part of the region, on the slopes of Vršačke planine. The Vršac wine-growing subregion is the most important wine-growing subregion of the South Banat wine-growing region. There are 1,405.48 ha of vineyards in it, which represents 81.2% of the vineyards of the entire region. The vine varieties are dominated by wine varieties (97%). 255 agricultural holdings are active in viticulture.

Map 16: Vršac wine-growing subregion

Potential beneficiary wine producers:
- "Bullet" DOO Beograd (winery in Veliko Središte)
- "VINARIJA CONTE VALLONNE" DOO, Gudurica
- "Porodični podrum vina SELECTA" Jocić Sonja PR, Gudurica,
- "SOUL WINE" DOO Vršac,
- "Vršački vinogradi" DOO Vršac,
- Aleksandar Mladenović PR "Vinarija pod bregom" Veliko Središte,
- Dobrinko Sočanski PR, "Vinarija Sočanski", Veliko Središte,
- Ivan Milanović PR, vinarija "VINARIJA BAHUS", Gudurica,
- Josif Nedin PR, "Vinarija porodični podrum Nedin", Gudurica,
- Ljiljana Rnjak PR Proizvodnja vina "VINARIJA RNjAK" Gudurica,
- Marija Đedanski PR, proizvodnja vina "PODRUM ĐEDANSKI", Vršac,
- Marko Vidosavljević PR, "VINARIJA MARKOV PODRUM", Veliko Središte,
- Nikola Cuculj PR, "VINARIJA VINIK", Vršac,
- Tomislav Stojilković PR Proizvodnja vina od grožđa "PODRUM VILA" Vršac,
- Vera Marinković PR, "VINSKI PODRUM VINARIJA MARINKOVIĆ", Vršac.
**Bermet – PGI for aromatized wine**

Bermet is a protected GI for aromatized wine with production within the Srem wine-growing region. 

Due to the non-compliance with the product specification and the inability of wine producers to comply with the conditions in the specification, it is necessary to make a new production specification or to make changes to the specification.

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**Map 16: Srem wine-growing region**

Potential beneficiary wine producers:
- Predrag Crnković, PR "Vinarija Kiš" Sremski Karlovci,
- "Vinarija Dulka" DOO Sremski Karlovci,
- Aleksandar Mrđanin PR, SZR "Vinarija Mrđanin",
- DOO "VINUM" Sremski Karlovci,
- "Vinograd Hopovo" DOO Irlg,
- "Agrina" DOO Novi Sad,
- Predrag Bajjio PR, SZR "Podrum Bajilo" Sremski Karlovci,
- "Fruškogorski vinograd" DOO Banoštor,
- "Patrijaršijska dobra" DOO Beograd,
- "Vinarija Kovačević" DOO Irlg,
- "Vinarija Veritas" DOO Sremski Karlovci,
- "Vinarium" DOO Banoštor,
- Aleksandar Ostojić PR, Proizvodnja vina od grožđa "Vinarija Vitis", Sremski Karlovci,
- Bojan Brestovački PR, "Vinarija Brestovački", Erdevik,
- Borivoj Živanović PR SZR "Vinarija Živanović" Sremski Karlovci,
- Darko Mecing PR proizvodnja vina "Podrum Probus", Sremski Karlovci,
- Dražen Đurđić PR, "Vinarija za proizvodniju i preradu grožđa i proizvodnju vina Đurđić", Sremski Karlovci,
- Ilija Adžić PR "Vinarstvo vina Adžić" Temerin,
- Jovan Ačanski PR, Proizvodnja i promet vina "Podrum Ačanski", Banoštor,
- Jovan Pavlović preduzetnik Proizvodnja vina od grožđa "Vinarija Kurjak" Sremski Karlovci,
- Jovan Radošević PR, proizvodnja grožđa i vina "Vinarija Radošević", Banoštor,
- Jovan Urošević PR, "Vinogradni Urošević", Banoštor,
- Milan Kosović PR, proizvodnja vina porodična vinarja "MK Kosović", Sremski Karlovci,
- Milan Petrović PR, SZR "Podrum Petrović", Sremski Karlovci,
- Milan Šijački, PR proizvodnja vina i trgovina "Vinarija Šijački",
- Milan Todorov preduzetnik, SZR "Vinarstvo Burić Todorov", Petrovaradin,
- Nemanja Popović PR, proizvodnja vina "Modele vinograd i vino Popović" Banoštor,
- Poljoprivredni fakultet, Univerzitet u Novom Sadu,
- PP "Erdevik" DOO, Erdevik,
4.4. Obligations and Financial Costs for Producers of Wine with Geographical Indications

Although in the European Union the costs of annual verification of compliance of production with the product specification are paid by producers, in Serbia wine/wine products and aromatized wines producers do not pay these costs. This system of free-of-charge control including the sensory evaluation of wine was set up in Serbia in 2009. Within the framework of future changes in the legislation, it is necessary to insist that the free system for producers be kept in order to animate producers to participate in the system of geographical indication. Wine producers who are users of PDOs or PGI s are obliged to apply each year to the MAFWM for the control process.
5. GOOD PRACTICES SUGGESTIONS RELATING TO FUTURE DEVELOPMENT OF THE WINE SECTOR

In order to strengthen the capacity of the association and strengthen the viticulture and wine production sector, we recommend to transit positive examples of PDOs and PGIs from Italy (Marche PDO/PGIs) as a wine-growing area which is not so promoted and known and with similar problems like in Serbia, as well as from France (Bordeaux) which has a very famous geographical indication.

Italy

**PDOs: Marche region** – *through work with experts from the association and through a study visit*
Association/institution: MT Istituto Marchigiano di Tutela Vini
http://imtdoc.it/
- Association has a permanently employed professional person

France

**Bordeaux** - *through work with experts on marketing and promotion.*
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