

XXII International Scientific Conference “Enometrix”, May 27–29,  
2015, Brno, Czech Republic

## Achieving regional competitiveness via export opportunities and quality systems of Serbian agri-food clusters

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### Abstract

This particular scientific research paper collected and presented information on the export opportunities of agricultural and food products and analysed the performance of some clusters and associations within the industry and their branches, which operate in the territory of the Republic of Serbia and its region. As part of this scientific research paper, producers were examined via descriptive analysis in detail within the clusters in the agricultural and food production, their problems, and business opportunities they encounter in the domestic and foreign markets. Quality management systems ISO (hereafter, Quality System—QS) and the manner in which they connect all of these food items of the food industry were also examined via the descriptive analysis in this paper. A case study analysis (hereafter, case-analysis) was carried on the two clusters, the association and on their survival in the domestic market. Since until now clusters Pecos, Sombor's Farmsteads and the Serbian Association of growers and winemakers have not been analysed in this manner. The work on the processing of data about them, their establishment, strategies, plans and objectives, was a real challenge. The organisation, operations, plans, opportunities, objectives, and obstacles of all three participants in this case analysis were examined using organisational maps, SWOT analysis, and their future plans. This paper aimed to review few relevant economical segments, each with its strengths and weaknesses, and rather than splitting them to fit into analytical categories, it sought to retain focus on entire segments. Therefore the paper is divided in economical instead of analytical categories. Of course, some of these segments clearly fall into one of the categories inside SWOT analyses. Their case analysis managed to make a good cross-section of agricultural production and food industry through its branches within which these clusters operate. These branches are baking, wine, organic food production, dairy industry, and ethnic tourism. In the continuation, the influence of the state on the development of these clusters was examined. In that way is illustrated how it is when a state with its diverse roles, tries to help the cluster development of agri-

*Enometrix XXII, May 27-29, 2015*

food industry in practice, and what is there to do. In this way a complete picture of the clusters in the agriculture and food industry was gained, which as an important branch of agriculture plays an important role in the present and future development of the Serbian transition economy.

Keywords: agribusiness, agri-food sector/industry, case-analysis, competitiveness, economic clusters, macro and micro levels, quality system (QS)

### 1. Introduction

One of the most renowned and recognised experts in the fields of strategy and competitiveness in his works define clusters as a geographically proximate groups of interconnected firms, suppliers, related industries and specialised institutions in particular fields located nearby, in a nation or region, which deal with specific activities while connected by the common features & characteristics, and complementarity (Porter 1990). In geographic terms, the cluster might include a city, but also the entire country, and even the entire network of neighbouring (adjacent) countries (Porter 1998). Cluster Development in Serbia has started in the year 2006, and the implementation of programs to support the development of clusters was achieved in the year 2007 over the program for the development of business incubators and clusters in the Republic of Serbia during the period between 2007 to 2010 with the financial support of the Government of the Kingdom of Norway. Based on the advice and practices of developed countries, especially the EU countries that have passed through a period of development of clusters that even today have developed economy, Ministry of Economy and Regional Development in the period from 2006 to 2010 have been implementing the program to support cluster development. The program aims to encourage economic development, growth of employment and export through businesses networking, R&D institutions, and business associations in the cluster. This program has been designed in four stages: consultation and program preparation, stabilisation and growth of clusters, strengthening the operational capacity of the existing clusters and the commercialisation and inclusion of clusters in the international business cycle. So far, many obstacles have been encountered in the development of clusters in Serbia, which is primarily explained by an insufficient connection between the cluster members, lack of connectivity of clusters in the country and abroad, as well as weak development and management engagement of clusters in the creation of development strategies. In order to overcome incurred obstacles and achieve results in business of clusters, it is necessary that both the state and the private sector involve more and more seriously in an effort to improve clustering in the country. The state has three roles in the economy with which it can and should achieve macroeconomic and political stability by establishing steady state institutions, the legal and economic framework, and sound macroeconomic policies. In addition, the state should establish a general microeconomic stability and efficient investment in their own country and foreign investments and actions across all four determinants of the national diamond or a rhomb. Finally, the government should establish a general microeconomic policy and incentives on the line to direct the competition which encourages the growth of productivity (Porter 1998). At the cluster level, government policy is leading to all parts of the Porter's diamond model (or a rhomb) as it can be seen below in Figure 1.

Figure 1: The influence of the private sector on improvement of agri-food clusters



Source: created by the author on the base of Porter's (1990) diamond model and Furman et al. (2002)

### 1.1. The current state of Serbia in foreign trade exchange between the agricultural and food industries

Since the end of year 2000 and the approval of the preferential trade concessions (privileges & benefits) by the EU, all the agricultural and food products originating from Serbia are exempt from customs duties during the export to EU market. This fact allows duty free access for Serbian products towards an extremely large, rich by abundant and demanding market, which is largely used. In early 2009 with the unilateral implementation of the trade agreement, Serbia has established a symmetrical relationship in foreign trade exchange with the EU. By creating a strategy of development and export-oriented agriculture, the EU market absorbs approximately half of the total agricultural exports from Serbia. The most important and significant business partners of agriculture and food industry of Serbia in addition to the EU countries and the Western Balkan countries (CEFTA) are signatories of the multilateral free trade agreements (FTAs). Serbia at the end of the year 2006, and seven other countries signed the first multilateral agreement in South-East Europe, named Central European Free Trade Agreement – CEFTA 2006. CEFTA 2006th signatory countries are Albania, Bosnia and Herzegovina (BiH), Croatia, Macedonia, Montenegro, Moldova and besides that, Bulgaria and Romania have also been signatories, but in 2007, they joined the EU and became the EU members. Serbia sells about 30% of total exports to market of CEFTA member countries, and with all countries, except with Croatia and Moldova, has a trade surplus in the exchange. Serbia from 2010 chairs this association. With the survey among executives, businesspersons and generally businesspeople, it was found that the biggest problem is mutual non-recognition of quality certificates. Nonetheless, the diagonal accumulation of origin of goods, which also enables a reduction of customs duties or tariff rates, is insufficiently used among businesspersons and executives in

CEFTA region. In the meantime, Serbia has signed an agreement on market liberalisation with Belarus and Turkey. Nonetheless, the increase in the balance of foreign trade exchange with Russia is also on the rise, and the fall in 2009 is justified by the effects of the financial crisis. Upward trend in exports of agricultural and food products is interrupted by the financial crisis. Although in most countries the crisis has left traces in early 2008, agricultural production in the same year in Serbia increased by 9%, and its products are mostly exported to CEFTA countries, which have quite mitigated the first effects of the world crisis on the country (Stat.Yearb.Serb. 2013). Nowadays the economy is gradually returning to the level of exports from the previous years, but that process is developing very slowly. The reduction of foreign direct investments (hereafter, FDI) over the past two years is going also in favour of a slow recovery, which has negative effects on the stability of the exchange rate and its large fluctuations during the year (Vanka and Heijman 2013a, 2013b). Due to the current and insufficiently successful monetary and fiscal policy, Vanka and Heijman (2013a, 2013b) argue that the state should lead these policies by stricter than ever (or so far), the so-called prophylactic measures. Krugman and Obsfeld (2009) argue that these measures are aimed at greater transparency, strengthening the banking system and credit lines and increase the inflow of equity capital in relation to the inflow of debts: showing increased equity capital influx. On the other side, Serbia needs to consider the opportunities to increase food products exports by strengthening the production, organisational and market strategies. In this way will perceive which products to produce and in which way, how to organise a domestic producers and which foreign markets should be examined in order to place them larger amounts of agricultural and food products. According to the World Bank (2013), prices of many agricultural and food products in Serbia show high volatility, rising higher than EU prices in periods of shortage and dropping lower than EU prices in times of surplus. This volatility indicates a lack of competition and efficiency in the marketing chains, and makes it difficult to achieve a continuity of exports, with obvious negative effects on consumers (World Bank 2013).

### 1.2. Export performance of Serbian agriculture through the food industry

Serbia leads the strategy of an export-oriented economy. Serbia, despite of the excellent geographic location and climatic conditions for agricultural development has always had an insufficiently adequate agricultural policy. Established in the period of planned economy, lost also those few clear visions during the sanctions, and as such, taken over as an unfortunate in the transition period, agricultural policies need to be shaped according to structural changes in the economy and toward market demands. In the transition period, opening its market to the world, Serbia ran into an unfamiliar terrain. When in Serbia began a period of transition, it was not immediately possible to see how much is the loss of equity capital, expertise (in regard to competence, skills and professionalism) and the technology compared to other economies. Moreover, when it tried with the planning to attract foreign investors in order to obtain FDI, it was realised that Serbia's ranking in the world economy is very low and as such, the Serbian economy is insufficiently attractive for investment. Since then a lot has happened, but still not enough in terms of competitiveness, antitrust policy, technological development, and investments into R&D of all other factors necessary for the rapid development of the domestic economy. The similar situation is in agriculture. Opening of the domestic

market to the world so far has not been used enough. In this lack, the roots can be found that were yet in the former Yugoslavia, when Serbia over 50% of agricultural and food products, as well as from the most of other economic sectors, exported to the markets of the former Yugoslav republics (Jevtic et al. 2007). Lack of knowledge about the requirements that existed in the markets of EU countries, former republics of the Soviet Union (USSR) and/or Asia, caused the placement of small quantities of agricultural and food products/stuffs (from possible) to the aforementioned markets. What characterises the Serbian agriculture is a great diversity of agricultural holdings and their great compartmentalisation (average size of less than three hectares of land and seven parcels), insufficient equipment of agricultural machinery which is however technologically overcome and obsolete (average age is 20 years old), low use of mineral fertilisers and extremely low productivity in all fields of production - by showing the average yields and especially average agricultural harvest yields below the level of the EU average (Jevtic et al. 2007). The Serbian market does not practice yet more rational use of significant ecological, production and human resources in agriculture. This primarily refers to the increase in overall generation and production efficiency, faster growth and sustainable development. In some developed countries, organic agriculture has a significant portion of the total agricultural production, so that organic farming in Denmark makes 13% of the total, in Austria is 10% and 8% in Switzerland. The largest market for organic products is in Germany with an annual growth rate of 10%, followed by France with an annual growth-rate of 5%. It is estimated that in the United States, France and Japan, the annual growth of this production is about 20%. The most successful country in terms of products' exports from organic agriculture in Europe is the Hungary, which exports about 80% of its products. Hungary stimulates and encourages organic food producers, which also needs to be done by others, especially the less developed economies. According to the World Bank (2013), the pursuit of EU accession will affect agriculture more than any other sector, but it is also the sector that will benefit the most. The pre-accession period requires great adjustments and investments at all levels of the agriculture and food industries. The Serbian agricultural policy has created uncertainty over the last decade, and has been redesigned into a two-year cycle since 2000, leading to an unstable political environment. This policy uncertainty has had negative effects on investments in the sector, as well as on its restructuring.

### **1.3. Serbian viticulture development**

When it comes to viticulture and winemaking development, Serbia has an excellent climate thanks to its good geographic location. However, due to the poor quality of many old untreated vineyards and unclean land which is expensive, parcelled and divided, Serbia is still not able to meet any quota granted to it for the export of wine in the EU. Furthermore, Serbian winemakers cannot cover even demand of the domestic market while some producers sell most of their production in the Russian market, which is less demanding in quality and allows for greater profits. The development potential of viticulture in Serbia can be seen in the data that in the EU average wine consumption per capita is 25 litres per year and in Serbia is about 11 litres. In France, the vineyards are spread over 870 thousand hectares and it has more than 80 thousand wine producers, while in Serbia under vineyards is about 25 thousand hectares which is handled by about 200 winemakers. Via the state subsidies and the new Law on Wine, the State

succeeds to improve the situation and stimulates the old and new winegrowers to produce.

### **1.4. Serbian dairy industry development**

The dairy industry, as well as the baking industry, went through a bad period of privatisation. This is also corroborated by data on the quantity of milk consumption in Serbia and the EU. Consumption of cow's fresh milk (no derivatives) of 56.5 litres per capita is less than the average consumption in the EU, where the average is 85.7 litres (Germany 62.8, France 66.2, Greece 60.1 litres). Even though the Legislature in Serbia approached the EU market, the Serbian market still does not manage to cope with internal problems such as uneven and temporally continuous quality of price, dissatisfaction of milk producers with the purchase price of milk, increased competition of foreign dairy products and removal of tariff barriers (Jelincic and Djurovic 2009). Yet in Serbia, there are several developed and well-known dairy plants (dairies) which subsist with their good quality consumer products in the domestic market and evolve in international markets. As it can be seen from the preceding, production capabilities in Serbia are great and her potential should be utilised for the development of food products, as do developed economies. Products from sectors that are listed here are the most in demand on the foreign markets, and as such, Serbia should be producing them in a way that their quality will easily find the customer and create a greater competitiveness to the domestic economy. In order to successfully develop the economy, the state with the development and financial institutions based on information from the market should create and carries out realistic and feasible development strategies. Doing so will increase the competitiveness of the country which is now in the unenviable place. Serbia is ranked at 95th place out of 144 countries according to the global competitiveness report for 2012-2013 (Schwab and Sala-i-Martin 2012; Sala-i-Martin et al. 2012).

### **1.5. Obstacles for the producers in Serbian baking industry**

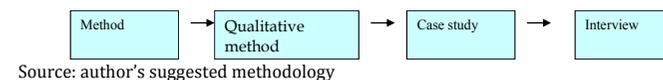
For the baking industry, the most important raw material is wheat flour. In recent years, due to sudden climate changes and bad weather, wheat is of lower quality. The poor wheat quality has resulted in inferior flour quality, which is why for the same quantity of bread is used larger quantity of flour and additives, which increases the production costs and raises the price level of bakery products. On the other hand, Serbia is among the biggest consumers of bread in Europe and according to author's unofficial estimates, Serbia casts 10% of bread which is a devastating fact in relation to developed countries. Quantity of the yield for the wheat in Serbia is also not at an enviable level in comparison with the countries that have a much worse climate conditions and geographic location, but larger yield. Namibia has about 8 tons, the Netherlands an average of 8.8 tons, Belgium has around 8.6 tons, Germany has approximately 8 tons, and the United Kingdom (UK) has around 7.8 tons (StatYearb.Serb. 2013). According to experts, Serbia should planted wheat each year on the surface of not less than 650 thousand hectares in order to have continuously over a million tons of wheat for export, and thus strengthens its position in the foreign markets. Although the baking industry has been for years now in an unenviable position and consumers often are negatively surprised by the new price hikes/increases of bakery products, the state still has no development strategy that would resolve these problems.

## 2. Material and Methods

Research methods can be divided into quantitative research and qualitative research. Flyvbjerg (2006) states that good social science research is problem driven and not methodology driven, when both qualitative and quantitative methods are selected based on the specific research issue. Denzin (1978) gives a definition that quantitative research method is a formal, objective, systematic process in which numerical data are utilised to obtain facts about the world. In quantitative research, according to Denzin (1978), the aim is to determine the relationship between one thing, an independent variable and another in a population. Rose (1992) points out that quantitative research designs are either descriptive or experimental. Rose (1992) also argues that a descriptive study establishes only associations between variables. Rose (1992) claims that an experimental establishes causality. According to Rose (1992), a descriptive study usually needs a sample of hundreds or even thousands of subjects for an accurate estimate of the relationship between variables. An experiment, especially a crossover, may need only tens of subjects (Rose 1992). Some authors divide it into three types which is descriptive, quasi-experimental and experimental. This research paper is aimed at quantifying relationships. A criterion can be employed to test method choosing here the following: validity and reliability. Verification is a checking process to test if research method meets specifications. Validation is a process to establish documented evidence that provides a high degree of assurance (Yin 1984). Validation can check if the chosen research method meets academic criteria. Qualitative research is generated outside the framework of a quantitative research approach. The collected data are not subject to formulaic/conventional analysis for the purpose of generating projections. Qualitative research involves the use of qualitative data, such as interviews, documents, and participant observation data, to understand and explain social phenomena (Bogdan and Taylor 1975). Miles and Huberman (1994) describe this research method as using words rather than numbers, such research flows from concreteness to abstractness. Generally, qualitative research is rather intended to determine whether things exist than to determine how many such things there are. In short, qualitative research is not concerned with measurement. This research tends to be less structured than a quantitative method and can be made more responsive to the needs of respondents (Miles and Huberman 1994). This method can be divided as follows, depth interviews, group interviews, participant observation, and projective techniques (Patton 1990). Qualitative and quantitative techniques may be employed during any phase of research their different characteristics make them uniquely appropriate in certain fields (Walker 1994).

The reasons why to choose a qualitative method instead of a quantitative method in this research paper is because qualitative analyses are more explicitly interpretive, creative and personal than in quantitative analysis. Quantitative research methods tend to produce results that can be generalised. The research paper focuses on the discovery of a truth as well as an emphasis on exploration and description; and not looking for cause effect relationships. Here, it is chosen qualitative research as research method. In this method, case study analysis is adopted as a tool within the case study with different respondents and sources. As part of qualitative methods, key respondents were considered because they provide specific knowledge about complex, contemporary phenomena (Boolsen 2005; Mayoux 2006). The selected respondents are executive managers from analysed Serbian agri-food clusters.

Figure 2. Basic structure of applied research method



Qualitative studies tend to produce results that are less easy to generalise. The interview is a quite a suitable way to collect necessary information. A case study refers to the collection and presentation of detailed information about a particular participant or small group, including the accounts of the subjects themselves (Yin 1984). A form of qualitative descriptive research, Yin (1984) realises that the case study looks intensely at an individual or small participant pool, drawing conclusions only about that participant or group and only in that specific context. These types of case studies include the following such as illustrative case studies, exploratory case studies, cumulative case studies, critical instance case studies (Denzin and Lincoln 2000; Gillham 2001). There are many methods in case studies to collect data like documents, archival records, interviews, direct observation and participant observation.

### 2.1. Applied case study analysis

As part of this scientific research study, case study analysis applies methodical, practical, and proven decision theory techniques and processes focused on achieving decision-maker objectives. Within this paper, it promotes the use of cooperative decision software tools aligned with organization's strategic objectives of analysed agri-food clusters. Case study analysis combines system performance, economic analysis, and risk assessment at the appropriate scope and depth to empower this research study. The case study analysis is a structured methodology and tool that aids decision making by identifying and comparing alternatives by examining the mission and both financial and non-financial business impacts, risks, and sensitivities. Case study analysis may be somewhat different from other decision support analyses through their emphasis on the enterprise or economic clusters wide perspective of stakeholders and decision makers and assessment of the holistic effects impacted by the decision. In some cases, a case study analysis could be a synonym for applying in-depth economic analysis and/or cost-benefit analysis (BCA). Broadly speaking, a case study analysis is any documented, objective, value analysis exploring costs, benefits, and risks. The case study analysis concludes with a recommendation and associated specific actions and an implementation plan to achieve stated organisational objectives and desired outcomes. The case study analysis does not replace the judgment of a decision maker. Rather, it provides an analytical, standardised, and objective foundation upon which credible decisions can be made. The case study analysis provides a fair, comprehensive, and accurate comparison when evaluating multiple alternatives. It should take into account broad department wide impacts and context throughout the analysis.

### 2.2. Case study profile

Barkley (2006) mentions that case studies are applied to explore innovative policies. This analytic approach combines detailed description and presentation of the contextual conditions of the case (Yin 2003; Creswell et al. 2007). An exploratory case study was

considered as the most appropriate research design. This article analyses the overall business performance and operation of several clusters and associations in the agri-food industry of the Serbian transition economy. Due to difficulties in collecting of data by which could be seen ways of working, opportunities and obstacles encountered by domestic producers united in clusters and associations in the food industry, two clusters, and one association of Serbia were analysed. Producers were investigated by descriptive analysis in detail within the clusters in the agricultural and food production, their problems and business opportunities they encounter in the domestic and foreign markets. These are cluster Pecos, Sombor's Farmsteads and the Serbian Association of growers and winemakers. The organisation, operations, plans, opportunities, objectives, and obstacles of all three participants in this analysis were investigated by using organisational maps, SWOT analysis, and their future plans. The influence of the state on the development of clusters Pecos, Sombor's Farmsteads and the Serbian Association of growers and winemakers was also examined. In that way is illustrated how it is when a state with its diverse roles, tries to help the Cluster Development of agri-food industry in practice, and what is there to do. In the SWOT analysis of the cluster, in detail are explained all of the possibilities that members of clusters can have through the strengths and opportunities as well as of the weaknesses and threats that may also adversely (negatively) affect the further growth and development of the cluster and its members. With their case analysis, it managed to make a good cross-section of the food industry through its branches within which these clusters operate. These branches are baking, wine, organic food production, dairy industry and ethnic tourism. Quality System—QS and the way he connects all of these food products of food industries is investigated with descriptive analysis in this paper as well. In this manner the complete picture of the clusters in the agriculture and food industry was obtained, which as an important branch of agriculture has an important role in the current and future development of the Serbian transition economy. As a case study, for the research are chosen managers from Serbian agri-food clusters which means that concrete information and data were collected during an interview with the respondents. The interview was adopted in qualitative method to go through agri-food clusters' case, and the necessary information/data were obtained and collected from respondents in agri-food clusters' management. When gathering the primary data, the researcher had the opportunity to communicate with the respondents several times in order to avoid uncertain information or data misunderstandings. During this method employed in practise, the researcher has had the possibility to increase the validity of the research study. A research review in connection with reliability is to see if the results are consistent over time and can be reproduced under a similar methodology. In order to meet these requirements and improve the reliability, the respondents in this study were informed about the content and question construction of the analysis before the interviews. Furthermore, according to Yin (1984), one of the biggest obstacles in gaining reliable findings, is that the interviewer perceives the answers wrongly or put it down on paper wrongly. To avoid these problems, the respondents are offered the opportunity to read the completed interview and see this research method to ensure the gathering of information was correct, and so the respondents can check and give feedback. This method really adds more reliability to this research. To conclude the methodological discussion of the selected research strategy, the complexity of this research is noted as well. Barkley (2006) points out that the complexities, contradictions, and causal relationships of the situation may be better revealed in case studies than through the other research methodologies.

### 2.3. Cluster profile

- *The "Pecos" bakery cluster* is local and cluster members are primarily small bakery producers, agency for introducing quality system, associations of bakeries and millers, R&D institute and non-governmental organisation. The cluster's objective is to provide support to its members in the process of strengthening their competitiveness and achieving profitable positioning on both domestic and foreign markets. Moreover, it aims to develop new health-secure products and improved production process in order to improve export and market recognition.
- *Sombor's Farmsteads* was established in 2008 with the aim of of tourist offer affirmation and promotion, as well as to increase the quality and quantity of organic food production in the area of western and of the Southern Backa District. The initiative for establishing an association with the characteristics/features of today's clusters was identified as early as 1996 in the general Master Plan of Serbia whose one part is referred to the Sombor's Farmsteads as a spatial entity which should be protected. Under existing survey (poll), which surveyed 300 agricultural producers and farmers from this region/area, it is clearly noticed that there is an interest for rural tourism development and production of organic food. The beginning of the work of this cluster has been facilitated through the professional and technical assistance of the Turnaround Management (TAM) programmes and services for reconstruction and business counselling&advisory by the EBRD in the first 12 months. Role in the formation phase, as for this one as well as other clusters has also played the Republic of Serbia, which has established education team through the Provincial Secretariat for Economy, which has with the history of cooperation with GIZ enabled easier orientation of clusters and drawing up its organisational structure and recognition of opportunities and objectives for future development. Yet at the very beginning, besides to existing organic food producers and farmers in the area of Sombor, in the cluster were also included institutions such as "Agro-institute" from Sombor and the Agency for Development of Small and Medium Sized Enterprises "Alma Mons" from Novi Sad. These two institutions with their previous work, expertise and professional competencies in the business, very quickly have created a sense of security in both existing and potential members of the cluster Sombor's Farmsteads. Further cooperation and partnership between existing cluster members drew (has attracted) the attention of the Tourist Organisation of Sombor, which by that time was already working on the promotion of urban tourism. However, at that time tradeshows on the state level were at a much lower level than they are today, so the majority of events were organised by districts in the province of Vojvodina. Exchange of information between the cluster members and the Tourist Organisation of Sombor has enabled recognition of their common goals, and in cooperation with the Ministry of Economy and Regional Development came to promote their products and services at tradeshows which are today of an international character.
- *Serbian Association of growers and winemakers* was established in 2008 as a result of several long years of work in its formation. The formation of the Association is supported by the Ministry of Agriculture, and also the GIZ (German Organisation - Society for International Cooperation, Agency for Technical Cooperation) has been providing services in the field of business counselling&advisory, easier orientation of

clusters, making their organisational structure and recognition of opportunities and objectives for future in further development. Ministries of Agriculture, Forestry and Water Management was also giving funds for establishing and raising vineyards to some winemakers prior to the formation of the Association.

### 3. Results

Results section contains case study analysis and business performance implications of agri-food clusters.

#### 3.1. The “Pecos” bakery Cluster Case Analysis

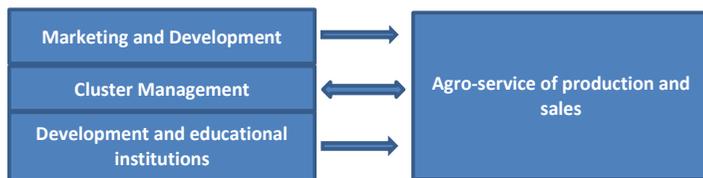
Cluster Pecos belongs to a group of the zero-phase clusters in Serbia, i.e., clusters that with its recent developments do not have sufficient possibilities for increasing exports. For that reason, this cluster is also of less priority to the state for allocations of the funds intended for the planned projects.

At the beginning of its operation, this cluster has received funding for the conceptual project in association with manufacturing firms and educational institutions from the South-Backa District in cluster Pecos in the amount of half of the necessary financial resources, which helped creation of this cluster (Figure 3). This project consisted of three sub-projects:

- The project for the exercise of legal form of cluster Pecos
- The formation of all bodies of clusters and establishment of control on work of clusters
- Seminar about concepts and experiences of clusters

All three sub-projects have been successfully completed, but the main problem is undeveloped Management which is still unsolved and creates a problem in the development of the cluster. By the opinion of its members, this problem must be solved as soon as possible, because cluster Pecos has difficulties in the planning and holding events where exposing its members, which are poorly interrelated and many still do not realise the benefits of a multifaceted group-collective exposure of their products.

Figure 3: Organisational map of clusters Pecos



Source: author's data processing from the source of the disposition of the project by the Serbian Ministry of Economy and Regional Development

Next to producers and sellers of bakery products, in the cluster are also included three research and educational institutions which have so far provided assistance (support) with the production, control and improvement of the bakery product(s) quality. These are the Institute of Food Technology, “Quo Vadis” Agency for the system quality (QS) introduction and the Institute of Occupational Health in Novi Sad. Based on the organisational map of clusters Pecos, it can be concluded that there exist another two important organisations for the development of this cluster. These are nongovernmental non-profit organisation "Development Project Group Rumenka" from Rumenka which organises projects and is working on raising funds for their execution. Inter-municipal association of craftsmen from Novi Sad has had the role of leader, management and the legal adviser on the project of clusters. In agro-service of production and sales, the roles in the organisation and sponsorship of events have both the Bakers' Union of Vojvodina and Zitovojvodina. This role could be higher if these two members had better think about common interests that may have with the others, although smaller but not less important members within the cluster. Ltd. for the production and supply of intermediate goods for the food industry PIP represents one of the most developed members. PIP has achieved a high product(s) and service(s) quality. This producer is specialised in the production of mixture for bakery products which are mainly sold in domestic market. PIP possesses a standardised quality management system ISO 9001:2000 certified for the entire area of operations and HACCP<sup>1</sup> quality system for production area of wheat tortillas. Other members of the agro-service of production and sales possess several sales outlets, while some also have their own production.

However, their way of obtaining HACCP certification is not over yet. In order to be more acquainted with the problems and opportunities that members of the cluster have or may have, a SWOT analysis of cluster Pecos has been applied (Table 1).

Table 1. The SWOT analysis of Cluster Pecos

| Strengths  | Weaknesses   |
|--|--|
| <ul style="list-style-type: none"> <li>✓ Determination for building a cluster</li> <li>✓ Created database on producers of bakery products and flour mills in Novi Sad</li> </ul> | <ul style="list-style-type: none"> <li>✓ Insufficient connectivity between the cluster members</li> <li>✓ Weak level of development of individual members</li> <li>✓ There is no working group in the cluster which would deal with providing services to other members of the cluster.</li> <li>✓ Insufficient availability of qualified human resources</li> <li>✓ Insufficient affirmation of the cluster to work on increasing the interest of young people in the baking industry</li> <li>✓ All members do not possess the HACCP system</li> <li>✓ Lack of website of cluster</li> </ul> |
| Opportunities  | Threats  |
| <ul style="list-style-type: none"> <li>✓ The possibility of easier obtaining financial resources from the international organisations</li> </ul>                                 | <ul style="list-style-type: none"> <li>✓ Law on HACCP has not been precisely limited</li> <li>✓ Price at the expense of quality – quality</li> </ul>   |

<sup>1</sup> Hazard Analysis and Critical Control Points

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>✓ Lowering of prices of raw materials through joint and planned purchase</li> <li>✓ Increased activity of marketing and management of cluster</li> </ul> | <ul style="list-style-type: none"> <li>suffers because of price</li> <li>✓ Insufficient cooperation with other associations of baking industry in the country and the region</li> </ul> |
|---|---|

Source: processing of data collected

### 3.1.1. Strengths

In one of the few strengths of this cluster is considered as a determination to form a cluster. Their commencement was based on the productive engagement of all available resources in the municipality of Novi Sad and other micro regions of Vojvodina. Next step was conceived through the establishment of cooperation with related firms from other regions in order to increase their product(s) quality and to enter foreign markets. Yet at the beginning of the work of this cluster a database of the producers of bakery products and flourmills in Novi Sad was created, which completes the database on the producers from Serbia.

### 3.1.2. Weaknesses

In the weaknesses of this cluster, as well as the most of the clusters in Serbia is considered to be an insufficient mutual cooperation between the cluster members. Insufficient connection arises from differences in the level of development of its members, where more developed cluster members watch the other members as the competitors. On the other hand, the less developed members are not able to develop quickly, and they have a problem with price competition of more developed cluster members. What is common for most producers is that they do not want to look at possible common interests and to include them into their own development strategy. What would certainly help in enhancing and increasing the mutual cooperation of the members is the introduction of a working group that would provide services to other members. In it could be included producers and distributors of machinery for the production of bakery products which at lower prices would sell equipment and outside clusters, and cluster members with a certain discount. This would lead to the reduction of production costs and on the strengthening of an information infrastructure within the cluster. The reduction of costs may be affected by a common distributive service of clusters which would at favourable prices procure vehicle fleet and even performed the transport of bakery products within the country and abroad. With these benefits from service provision of clusters would be attracted the new vendors or service providers, which would lead to an increase in the number of employees who are still moving around two hundred from time of cluster formation. Apart from the possibility to increase the number of employees, it is necessary to also work on strengthening human resource potential, which represents a problem in most of the municipalities in Serbia. Due to disinterest among younger generations to deal with baking trade, according to author's unofficial estimates many bakeries are forced to employ (or hire) retirees, while some bakers are also working in several bakeries. Although lately many bakeries trains at the workplace for their profession, and only recently noticed was an increase in the number of high school students who are choosing this vocation. It is of concern that neither one of bakery firms does not give scholarships, which would lead to an increase of youth's interest in this craft. In the previous work of cluster Pecos, this feature is neither planned, although the cluster was formed in the area, according to many, the biggest barns granaries in Europe at Vojvodina. In the work of the cluster, it would significantly benefit the planned training for students of baker artisanship through

practices and seminars which would be organised at the production facilities of cluster members, and to the best would be awarded scholarships, and subsequently also an employment. As a result would be received a young professional and competent cadres who could work in both production and sales, as well as within educational and development institutions. It could be to create a new department within the service sector, which would deal with examining domestic and foreign markets and thus to inform the other members of the cluster about possible further plans, objectives and strategies. Since one of the goals of cluster represents the positioning and profit on both domestic and foreign markets, it is necessary to obtain all attests and certificates on quality and performance. This would have had a twofold positive effect on further development. The first is that high-quality products easily become more competitive based on which the cluster members will achieve the second objective, and that is the creation of the projects that may be both of regional significance and thus raise enough funds from international institutions. In the cluster Pecos, a small number of producers have the HACCP standards, mostly larger, whose members are dealing with export, while small bakeries did not have any interest in it so far. Nevertheless, most of these small bakeries with another three hundreds of firms from Serbia have applied in year 2006 for issuance of the HACCP standards. Although it has already long been known that the website is an integral/essential part of an information system, as individual firms, as well as associations and clusters, cluster Pecos still does not have its own website. The lack of website weakened the already insufficient supply of information on the work of the cluster and its members. For this reason, finding information about this cluster, its members, plans, and objectives represented a real difficulty in writing this paper. Although the employees who are engaged in the marketing of this cluster are aware of negative consequences of the lack of an internet website, his creation and commissioning is still planned to continue for an indefinite period in the future.

### 3.1.3. Opportunities

Clusters Pecos is managed by a nongovernmental non-profit organisation, Group for development projects from Rumenka, and as such, it is able to apply with development projects for obtaining donor and incentive funds for the promotion and improvement of its members. The cluster should take advantage of this chance for allocation of funds both in the country, as well as in the EU through a new the procedure of IPA fund which offers support with donations to non-profit organisations. The cluster brings together a range of related organisations and as such it may enable more secure and a more favourable procurement of raw materials for its members. Lower costs of raw materials may influence on reducing overall/total costs of production, and consequently to the selling price of bakery products. This is achieved by increasing the competitiveness of small bakeries which make the majority of the cluster compared with the major largest industrial producers in Serbia, which with the economies of scale can more easily adjust prices and attract consumers. The cluster should even better encourage and utilise the activities of marketing and management in the organisation of events where its members can exhibit their products and services. An example to be followed and to develop in the future is an international festival of bread which is organised by the two members of the cluster Pecos, the Institute for Food Technologies and the Zito-Vojvodina from Novi Sad. This program shall consist of exhibition, cultural, scientific, vocationally professional, music and of a film part in order to promote and introduce visitors with the Serbian baking industry and its most important product, bread.

#### 3.1.4. Threats

As well as members of the Cluster that belongs to the food industry, the problem also creates an existing laws, standards, and certifications which must be respected and possessed. As mentioned earlier, most of the cluster members are small bakeries that do not export their products, and so far have not had the need to have HACCP standards, which for them implies control and safety of products. An additional threat represents that the HACCP standards, as determined in the country of Serbia is a very rigid standards and seeks major interventions on workplaces which is sometimes impossible to do in urban conditions. Croatia has a so-called limited HACCP, which primarily affects the hygiene, marked with a declaration and warranted quality, composition and weight of the product and bakers must and can fulfil that. Larger bakeries and baking and milling large firms have a HACCP system primarily due to exports while domestic market still from this standard has no use. A threat to small bakeries represents the strong competition. According to data from last year, Serbia has more than 7000 bakery shops, of which about 2000 operate in the capital city. Because of the weaker turnover due to a decrease in purchasing power of population, bakers are struggling on their own by making that the raw materials are procured through "grey" channels; do not pay their taxes and the contributions to its employees. However, the law on security and safety prescribes that the entities in a business with food at all stages of production, processing and turnover are obliged to ensure that in each facility under their control should be established the principles of good manufacturing practice (GMP), good hygiene practice (GHP) and HACCP system which are a pre-requisite for HACCP implementation. These guidelines are current and valid as of June 2011, after which it was expected to close a large number of bakery shops. In Hungary, after the country's accession to the EU, it was closed more than 2000 bakeries. Assuming that this number is bigger in Serbia, analysts with extensive (vast) experience stand out that the number of bakery business operations in the country will be reduced with the introduction of the control system for ensuring the safety of HACCP. Nevertheless, many bakeries will not be able to adapt their facilities according to the standards and then they will have to shut down their business. Threats to small private bakeries are major producers such as Belgrade Klas and Nutrition from Smederevo, who set off to conquer the market of Belgrade and other major cities in Serbia. Due to the already mentioned serious condition, that affects the decreased turnover due to reduced purchasing power of the population, many small bakeries are forced to reduce prices with which they cannot cover all the costs. In order to achieve profits or earnings with discount (reduced) prices, they reduce the product quality and come up with other ways. They also reduce the weight of the product, or use different colours in order to obtain products which resemble the products of whole wheat (or some wholemeal) flour. What represents a threat in the strengthening of competitiveness and exit of clusters producers to the markets in the region, is their lack of cooperation with other associations and clusters of baking industry from the country and the region. On this problem must be working intensively in order to inform producers of cluster Pecos about the demand in the regional market and the EU. A large and an important role in this examination and the dissemination of information can also have members which would belong to the service sector of clusters. Their research findings may refer to smaller market segments, niches where consumers are demanding and looking for products such as "Burek". The factory-baked goods Hera Ltd. from Prokuplje exports "Burek" since 2008 in the Netherlands for which demand is growing from year to year. Hameum International from Prokuplje since 2007 exports "Burek" in large quantities on the market of the Netherlands, Belgium, Germany, Switzerland and

other EU countries as well as other pastries and baked goods/products which will recognise and seek Serbian people abroad. By exhibiting at the tradeshows, farms and ethno centres, home-bakery products can be interesting for a growing number of tourists who will be informed about the existence of the same products in their countries. In order for this plan to work, it is necessary to invest more in cooperation with producers from the country and abroad and seeking common interests in the production of some new products, and sales of existing products in the common market.

#### 3.1.5. Identification of cluster Pecos long-term strategy direction

Long-term plans of clusters Pecos should be directed on increasing the number of members and keep focus on the membership growth and strengthening of information structures. Strengthens informational structure about further plans for the product of clusters would have an interest in strengthening mutual cooperation among their members. Benefits that these members of the cluster will have on the joint exhibition of their products need to create awareness among producers about cooperation with other producers in the cluster, as well as with the producers from the region. In this way, members will have an insight into plans, the errors, and the positive results achieved by other clusters and associations on which they can learn faster. The issue of obtaining HACCP system standards for small producers in the cluster can also be positively resolved, if you consider their existing capabilities and the opportunities of the domestic market. On the other hand, it is necessary to consider solutions to this problem also in neighbouring countries in the region (i.e. Croatia) and only then make a decision on the fulfilment of these new realistic conditions for Serbian bakeries. What represents the largest obstacle to the development of clusters Pecos is certainly insufficiently developed management which would through their work facilitate the work of producers by the creation of realistic, viable and innovative development strategies in the domestic market. Without the support of such management in the market which is not sufficiently controlled and developed, primarily due to an underdeveloped or a poorly developed economy and laws which are not enforced strictly enough, the odds are weak that even small producers struggle for properly earned profits and satisfied customers.

#### 3.2. Cluster Sombor's Farmsteads Case Analysis

Nowadays the work of the cluster takes place in the working groups set up for individual projects. Primary task forces are working groups for Rural Tourism, agro-services and organic production. The executive body of the cluster is the cluster Sombor's Farmsteads Ltd., which operates based on the conclusions of the working groups and projects approved. The greatest and most important role in the development of the cluster Sombor's Farmsteads have associations and members, which have managed to survive with their product(s) and service(s) quality and long-time work in a difficult time-period when country of Serbia was under sanctions and its economy was also closed towards others, but also to grow, further develop, and win the awards at domestic and international events when the Serbian economy opens to the world market. Due to that, the cluster Sombor's Farmsteads can count on the organic product(s) quality, dairy products, and tourism services. The image below depicts a schematic representation of cluster members mutual relationship and interconnection (Figure 4).



|   |            |            |            |            |            |            |            |            |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| ✓ SMEs<br>✓ Large Enterprises/Firms     | 160        | 210        | 230        | 270        | 305        | 340        | 375        | 410*       |
| Firms and Entrepreneurs                 | 50         | 50         | 50         | 50         | 50         | 50         | 50         | 50         |
| Support Institutions                    |            |            |            |            |            |            |            |            |
| ✓ Research and Development Institutions | 20         | 20         | 20         | 20         | 20         | 20         | 20         | 20         |
| ✓ Education and Academic Institutions   | 20         | 20         | 20         | 20         | 20         | 20         | 20         | 20         |
| ✓ Other Support Institutions            |            |            |            |            |            |            |            |            |
| <b>In Total</b>                         | <b>250</b> | <b>300</b> | <b>320</b> | <b>360</b> | <b>395</b> | <b>430</b> | <b>465</b> | <b>500</b> |

(\*An Unofficial number of employees in SMEs in the cluster Sombor's Farmsteads for 2014)

Source: author's data processing on clusters from the source via Serbian Ministry of Economy and Regional Development

Although most of the members are working with great success on the market as an independent-standalone households and businesses (enterprises), their mutual cooperation as well as in most of the clusters in Serbia is not at a satisfactory level. Cooperation in most cases begins and ends at events such as tradeshows in which they meet existing and potential consumers with its offer. In order to better understand why is such a state within a cluster, and what can be also done in order to each of its members get the most with their presence and work within a cluster, were done comprehensive SWOT analysis. In the SWOT analysis of cluster Sombor's Farmsteads will be more thoroughly explained all the opportunities that members can have through cluster strengths and opportunities as well as weaknesses and threats which can adversely (negatively) affect further growth and development of the cluster and its members (Table 3). In the strengths of the cluster are certainly included the determination for building a cluster, qualifications in the field of rural tourism – through the Master Plan of the Upper Danube region; and Serbia's commitment according to the principles of organic production (farming), which at the beginning was represented the foundation (basis) of the cluster formation and in their future work, the part of a strategy on the basis of which will cluster development move. Because of many years of long-standing work, in a certain number of cluster members even before its creation, the need for qualified personnel is downplayed by training of the existing employees and hiring new workers which are already addressed to certain positions. With the emergence of clusters, aid in the specialisation of workers was obtained from the available foreign consultancy personnel, such as members of the TAM Program, out from the EBRD team, by GIZ and the team for education of the Provincial Economy Secretariat. All this has led to it, that nowadays a cluster has a high availability of qualified human resources, both in its coordinate team, as well as in the workforce of the members themselves in the cluster. This cluster has also achieved cooperation in the field of research, development and exchanging cooperation with cluster Bio Quality from Osijek. In addition to participation at international tradeshows, common participation was planned with a cluster Bio Quality in the IPA cross-border cooperation between Serbia and Croatia.

Table 3. The SWOT analysis of cluster Sombor's Farmsteads

| <b>Strengths</b>   | <b>Weaknesses</b>   |
|--|---|
| <ul style="list-style-type: none"> <li>✓ Determination and commitment for building a cluster</li> <li>✓ Eligibility in the domain of rural tourism, its development and the organic food production</li> <li>✓ Availability of qualified human resources</li> <li>✓ The diversity of specialisation for participants</li> <li>✓ The availability of foreign consultancy personnel</li> <li>✓ Existence of cooperation with foreign customers/buyers</li> </ul> | <ul style="list-style-type: none"> <li>✓ Lack of mutual cooperation (insufficient interconnection)</li> <li>✓ Lack of an information infrastructure between the members</li> <li>✓ Weak individual development level of individual stakeholders/participants</li> </ul>       |
| <b>Opportunities</b>   | <b>Threats</b>  |
| <ul style="list-style-type: none"> <li>✓ Serbia's commitment to the development of rural tourism</li> <li>✓ Serbia's commitment to the development according to the principles of organic production (farming)</li> <li>✓ Adopting advanced technologies of organic production.</li> <li>✓ Growth in demand for agricultural products of organic origin</li> </ul>   | <ul style="list-style-type: none"> <li>✓ An unfavourable legislation and law regulation in the field of rural tourism and its development</li> <li>✓ Legal and economic uncertainty in this area</li> <li>✓ Insufficient access to funds/resources for investments</li> </ul> |

Source: author's data processing

### 3.2.4. Strengths

Diversity of specialisation for participants is very high thanks to the cluster members that operate in various fields. As can be seen from the map of the cluster, farmers operate as members of the working group of rural tourism and its development, which in the offer have an accommodation on farms equipped just like old times with a full menu from the local cuisine. Many of them cooperate with the members of the old crafts, while within the Danubian association from Backi Monostor these members are directly involved. Diversity of business-operations can be also seen among the members of the working group of agro-services production, which include producers of organic food such as "Hello Organic" from Selenca and Eco-Energy from Sombor, as well as dairy factory Gulmlek and household "hundred-house". Provider of services "Agro-service" is based on the diversity of its different machinery and equipment owned by its members through which provide services. The business-operations quality of all members is certainly based on the diversity of consultancy support to a cluster consisting of agricultural expert (professional) advisory services in the city of Sombor, Agency for development of small and medium sized enterprises (SMEs) "Alma Mons" from Novi Sad and the Tourist Organisation of Sombor city. Counselling about business plans, information about opportunities for taking out loans, cooperation with other producers primarily in the province of Vojvodina, the improvement and control of the product(s) quality, organisation of products and services exposure at various events in Serbia, are just some of the services which offer to all members of this Cluster consultancy organisation. With an excellent product(s) quality, but also with the help of consultancy

support, some members of the cluster are started cooperation with foreign customers/buyers. In the forthcoming period, they will work on strengthening of this cooperation.

### **3.2.5. Weaknesses**

Partly because of the variety of the participants' specialisation and partly because of still insufficient development of the cluster, which manifests through the low level of exports, insufficient interconnectivity between the participants is considered as the weaknesses of clusters. Weak mutual interconnection entails a lack of information structures for members and a weak individual level of participants; especially newer members who still do not achieve satisfactory results in the domestic market. Since the three major weaknesses arising from each other, and should be dealt with as a whole and not separately. Insufficient mutual cooperation between participants in the best case may be reduced and entirely eliminate by creating products and services within the cluster linking two or more participants in its making. One such example is the product Sombor cheese in tubs (vats) or barrels. The production plan after obtaining certificates acceptable in foreign markets is that the major production takes place in a dairy factory Gulmek. Because of the deadline which would be short and insufficient to produce the entire order quantity, the quantity of orders which this dairy within a specified period should be achieved, household "hundred-house" would produce in the same manner as dairy factory Gulmek. Hence, the cooperation between these two producers would increase primarily because of interest, such as meeting the needs of consumers, profits, and maintenance of product quality. The following case can be seen among the members of agro-service providers. Agro-service provider operates by making the charged services for performing operations by using equipment and machines which its members possess. For the time being, these are machines for soil tillage and arrangement (tractors, CLAAS harvesters, etc.), with which the owners are processing and treated land in their & someone else's property. The situation can be improved in a future period if the current service providers increase their offer on an increasing number of equipment and machines (machines for milk processing, processing of fruits and vegetables, wood processing and woodworking for the furniture on farms) which will be of use to the existing cluster members. This would enable products to be of good quality with prices more favourable than imported products, because then they would not pay the customs duties and transportation costs. It would also attract potential producers of food products and service providers so that they also launch a small production which may develop over time. The interplay between cluster members can be much more improved on the already existing route of the working groups, agro-production services - rural tourism. For this improvement, it is necessary for farmers to raise their level & number of services and its delivery, most of the individual and sporadic visits, sightseeing tours, and tourist arrivals. Next to the traditional domestic cuisine, offer of food can be further extended to produce organic and dairy products, which are offered by existing producers of agro-production services. After investigating and considering the possibilities to produce in the domestic market (markets, shops, restaurants, hotels), potential producers within the clusters may to decide what will specialise and begin the production (e.g., goat milk products, dairy products packaged in a different manner and in an alluring & attractive packaging, processing of an organic fruit and vegetables for those products which are not produced by the existing producers, etc.). From the previous three examples, it can be noticed countless ideas to develop and specialise new producers and the service providers (or system vendors),

despite current producers who have created their own market in Serbia, and some abroad. The participants in this way cannot adversely affect the other, because the way they work will create a healthy competition or build and strengthen the informational structure between member states. Information that are spread out and circulating in the cluster can only have a positive impact on market enlargement and growth of this cluster and create new markets/niches. Way of doing business, on small-specialised markets or niches, perhaps the only types of foreign markets which will be able to serve this cluster, is described in the opportunities of the cluster.

### **3.2.6. Opportunities**

Opportunities of clusters are primarily observed in commitment of Serbia for the development of rural tourism, which from year to year receives an increasing number of projects. In order to better use this way of tourism development, it is necessary for the participants to connect with as many of other tourist centres and clusters, to share and/or exchange information with them and organise tourist guided&sightseeing tours which will allow visitors to be satisfied&happy with the service and accommodation so as to the next time come back and recommend visited places to their friends. Serbia's commitment for development, according to the principles of organic production has given a strong boost to organic food producers, and launched straight contest with real competition between producers in the domestic market for increasing the organic production quality and obtaining all the necessary certificates which guarantee the product quality. Producers are well aware that the market beyond the country borders is very demanding in terms of food quality. Due to the development of information technologies and opportunities for citizens in the past few years to travel more and more and find out how the organic food produces abroad, there is growing pressure to make the best possible high-quality product for the domestic market and its consumers. The adoption of advanced technologies for the organic production goes in favour to this. In the cluster Sombor's Farmsteads both organic food producers do business with the great success, and are the owners of many certificates, but the carrier of organic production is the Hello Organic which plans to export ever increasing quantity of products. For the time being, the products/goods are exported primarily to countries in the region, but further strategy includes work and effort to export products into the EU and Russia. What needs to be done and on what major producers in Serbia work is comprehensive market research, above all the EU markets in which many of the rules already governing in terms of quality and on which there is already a large number of producers who have occupied parts of this market. By examining the obtained results, it can be seen parts of the market or market segments, and niches which are not yet covered. The domestic producers should prepare a strategy that will meet the required needs of consumers who are located on the territory of detected niche and which have not yet meet the already existing producers. What goes in favour to the domestic producers is a satisfactory product quality that is accompanied by a relatively low prices. Appearance in the sales of organically produced and organic products differs greatly in the markets such as the EU and Russia. Over time due to the rise of organic food producers, EU Single Market has become more demanding in both, the quality and the packaging. Selling strategies in order to be successful are necessary to attract consumers' attention by the nice handy packets with different quantities and combinations of ingredients within the packaging. Unlike the EU, the Russian market is less demanding on the look and design of packaging and selling is done in containers with large quantities. However, in order to create increased awareness of the Russian

customer/buyer for domestic products, it is necessary to also work on the sale of organic products in the smaller packages to contribute to a greater profit (earnings). Until now, the positioning strategy to finding a niche is not much applied. However, the change in sales for the certain markets or niches announce Serbian exporters, who export certain products to retail chains who specialise in the healthy eating and diet or on the bio-markets which are either in the supermarket shop or on a specially designated places for them in the cities of the European Union. On the other hand, on the demand of organically produced products may affect tourist centres, local events, and farmers on the territory of Vojvodina. Within the framework of their offers, they need to attract the visitors from abroad with the tastefully arranged packaging which those same visitors will be able to find on selling points in their respective countries. What matters for the cluster Sombor's Farmsteads is that should work to make the most of both approaches in sales of organic products so that more of its participants had benefited both for themselves and for improving and strengthening interrelationships.

### 3.2.7. Threats

Threats to clusters are above all represented in the unfavourable legislature and legal regulations in the field of rural tourism who because of its obscurity and incompleteness affect the occurrence of the legal and economic uncertainty in this area. Insufficient access to financial resources and funds, primarily from the government and state institutions for cluster development and tourism also poses a threat to the development of the cluster members who have not yet received any funds (cash assets). The cluster is financed independently with a certain percentage of the signed agreements or contracts, related to the joint venture or common project. For larger projects will still be required access to a more favourable way of accessing monetary funds from the market, primarily because of high interest rates and market volatility which continues in the country, and which can lead to the inability of returning the borrowed funds.

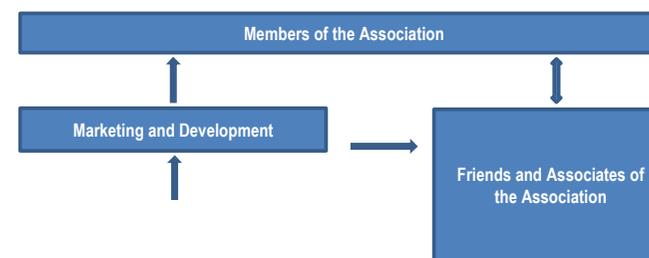
### 3.2.8. Identification of Sombor's Farmsteads long-term strategy direction

Long-term plans of the cluster will go towards the increase of cooperation between its members and between the members of the other clusters with similar activities – cooperation with Bio Quality from Osijek and producers from the city of Apatin. Besides the development of marketing throughout the organisation of events, efforts will be made to improve an online offers and searches via the constant expansion of the database. It will continue to work on products which may present a brand of cluster and thus connect several (or more) members to its production and distribution. Doing so will increase the attractiveness of clusters for new members, which will, with their knowledge and interests they might have in the cluster, positively affect its further development. By creating fair competition within the cluster, it will be required that the cluster members are increasingly appearing at events in the country and the region; and especially to attract the new customers with its more competitive prices and better quality products. The further development of the cluster will enable the development to new projects which will, as they have more participants and were more important for the development of the region, more easily to get financial and educational support from both domestic and foreign/international institutions.

### 3.3. Serbian Association of growers and winemakers case analysis

More seriously was started with the formation of the association towards winemaker's subsidy by the state but due to lack of information from the accompanying-support services officials, it is often plagued by errors, which were mainly administrative in nature. These errors have caused more winemaker's negatively resolved demands for the incentive funds for establishing vineyards, which caused protests of the damaged. By adoption of the new law on wine, better informed accompanying-support services officials and clarification of conditions and required documentation for applications in order to obtain incentive funds, winegrowers are enabled to be timely and accurately informed about the conditions of applying for subsidised resources. High quality lectures on production of wine and the possibilities for development of oenology/winemaking in Serbia are held with the assistance of agricultural experts from the Faculty of Agriculture at Serbian state Universities of Belgrade and Novi Sad. For the purposes of organising and participating in national and international tradeshows and events, wine makers are addressed to the Serbian Chamber of Commerce and the Tourist Organisation of Belgrade. Below is a scheme of the Serbian Association of growers and winemakers (Figure 5).

Figure 5. An organisational map of Serbian Association of growers and winemakers



Source: author's data processing based on the source of the disposition of the project by the Serbian Ministry of Economy and Regional Development

Producers themselves have the most important and greatest role in the production of wine and their presentation to consumers. Producers are the ones on which is to decide which type of varieties is good for breeding, which kind of wine to produce in order to enhance its quality and how to continue to sell it further. An association now has 51th member and around the fifteen honorary members of the Association. Some of the members are also engaged in the production of other alcoholic beverages, such as various types of brandy, wine distillate, while the larger producers, such as Ruby known as the Rubin and Navip deal with the production of fruit juices and syrups. Members of the association have great support from several forums, journals, and festivals with which they can more easily plan the organisation of events on which their products are exhibited within the country and abroad. Since the formation of the Association, it is necessary to do a lot of work on the marketing and media monitoring of all presentations and the single performances (appearances) by the wineries themselves which have invested heavily in refurbishing their respective websites which represent an excellent source of information. Members of this cluster are producers who have also

been known in the former Yugoslavia, as well as newer producers whose qualities meet standards of the domestic and foreign market. At an earlier research stage, Vanka and Heijman (2013a, 2013b) pointed out that the once-largest exporter of wine in the former Yugoslavia "Navip Belgrade" has been privatised, a large firm which in addition to the production of wine deals with the liquor and the production of fruit juices and syrups. Under vineyards are located over 2000 hectares of land from whose organically produced grapes Navip produces more than 180 000 litres of bio-wine. Vineyards of Vrsac, joint stock company (hereafter, JSC) from Vrsac produced their wine from the vineyards of the famous for centuries Vrsac vineyards, which extends to about 1700 hectares, occupying one of the first places in size in Serbia. Today, this one producer exports about 10% of its own production, partly to EU countries, mostly in the region as well as to the Russian market. Rubin JSC from Krusevac, once the largest producer of Brandy alcoholic beverages known as Vinjak in southeast Europe, after privatisation in 2005 has managed to continue to produce high-quality alcoholic beverages, including wine. Nowadays, Rubin has 700 hectares of vineyards and successfully serves different market segments in Serbia and the EU, Russia, Australia, Canada and the United States. By the quality of wines in the country and abroad, a several small but high quality wine producers are singled out. Among them are also Wine cellar Alexandrovich from Vinca who for years, primarily due to their main product known as Wine Triumph, won the first places in both Serbia and the region and in the EU. Muscadine, a Muscat wine from winemakers of wine house Spasic from Trzac with their quality is expanding its own consumer market. Wine Bermet from the Kish Winery at Sremski Karlovci is a ticket to domestic, regional and EU markets. In addition, Kovacevic Winery from Irig succeeds first in Serbia to produce sparkling wines via traditional method from France and its total production increases by 30% annually. As can be noticed from the above mentioned, the diversity of its members is large. Among them are also a large major producers such as Navip, Ruby (also known as the "Rubin"), wine producer Vino-Zupa, which in recent years have privatised and aspire to become at least as giants they were in the former Yugoslavia, as well as a small private producers which produce only a few types of wine. There are also producers who have only recently begun to produce wine; while there are a large number of smaller winemakers, who continued the tradition of their ancestors in which during the nineties due to the difficult state was interrupted. These and the other differences affecting the insufficient mutual cooperation between the members of the Association, which, together with other obstacles, weaknesses, strengths and opportunities will be discussed (and described) in the SWOT analysis, which is shown below (Table 4):

Table 4. The SWOT analysis of Serbian Association of growers and winemakers

| Strengths   | Weaknesses   |
|---|--|
| <ul style="list-style-type: none"> <li>✓ Excellent climate for viticulture – wine growing</li> <li>✓ An incentive of the State through subsidies</li> <li>✓ Availability of qualified human resources</li> <li>✓ A wide range of wine varieties – sorts of wine</li> <li>✓ The quality and diversity – variety of wines</li> <li>✓ Specialisation of producers by type of wine</li> </ul> | <ul style="list-style-type: none"> <li>✓ A large number of vineyards are still of an unacceptable quality</li> <li>✓ Many areas which were under the vineyards are cleared</li> <li>✓ Land is expensive, parcelled and divided</li> <li>✓ Insufficient mutual cooperation between members</li> <li>✓ A weak individual development level of members</li> </ul> |
| Opportunities   | Threats  |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>✓ The great potential of Serbia for the development of viticulture – wine growing</li> <li>✓ The export quota of wine which has been approved by the EU even half is not used</li> <li>✓ The EU Commission Regulation has banned new vineyards in the EU countries</li> <li>✓ The increase in plantings</li> <li>✓ Production by the small wine producers producing quality wine</li> <li>✓ Boosting marketing of Serbian wines</li> <li>✓ The wine tourism development</li> </ul> | <ul style="list-style-type: none"> <li>✓ The law is not enforced strictly enough</li> <li>✓ Non-regulated property and legal relations – unregulated issues</li> <li>✓ Large imports of grapes and wine</li> <li>✓ Low-cost competition</li> <li>✓ High costs of planting and processing</li> <li>✓ Problem of debt collection</li> </ul> |
|---|---|

Source: author's processing of data collected

### 3.3.1. Strengths

One of the most important strengths for the wine producers in Serbia is the excellent climate of the country for the development of viticulture (winegrowing). The geographic location of Serbia is ranked (classified) among the most favourable zones for viticulture (winegrowing) in which grapes can be grown (cultivated) with an ideal balance of acidity and sugar (glucose). For this reason, it was not difficult for winegrowers to convince the state to come and move forward with incentives through subsidies given to raise plantings of vineyards and clearing of neglected and infected vineyards. The total cost of replanting of one seedling amounts to 2 euros (€) approximately. Long-time work of wineries and the presence of institutions that monitor and develop the quality of the vineyards and winemaking have produced a high availability of qualified human resources. In recent years, a lot has been done both on the breeding of quality domestic varieties, of which there are more than fifty species, as well as on the breeding and cultivation of international varieties. This makes it possible for Serbia to possess a wide range of varieties from which makes various types of high-quality wines. Due to the advent of strong competition, both domestic and foreign, and by the quality and at the price, many producers have turned to specialisation of a smaller number of sorts of wine. This allows them to be easier differentiated from the competition, to increase the quality of wine sorts that they produce and with such high quality products to be recognised in the country and abroad. Amongst small producers, there are those who produce only two or three types of wine, but they are of excellent quality and are also accepted in foreign markets.

### 3.3.2. Weaknesses

Weaknesses of viticulture in Serbia, despite the previously mentioned advantages are enormous. First of all, a large number of vineyards due to the poor state of the country during the nineties has been pretty neglected (or cleared). Once in Serbia the land under vineyards was around 130 thousand hectares while today only 25 thousand hectares remained. For this reason, the quality and production volume of wine can be described through the action of the Pareto principle, which actively uses about 20% of the lands in which were once vineyards in order to produce 80% of the products made of grapes. Pareto principle is based on the assertion of Italian economist Vilfredo Pareto, according to which 20% of the causes cause 80% of all events. State and winegrowers certainly are working on reduction of unused vineyard plots. In addition to the poor condition of old vineyards, problem is to find a large enough parcel of land in one part at an affordable and competitive price. Many winegrowers complain that the land was so parcelled that

rather decide to grow grapes in the land parcels of ten to fifty hectares and thus they join other small food producers of wine. One of the weaknesses which is common to all clusters and associations in Serbia is a weak mutual interconnectedness between members of the association. This problem occurs because of differences in size, development strategy and the expectations of the producers and a still insufficient work, which refers to business operations of the association in organising a larger number of seminars where their members would acquaint with their joint plans and objectives. A good example of cooperation of the Association with the producers represents for the first time an organised appearance of the Serbian winemakers on the traditional International Wine Fair (tradeshow) in Vienna, known as *Vievinum*. In cooperation with the Serbian Association of growers and winemakers and the Serbian Chamber of Commerce, a dozen famous Serbian wineries that have occurred for the first time in an organised group have offered their own products to consumers. These kinds of joint appearances can make a much stronger impression and send a stronger voice to foreign consumers about Serbian wines than individual performances (appearances) by separate stalls. With a group exposure & presentations can also be reduced the weaknesses of development of individual members of the Association, which in this way can save on marketing costs and transport and that money to invest in the production and their product(s) quality. The problem of insufficient mutual cooperation between members may also be mitigated by creating the service sector of the association, which would consist of producers of packaging and storage operators. It is disappointing that due to the best value for money: best relationship between price and quality; most of the wineries bottles and cork stoppers procures from Italy, while labels and transport boxes as well as decorative packaging from producers from Serbia who do not have any connection with the Association. It is very important that within the association are producers of packaging, whose main task will be that in accordance with the requirements of the market suggest producers, and offers them the products that will be able to buy at a more favourable and lower price than the market. On the other hand, producing large quantities of packaging for all members of the Association could achieve a satisfactory profit. Warehouseman would affect the reduction of warehouse storage costs of raw materials, because it would be more profitable for producers to pay the rent for the warehouse than to build them alone by themselves, and which along with the costs of construction, maintenance, and legalisation create a big hole in the budget of producers.

### **3.3.3. Opportunities**

Great potential for the development of Serbian viticulture is one of the biggest opportunities for the winemakers which should be used. It is enough to mention that before the sanctions in Serbia were 130 000 hectares of land under vineyards while today vineyards are planted on about 25 000 hectares of land. For this reason, from the annual quota of about 63 000 hectolitres of wine, which was approved by the EU, the half was not adequately utilised and exploited. As a positive side is also EU regulation which prohibits to all European countries to raise new vineyards by the year 2018, except in certain strictly defined cases. For this reason, it should take advantage of EU assistance to the Western Balkans countries in an increase of plantings, which with the entry into the European Union may be limited. Although Serbia is determined to increase the surface area under vineyards, it is a long and slow process. For raising of one hectare of high quality vineyard is necessary to invest or simply put 30 thousand euros (€). In this haste to increase the plantings as soon as possible, the lack of larger

land parcels, and the market demand for quality wines, the best will manage and develop small private producers. In addition, small producers filled bottles with the process of cold pasteurisation which does not destroy the aromatic complex and do not break the wine, which makes industrial production carrying out bottling of bottles with hot and warm pasteurisation (or heating). For them it will be enough to produce a small number of wines whose high quality will satisfy some market segments or niches. In addition to their work, in it also will help to amplify the already reinforced marketing of Serbian wines as well as Serbian tourism development. With an increased marketing of Serbian wines, producers will have access to the foreign market demand. It is important to examine the market well, both the EU and Russia, because to them the highest volumes of Serbian-domestic wines are mostly exported. Since according to the statements of a large number of Serbian domestic producers, the EU market is very saturated by a high quality and with prices more competitive (the more price competitive) than domestic wines, remains for it to satisfy one not so small market segment. This market segment or niche consists of the Serbian community which need to get closer and gain their interest in domestic wines by going out with a united several smaller producers into the market. As far as Russia's market, it is not so much saturated with wines and here domestic producers have more room to manoeuvre prices. On the Russian market, some producers exported by up to 70% of its total production at a satisfactory price. With the development of Serbian tourism will be possible to offer a large variety of Serbian food and beverages on exhibition areas, ethno centres, and farmsteads some of which are already included on the roads so-called wine. There will, in one place, domestic and foreign citizens who are living outside Serbia will be able to feel the life of the Serbian region and to inform where they can purchase some of these products in their countries and cities.

### **3.3.4. Threats**

Barriers faced by Serbian winegrowers are caused by a difficult period which is behind them and which also runs in the present hampered by the recent economic crisis and represent serious threats to their further development. The new law, passed in the mid-last year, is still waiting for a series of bylaws and does not implement strictly enough. In order to gain the trust of both domestic and foreign consumers, it is working on the reduction of products which do not contain the quality indicated on their labels. Since 1st January 2008, the Ministry of Agriculture has begun with the establishment of the vineyard and the wine registry by EU standards. In this way are determined eight winegrowing regions and varieties which are grown on them. Nonetheless, reform of the geographic origin has only recently begun so that small producers could also enter into the control system and be financially assisted by the Ministry. For the time being, it has remained on a story about the introduction of evidential stamps which in the future will mark all wines who bear the mark of protection of geographic indications. The purchase of land with the unregulated ownership, legal, and property rights relations prevents further increase in production. It still does not fully know what is state-owned, what is in the ownership of national cooperative, and what is in the private ownership of land, which interests potential buyers. On the other hand, Serbia has a large import of grapes and wines in bulk, primarily from Macedonia. This import further strengthens an already strong and cheap competition of wines from the region and some EU member states. One of the obstacles that can and must be removed as soon as possible are the high costs of planting and processing of grapes. This can be achieved by introducing new technologies, and by allowing the preservation of the environment and productivity

growth. What worries the most successful winegrowers is certainly a problem with the speed of collection. Slow turnover of money extends an already long payback period: return of invested funds. Due to the slow collection, many of Serbian domestic producers sell less than 5% of total production in market/retail trade/commercial chains, which are by their previous experiences so far the worst payers.

### **3.3.5. Identification of association's long-term strategy direction**

Long-term plans of the Serbian Association of growers and winemakers show that the association has put many objectives ahead to be achieved. It is necessary to continue to work on increasing the size and surface of vineyard even though the costs of plantings are high. It is necessary to affect as quickly as possible on the resolution of the clearing and the property-legal relations and rights of the land which was once covered with (or under) vineyards. By the new Law on wine shall be determined the boundaries and names of viticultural production areas, allowed and recommended varieties, maximum yields and other characteristics related to the grape and wine production in these areas. Making and preparation of regionalisation on the basis of utilisation of all necessary meteorological, climate, soil, and other necessary parameters and research is conducted in the framework of the Twinning project, whose implementation started in early 2011 and completed in late 2012. The first phase of development of regionalisation – boundaries and names, varieties, maximum yields and other characteristics, as a basis, will be prepared by the future regulations and rulebook, according to the Serbian Chamber of Commerce. In the making and preparation of future regulations and rulebook 130 working groups has participated. Work on improving the quality and the varieties of wines, strengthening cooperation with other members of the association, openness for group exposure and exhibition, as well as developing marketing of Serbian wines are just some of the tasks that only the Serbian Association of growers and winemakers with its producer members can successfully execute.

## **4. Discussion and Conclusions**

Discussion section (next to conclusions) contains potential and pitfalls of agri-food clusters.

### **4.1. The state influence on the development of agri-food clusters**

In the segment of a rhomb, within the context for the firm strategy and rivalry, the state has commenced multiple programs, but few of them have been completed in order to provide support for the other projects. Thus, the removal of barriers for local competition commenced with a commitment by domestic producers is to have in possession all licenses for the production and sale of their products. However, except for the larger dairies, wineries and bakeries actions in which their products are exported to the international market, other producers have ignored this. They are selling most of their products outside the official points of sale and thus preventing the existence of healthy competition. Nonetheless, these producers and sellers reduce inflow of money in the local markets and reduce the budget of their institutions. In the programme for business incubators and clusters development in Serbia between 2007 and 2010, the state has at its disposal financial resources of the Government of the Kingdom of Norway and invested small amounts in the establishment of government offices which would

support the operation of clusters only in larger cities in Serbia. This is highly disadvantageous for clusters which are engaged in the production and sales of food products, because the most of small producers are located outside the major cities of Serbia (Belgrade, Novi Sad, Nis), which represents a problem in their mutual communication. Even the cluster Pecos, whose members are almost all from Novi Sad, had to contact the government offices in Belgrade for each proposal, which led to a slowdown in future work. So far the state has been trying to attract FDIs, but without much success. Those funds were mainly intended for maintaining events such as tradeshows and conferences. The funds received from the government of Norway, apart from the investment in conferences, tradeshows and seminars have been invested into projects of forming of some clusters, in which the clusters of the food sector have not been well received. Non- inconsiderable benefits can be obtained by raising of agricultural loans approved by the Ministry of Agriculture, Water and Forestry, with a lower interest rate and longer grace period of repayment. A good example of attracting foreign investments (FDIs) in the vicinity of the cluster is Symposium in Selenca named "Hello Organic", whose one of the patrons is the Regional Office of FAO for Europe and Central Asia headquartered in Budapest. When it comes to orientation to boost exports in the vicinity of clusters, according to Vanka and Heijman (2013a), the state is making an effort to encourage development of viticulture and export of wine. Such process significantly helps the Serbian Association of growers and winemakers to receive monetary funding for projects of planting vineyards and joint appearances at domestic and international markets. On the factor conditions of agri-food clusters and associations, the state acting through a holding seminars and educational programs such as the First Conference of clusters of Serbia in 2007. However, a far greater role in education and training have the state institutions such as agricultural colleges, travel agencies and institutions for testing the food product(s) quality. The thing on which should be intensively working is the initiation of research in the field of cluster technologies at a local university. This will create awareness about the importance of cluster development and make better use of technology of clusters. The state began collecting basic information specific to a cluster, but it did not continue.

In the meantime, smaller clusters have appeared, such as cluster Sombor's Farmsteads, which are not found on any news site although they are in developing phase and their members are achieving good results in the domestic and foreign market. Still there is not a word about the strengthening of a specialised transportation and communication infrastructure, but since Serbia leads the country's export-oriented strategy, it is necessary to develop any kind of infrastructure that will help clusters to easier sell their products in domestic and foreign markets. The third important part of the rhomb consists of the related industries and/or supporting branches which the state must (to) support equally in order to improve a further work of the cluster. So far, the state has supported the organisation of events and forums for linking participants of clusters. An example for this is the first organised participation of Serbian traditional winemakers at the International Wine Fair (tradeshow) in Vienna, entitled "Vievinum", where several traditional wineries from the Serbian Association of growers and winemakers occurred together. The state, through the Belgrade Tourist Organisation helped to organise tartaric evening "Rawangard wine Fest" in Sombor, which was attended by the members of the cluster Sombor's Farmsteads. Members of both clusters had the possibility to share their experiences and future plans, while the experts shared their experiences with them within a short educational program. Such forums are necessary as much as

possible to organise, because most of the clusters depend on the development and mutual cooperation of its members.

Until now there were no much words on encouraging of specific efforts for the cluster which will attract suppliers and providers from other locations. According to Vanka and Heijman (2013a), cluster Sombor's Farmsteads gives an example that shows the possibility of extending the cluster to other locations, which began cooperation with the producers of food products from city Apatin that in the future may become member of the cluster. Cooperation also exists with the Bio Quality (also known as "Bio Q"), ecological production cluster from Osijek in the field of knowledge transfer, joint participation at tradeshows and planning of joint participation in the IPA cross-border cooperation between Serbia and Croatia project under the name "Tradition for the Future". By signing the Transitional Trade Agreement with the EU and the Free Trade Agreement with CEFTA members signed in late year 2009, the biggest benefit have the members of the Serbian Association of growers and winemakers, and the same amenities are used by some members of the cluster Sombor's Farmsteads (Hello Organic from Selenca). On demand conditions, the state acted by prescribing of having standards applicable on domestic and foreign markets, such as the quality system ISO-22000, OHSAS-18000 standard of protection of workers, the quality system ISO-9001 for easier establishment of relations between buyers and suppliers, environmental protection system ISO-14001 and of the HACCP, a standard system of proper hygienic production. Larger producers which sell their products and on the outside of the domestic market have these certificates, but the majority of smaller producers still lacks all the certificates because they are not an export oriented. In order to get sell domestic products as much as possible primarily to the EU market, the country has more stringent acceded to the commitment of all the producers for obtaining primarily of the HACCP standards, ISO-22000 and ISO-9001 which guarantees the constant food product(s) quality. This is also one of the biggest conditions for export of domestic food products. Since the majority of small producers will not be able to obtain these certificates, termination of their work is expected. Cluster Pecos can serve as an example which represent the majority of small producers in the baking industry. Never has been much spoken about the state as a purchaser of goods of clusters and associations within the food industry. Some of the traditional wineries have promoted their wines at major national events, but all was remained at the level of promotion. As we have seen, the role of state influence on the improvement of clusters is a vast and must be sustained if they want to achieve the desired results. In addition to the state, the impact on the improvement and development of clusters has the private sector through the permanent relationships with the local authorities and institutions and through the private investments.

#### **4.2. The influence of the private sector on improvement of agri-food clusters**

Here it can be seen how the private sector may influence on all parts of the rhomb and in the hereinafter referred, it is shown how the members of the cluster Pecos, Sombor's Farmsteads and the Serbian Association of growers and winemakers doing this in the practice. The influence of the private sector on the context of firm strategy and rivalry is likely that the results from year to year will be increasingly better. As mentioned before, the cluster members perform with joint marketing at trade shows. Cooperation with the

state within its efforts for encouraging exports and his promotion provide mostly larger enhanced wineries and producers of the dairy industry and organic manufacturing for the time being. In terms of making websites of clusters and associations, it is going from one extreme to another. While the Serbian Association of growers and winemakers and its members are competing on who will have a better website and on which all seems fantastic, cluster Pecos does not yet have its own website and seeking information about him and its members represent a true difficulty. Improvement of the factor conditions so far did not work out in the best way. Of all the activities that can be seen up to now, a private sector was the best in organising training courses for the employees (not just for managers, but also for technologists) in connection with the legislation and regulations, quality and management. An example are the tradeshows, in which specialists are professionally (teachers, engineers) hired by the cluster members to hold lectures for the audience. In the part of rhomb, related and the supporting industries, the private sector has so far founded professional associations within the cluster. An example of professional associations within the cluster Sombor's Farmsteads gives an enterprise Hello Organic from Selenca whose association nowadays disposes with 67 members of which 12 licensed producers for organic production (farming) and 45 producers in the transitional and conventional category. Another important association in cluster Sombor's Farmsteads is Eco-Energy from Sombor. Within the cluster Pecos are also two professional associations, inter-municipal association of artisans, and the Union of bakers from Vojvodina in Novi Sad. In order to encourage attracting of the local investments, many wineries are building their accommodation facilities in which they will have tasting rooms, apartments and restaurants with traditional cuisine which will attract suppliers from related industries/branches: organic food products, bakery and dairy products (Hello Organic - who built and leased a large capacity cold storage to the other producers/suppliers as well). Joint efforts of all users of these facilities will attract the local investments, which will be able to invest in existing and new joint plans. Improvement of demand conditions in the analysed clusters is visible in cooperation of their members with the state authorities regarding participation in foreign markets and obtaining QS certification. So far, negotiations between the cluster members and the state give the progress in the wine sector in terms of increasing plantings. The progress is also visible in securing resources/funds intended for free control products. However, in order to achieve better agreements in terms of exports, it is necessary that producers of similar interests jointly exert pressure and lobby in the groups to obtain the same. Determination of organisational development strategy requires careful planning of further work and development of all participants in the economy. It is necessary to work intensively with one another of the cluster members or associations based on cooperation and information exchange. Vanka and Heijman (2013a) claim that with its business operations, they continue to give the signals towards the state authorities about the problems that arise in the economy or about the possibilities which with the help of the state may accomplish. Often, the intervention of the state is insufficient. However, it is necessary to activate more individuals within clusters or associations through the higher investments, market research, strengthening of marketing and the establishment of professional associations in order to facilitate the attraction of new members. Serbia has excellent conditions for the production of organic food and several producers already have found their place on the domestic and foreign market. One of them is Hello Organic from Selenca, which is part of the cluster Sombor's Farmsteads. What needs to be done by the state is a greater stimulation of producers through

subsidies and enacting legislation – making laws and bylaws on the organic production (farming).

#### **4.3. Conclusion**

This scientific paper collected and presented information on the export opportunities for agricultural and food products (particularly foodstuffs) and the performance and operation of some clusters and associations within this industry and/or their branches, which operate in the territory of the Republic of Serbia. Serbia exports about half of its agricultural and food products to the countries of the EU, and about one-third of these to the CEFTA countries. While this is an encouraging fact, this branch of the Serbian economy can and should give even better results. In order to increase the export of agricultural and food products, it is necessary to produce high-quality products which are the most in demand on the foreign markets, such as organic food, dairy and bakery products, and domestic drinks/beverages, out of which in this paper accent was placed on wines. Serbian producers need to cooperate in clusters and associations in order to make it easier to qualify in foreign markets. Such a way of working will enable them the increase of information and greater awareness, sharing the costs of procurement, production, marketing, product placement and selling products through the cooperation with the other members. The private sector within the cluster should encourage the development of informational (ICT), technological and transport infrastructure, to cooperate with the state authorities and thus solves the obstacles and problems and to create a stable trade and professional associations which will attract a larger number of participants and thereby strengthen its position in the market. On the other hand, the state should establish and maintain a stable micro and macro-economic conditions in the Serbian economy. By attracting foreign direct investments in the vicinity of cluster centres, by removing barriers to entry for the local competition, by establishing standards that are conducive to innovations and by acting in the cluster as a buyer of goods – products and services, the government will encourage the greater interest of producers to engage in clusters and harvest the profits. In order to help research and education, it is necessary to activate the educational and technological scientific public-state and private institutions or agencies in the examination and the development of clusters. By connecting participants of different clusters, cooperation between related and supporting branches/sectors of the food industry will be intensified. Due to the increase of globalization in the world market, domestic producers should take advantage of the lack of major market players to satisfy the needs of all segments of the market. These narrow market segments known as well as market niches should be analysed in detail and then create and implement strategies for doing business in them. For the successful implementation of strategies on a niche market, it is necessary to use a marketing niche. Niche marketers are well acquainted with a particular market of niches and the customers or its users are willing to pay for their services at a premium price (Kotler and Keller 2012).

According to the AT Kearney research, it has been proven that the managers of enterprises or firms, which reach beyond the average business outcomes for achieving a successful organic growth, listed the factors such as the attitude towards customers, a vision of growth and the availability of resources and capabilities. On the market, it can perform with the strategy of cost leadership - competitive advantage via lower cost, differentiation strategy and the focus strategy - cost focus or differentiation focus. The

cost leadership strategy is used to attain the lowest costs per product-output unit in relation to the competition and is provided through the economies of scale. An economy of scale enables the lowering of costs per unit by increasing the amount of scope with greater capacity utilisation and performance of the curve of experience and learning (Krugman and Obstfeld 2009).

According to Krugman et al. (2012), the curve of experience explains that the more the firm or enterprise produces, is the more intense their learning process and it becomes more efficient&effective and reduces costs. In order to be in the cost advantage compared to smaller rivals, the enterprise can achieve economies of scope by increasing the scope and the breadth and width of the product portfolio and by the simultaneous division of fixed costs on them. Knowledge of the domestic and regional markets is another advantage that the domestic food producers achieve high profits, and perhaps become the leaders on the regional commodities and the multi-regional commodity relations – the niches. The further development and strengthening of Serbian economy will enable stable business operations on the international commodity relations: the so-called niches. In practice, the things develop more slowly than it is the desire of members of clusters and associations. Mutual cooperation between members is not at a satisfactory level. The existence of a low (weak) individual development level of members, expensive, parcelled and divided land, and the law which is not enforced strictly enough are just some of the reasons for the creation of mistrust among the cluster members as well as to the public-state authorities or government bodies. So far, the previous efforts of the state in subsidizing the development of viticulture and rural tourism represent a good beginning of the state activation for the development of clusters and associations. In order to independently develop and connect producers with the other members of their clusters and clusters from the region, it is necessary to have the possibility of using the favourable funds for the investments which the state can activate by signing trade agreements with other countries. This will create projects in which their interests will find both domestic and foreign producers, and as such, they will be interesting for investments of both domestic and foreign investors. By an increased investment(s) into the development and production, producers will be better able to take advantage of the climate for the development of agri-food products in which Serbia is located and thereby bring closer Serbian economy to other developed economies.

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