ANALYSIS OF THE DEVELOPMENT OF SMALL AND MEDIUM ENTERPRISES IN THE AGRO-FOOD SYSTEM OF SERBIA

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Abstract

The importance of agriculture to the national economy and economic stability of Serbia is great considering the fact that it makes a substantial part of the Gross domestic product. At the same time, the abundance of natural resources in Serbia, favorable geographic and climatic conditions and skilled labor force are resources which can make the local agriculture more competitive in the global market. The sector of small and medium enterprises (SMEs) stands out as an important factor in the economic growth and development of the countries in transition. Due to its numerous advantages over the large enterprises, such enterprises can accelerate the process of transition, increase the investment rate and reduce unemployment rate which is usually very high in the developing countries. Economic development of our country is based to a certain extent on the development of the SME sector which has a particularly important role in the agribusiness sector. This paper aims to provide an analysis of the SME sector in Serbia with the special focus on the agro-food system and its characteristics in the agriculture and food industry. Strengthening this sector will mean better business conditions in the Serbian economy, and the measures taken within economic and agricultural policies should be aimed at fostering innovation and competitiveness of small and medium enterprises.

Keywords: Small and Medium Enterprises, Agriculture, Agro-food System, Economic Development

INTRODUCTION

In order to achieve the progress in the economy and improve the well-being of all its participants the size of an enterprise does not play a crucial role. The optimal combination of small, medium and large enterprises that can meet the social and economic goals of a country is a crucial issue of almost every national economy. Large enterprises in economies with high rates of growth are often dependent on input given by suppliers who are often organized as the small and medium enterprises. Due to its characteristics they are opting for the activities which can lead to the economies of scale and high profits, while SME sector mainly supply them with the products characterized by the lower level of processing and certain specific features.

The development of the strong and competitive SME sector has an important role in the transition of our country. When looking at the cases of the developed countries that have successfully completed the transition reforms and the necessity of a competitive SME sector during the process of their implementation, this sector should be the backbone of the future economic development of Serbia. Taking into account the current circumstances in the domestic economy and a tendency to increase exports in order to achieve macroeconomic stability and better economic performances, different ways
should be considered in achieving goals through the promotion of the sectors with the greatest chance of success.

One of the most important segments of the Serbian economy is the agro-food system which makes the basis for the development of other complementary systems and their activities. The availability of natural resources, favorable geographic location and the quality of human resources together with an adequately designed strategy for agriculture and rural development make the agro-food system a basic factor in the economic development of Serbia and the basis of food security of the population (Ceranić and Maletić, 2005). In the agro-food system interconnections among producers are important because the quality of a finished product and its success in the market depends on timely communication between suppliers and producers, as well as the timely and efficient distribution of products. The farmers engaged in crop farming, vegetable farming, fruit growing and cattle farming are often organized as small businesses or entrepreneurial entities. Using the raw materials obtained from the exploitation of land, raising of different species of animals and seeding crops on arable lands, they supply the large processors who want to meet the needs of consumers for the food products of higher added value. Large food industries can be supplied by the primary agricultural products, although it is possible for them to use as inputs, intermediate products resulting from processing of raw materials, carried out in the small agricultural enterprises.

THE IMPORTANCE OF SME SECTOR IN THE ECONOMIC DEVELOPMENT OF SERBIA

From the perspective of economic development, all business entities are not making equal contribution when it comes to the creation of GDP. Regardless of the type of organization and ownership, some business entities produce higher quality products and services and generate much of the GDP, while others are more competitive in foreign markets and their business is primarily directed to the demand abroad. The importance of a particular business segment for growth and development is reflected in its share in GDP, but also in the contribution to the improvement of other macroeconomic indicators. In 2011 the share of SMEs and entrepreneurs in GDP was about 33%, in the overall employment 45.1%, reached 46.5% in exports and 52.7% in imports. Micro, small, medium enterprises along with entrepreneurs generate 61.7% of foreign trade deficit of Serbia which makes a share of 51.7% of total investments (SMEE Report for the year 2011, 2012). Foreign trade activity of micro, small and medium enterprises is high, but in the coming years should be improved because it affects the amount of the balance of payments with foreign countries. If a bargaining position of the domestic sector improves and a period of collecting receivables and liabilities due becomes balanced, the possibility of financing manufacture through a loan will be higher and therefore better prospects for improving product portfolio or services will emerge along with boosting competitiveness.

At the beginning of the 21st century Serbia has experienced the major political changes, as in almost all sectors of the economy and the reform caused a shift to the newer and more modern way of doing business. Economic reforms were aimed at strengthening the competitiveness of domestic firms and industries which are relevant for doing business in the international markets. Starting production of strategic products that would be exported to foreign markets, not only that would lead to GDP growth, but also to the reduction in trade deficit, increase in employment and standard of living. In the period between 2007 and 2012 the economic climate in Serbia has changed. Setting up representative offices of large global companies changed the investors' perception of quality and conditions of doing business and several of them invested in the construction of its manufacturing plants in Serbia. This has enabled the employment of a number of people who have lost their jobs due to the restructuring of companies previously state-owned. Moreover, their importance for the local economy is reflected in the creation of new small enterprises and entrepreneurial entities that have seen their chance in cooperation with major multinational companies. According to the Business Registers Agency, in 2011, 7,130 new companies were established which is 7.8% of the total number of small, medium and large business entities in Serbia (Ivković et al, 2012). They opened 15,547 new jobs which were
performed by 1.5% of total employees. In 2010 a slight decrease in entrepreneurial entities was recorded - 9,469, while in 2006 this number was slightly higher - 11,536. A similar situation can be seen in setting up of trade and handicraft shops, and in 2010 35,036 new shops were established, which is about ten thousand less than in 2006 (Ivković et al., 2012).

Analysis of the development dynamics seen in the small and medium-sized enterprises from 2007 to 2012 shows that this segment of the economy is becoming increasingly important for the implementation of transition reforms. Owing to the high degree of innovation performed by owners and managers of these companies they are the driving force of the domestic economy, they are willing to transform and accept trends and changes and they can enhance the revitalization of the economy and are one of the most important factors in the development and straightening of the national economy. Key Performance Indicators of SMEs that are commonly used are the number of companies, the number of workers they employ and the amount of annual turnover (Paunović, 2010). Based on the above the conclusions about the characteristics of the development of the SME sector are being drawn, about the progress or regression of certain industries, productivity, costs and other.

Table 1. The number of companies in the SME sector in Serbia in the period from 2007 to 2012

<table>
<thead>
<tr>
<th>The Republic of Serbia</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>71,065</td>
<td>75,540</td>
<td>76,243</td>
<td>77,989</td>
<td>78,890</td>
<td>79,189</td>
</tr>
<tr>
<td>Small</td>
<td>9,874</td>
<td>10,415</td>
<td>9,873</td>
<td>9,614</td>
<td>9,656</td>
<td>9,699</td>
</tr>
<tr>
<td>Medium</td>
<td>2,572</td>
<td>2,675</td>
<td>2,470</td>
<td>2,257</td>
<td>2,218</td>
<td>2,142</td>
</tr>
<tr>
<td>Total of SMEs</td>
<td>83,511</td>
<td>86,360</td>
<td>88,586</td>
<td>89,860</td>
<td>90,764</td>
<td>91,030</td>
</tr>
</tbody>
</table>

Source: Independent author’s analysis based on the available data in the Statistical Office of the Republic of Serbia (SORS)

Of all the enterprises in the non-financial sector in Serbia in 2007 (84,109 in total), SMEs made 99%, or 83,511 enterprises (SORS Working paper No.61, 2008). A few years later, in 2010 the total number of small, medium and large enterprises grew to 90,364. Out of this number, the SME sector included 89,860 legal entities and a share of 99% in the total number of enterprises (SORS no.77 Working Paper, 2011). Number of entities recorded a slight increase in the coming years and in 2012 91,536 entities were registered, out of which the majority belonged to the SME sector comprised of 91,030 enterprises (Working Paper No. SORS.82, 2013). 506 entities fell under the category of large business entities. Small, medium and large enterprises in Serbia looked at from the territorial point of view, show the great differences in numbers by regions. During 2012, 23,860 enterprises operated in Vojvodina, of which 131 were classified as the large enterprises, while the remaining 23,729 belonged to the SME sector. In 2012, a total of 39,645 enterprises operated on the territory of Belgrade. The share of SME sector was 99.5% in overall number while 0.5% or 200 enterprises were classified as large business entities.

Based on Table 1 a steady increase in the number of enterprises in the SME sector has been seen, except in 2009 when there was a decline in this indicator. The cause can be found in the effects of the global economic crisis that has affected a large number of national economies around the world and has worsened macroeconomic business environment. The number of micro-enterprises was constantly growing and in 2012 reached the number of 79,189. The situation was different with the small and medium-sized enterprises whose number grew consecutively except in 2009 when a slight decline was noted.
Employment, as an important indicator of economic activity that affects the quality of standard of living, survival of the company in the market, attracting foreign direct investment and enhance the competitiveness of domestic products abroad. SME sector employs many workers, so in 2007 in this segment of industry there were 620,941 employees (about 63%) of 995,375. During 2010 in the SME sector were 582,409 employees (about 58%) of the total of 995,375, its number was lower in 2012 with 574,460 employees (about 57%) working in this sector of the economy. The graph shows that the number of employees in the period fluctuated, with the largest increase in employment recorded in 2007 and 2008, which can be justified by improving business conditions. They were analyzed by the World Bank that measured the relevant indicators and published them in the report "Doing Business" for that year. Since 2009 a decrease in the number of employees is noted in this sector. Micro enterprises are pointed towards the growth of employment in the years of crisis when other categories generally dismiss the workers. One possible reason for this is self-employment of workers who lost their jobs in the companies and started their own business.
enterprises RSD 1,396,636 million (36.06%) and medium-sized enterprises RSD 1,401,972 (36.02%). Large-scale businesses generated RSD 2,482,401 million which is slightly more than RSD 2,078,312 million in 2009. In 2012 enterprises had a total turnover of RSD 7,818,180 million, of which RSD 3,011,466 was generated in large enterprises while RSD 4,806,714 was generated in the SME sector. The total turnover in the SME sector during the observed period generally increased, except in 2009 when a decline was recorded. The graph above shows that the initial turnover of RSD 3,872,794 in non-financial part of the SME sector reached the amount of RSD 4,806,715 million, which is higher than in the beginning of the period. This indicator would probably be higher if there is a more favorable macroeconomic environment, the conditions for exports easier and domestic sector more competitive. Also, one of the obstacles for the increase in turnover and the gap between payment of liabilities and recovery of receivables which makes the present financing conditions difficult, slows the production process, affects the output and in such a way the sales volume and turnover.

Sectoral distribution of SMEs is specific. During the observed period certain economic activities with most micro, small and medium enterprises have been identified. At the beginning of the period in the economic sectors such as wholesale and retail, processing industry, real estate and construction, had the highest number of SMEs, the highest number of workers and the highest turnover. In 2012 the situation was somewhat different. Most SMEs operated in economic sectors such as wholesale and retail and repair of motor vehicles, processing industry and construction. A noticeable increase was seen in the number of enterprises in the professional, scientific, innovation and technical activities, which is in line with the current demands of the market and continuous business innovations.

SPECIFIC FEATURES OF THE DEVELOPMENT OF SME SECTOR IN THE AGRO-FOOD SYSTEM

Agriculture has long been seen as the primary production that includes growing different species of plants and livestock farming. Such view has been retained in some economies, even today, despite the changes that have transformed traditional agriculture in line with modern trends based on consumers tastes. Countries with different levels of economic development look at such activities in a different way, hence the term agriculture can be viewed from different perspectives (Zakić and Stojanovic, 2008). While some experts believe that agriculture is a way of life because it provides income and livelihood of rural household members, other advocates of the modern approach to agriculture, which is the complex relationship between the number of activities that are mutually integrated horizontally and vertically.

In the 21st century agricultural production cannot be viewed separately from other activities in the area of food production and distribution (Ceranić and Maletić, 2005). Between the food producer and end consumer, there is a number of business activities involved in making products with the highest level of processing to meet the needs of the modern customer. Each activity is equally important, a good quality of work in all phases of the product life cycle affects the perception of customers about the product and its positioning in the market. The food industry is an important element of the agricultural sector as it deals with the processing of raw materials of agricultural origin and their placement on the market. For the development of agriculture is not enough to improve business conditions for primary agricultural producers, but also for the companies engaged in production of processed food products because together they make Agro-food system.

Agro-food system shows some business-related characteristics when compared to other sectors of the economy partially due to the complex dependency relationship between primary producers and processors of agricultural raw materials in the food industry (Ceranić and Maletic, 2005). Primary farmers cultivate the soil, sow fields and arable lands by the crops that will be most used in the food industry for the production of finished products designed for end consumers in the market. A small part can be used as intermediate products or for the purpose of animal nutrition. For this area of the economy can be said that it is highly dependent on climatic factors and weather conditions that
Bad weather conditions are sometimes inevitable, and the high uncertainty of such occurrence influences the reluctance of the producers to respond at the right time and to keep the losses that may occur to a minimum in case of drought, floods, hail, etc. Crops in the fields, fruits and vegetables will give satisfactory yields which will affect the volume of industrial food production. Smaller amounts of available raw materials may compromise the production of basic foodstuffs. Processors of primary agricultural products resort to imports so as not to deviate much from the planned production due to poor plenteous years. They compensate domestic raw materials with the foreign, which also worsens the trade balance that is very disrupted and unbalanced in the transition countries. The majority of economic experts agree that the carriers of economic growth are small and medium-sized enterprises, and due to its characteristics they favor the development of one of its segment - agro-food system.

Enterprises of different sizes make the offer of agro-food products. Small and medium-sized enterprises have a different position in the market when compared to the large enterprises as they face problems and difficulties that are more difficult to resolve taking in account their capacity. For them is difficult to obtain financial resources for investment due to slow capital turnover, but also the risk of failure cannot be compensated by diversification of the product range. The big companies can produce several different products, sometimes in different categories so a drop in the demand for one product can be compensated by the increase in a demand for other product. This is not the case in SMEs because they do not have the capacity for a wide range of products and opt for those that have the highest probability of success with consumers.

Companies that choose to be engaged in agricultural activity should develop a strategy to define a range of products, the volume and method of production. Entrepreneurs and small enterprises often enter the market with products that are under-represented or have inadequate offer. Frequently it is about specific categories of goods for which there is a likelihood of success with the consumers. In order to achieve successful results in the market ruled by intense competition and where "the big eat the small players" marketing activities play an important role. Large companies usually have a well established image and position in the market, and can meet the needs of the customers by offering various promotional activities which help them to improve the sales. They are in a better position in comparison with SMEs because they exist longer on the market and enjoy a certain degree of confidence and security so the quality of their products is not brought into question.

Owners of small and medium-sized enterprises based on information received from the market independently decide on the species of plants or animals they will farm, inputs suppliers, hiring workers to work in the fields or farms and on the amount of output per annum. Due to the characteristics of agricultural production in most cases short-term plans are adopted, while the medium-term plans are generally associated with the development of the enterprise and its classification into superior categories.

Small and medium-sized enterprises in the agro-food system can choose one of the possible strategies available to them (Ceranić and Maletić, 2009):

- continue production and sales of old products in the current market,
- introduce existing products in the new markets, including export markets,
- start selling a new range of products in the existing market,
- introduce new products in new markets, including export.

Which of these strategies will be chosen depends on many factors: the potential of the local market, the characteristics and needs of customers, degree of competition, willingness of producers to bear a risk of failure, the available financial resources and other factors.

Conditions in the domestic agriculture are far from desired. The low level of utilization of food processing industry capacity is a consequence of advantages of foreign producers which number is increasing in our market but also due to the insufficient domestic supply and the low interests of
producers regarding innovations of their product range. Production structure is sub-optimal and funds available to owner are scarce. The poor condition of the food industry is also reflected negatively on the primary agricultural production which produces inputs for manufacturing. In countries that have gone through a transition with similar economic performances, the SME sector have proven to be the main driver of growth and employment growth. Considering that the natural potential of agribusiness in Serbia is great and predominantly under-utilized, a possible solution would be encouraging the development of the small and medium-sized enterprises by implementing economic policy measures and institutional reforms to facilitate business.

STATISTICS OF SMES IN THE AGRO-FOOD SYSTEM IN SERBIA

One indicator that shows the competitiveness of the sector and its importance in the economic development is the volume of foreign trade activities. Information on the participation of certain industries and legal entities in total exports and imports can indicate the quality of the products or services that are traded, an inadequate or insufficient supply of certain products or its competitiveness abroad. The SME sector has achieved a significant share in foreign trade activities. Small businesses dominate in the exports made by SMEs in 2011 47.2% in agriculture, forestry, fishing, processing industry and mining. Small enterprises in the SME sector are the largest importers, with a share of 38.3% (Report on SMEs in 2011, 2012). In terms of sectors, the surplus in foreign trade in the SME sector has been achieved in agriculture, forestry and fishery, which implies its importance for economic growth and development.

Considering the increasing number of consumers and their diverse needs, as well as the effort to adapt the work to the recommendations and standards of the Statistical Office of the Republic of Serbia in the analysis of companies according to their size in 2010 introduced changes that are specific in comparison to the previous year (SORS Working Paper no.77, 2011). First of all, during the data processing a new territorial division of the country was applied, and instead two territories: Central Serbia and Vojvodina, starting from this year data collection has been performed for 6 regions excluding Kosovo and Metohija. New classification of the activities was also applied, therefore and among other things, the fishery sector (considered as independent sector by 2010) was incorporated to the agriculture and forestry.

Due to the above changes the statistics for 2010 are not strictly comparable with the data on the SME sector and economic activities in the previous years. Therefore, this section will show only data that can be used for making comparisons in the SME sector during the period. Indicators of development of SMEs have not been changed so the data on the number of enterprises by size, number of employees and turnover are treated in a same way as before.

Figure 3. Total number of SMEs in the agriculture, forestry and water management in Serbia in the period from 2007 to 2011.

![Figure 3. Total number of SMEs in the agriculture, forestry and water management in Serbia in the period from 2007 to 2011.](source: Independent author's analysis based on the available data in the Statistical Office of the Republic of Serbia (SORS))
Figure 3 shows the number of SMEs in one segment of the agro-food system. Considering the period from 2007 to 2011 the increase of number of companies in this sector can be noted in the early years of the given period. The effects of the global economic crisis left a negative effect on the sector and the number of companies decreased slightly in 2009. The number of companies operating in this sector, classified as micro, small and medium, in 2011 was 3,370 which means 300 companies less than at the beginning of the period.

**Figure 4. Total number of SMEs in the food production, beverages and tobacco industry in the period from 2007 to 2011**

![Figure 4](image)

*Source: Independent author's analysis based on the available data in the Statistical Office of the Republic of Serbia (SORS)*

A significant sector in agro-food system is the production of food products that belong to the processing industry. The graph above shows the trend in the number of SMEs in this industry. In 2010 it was recorded that 3,402 companies were classified as small and medium enterprises doing business in agriculture, forestry and fishery. In 2001 their number dropped to 3,355.

**Figure 5. Employed in the agro-food system in Serbia in the period from 2007 to 2011**

![Figure 5](image)

*Source: Independent author's analysis based on the available data in the Statistical Office of the Republic of Serbia (SORS)*

The number of employees in the SME sector of agro-food system during this period manifests significant fluctuations (Working Paper No. 61 SORS). Since 2007 the number of employees has gradually declined in agriculture, forestry and water management, while in the segment of food products, beverages and tobacco there is no growth or downward trend and already a number of factors affecting them. The majority of small businesses in 2011 were operated in the sector of food products, 492 in total. There were 199 medium-sized enterprises, while 43 large enterprises were engaged in the activity of processing of agricultural raw materials and intermediate products for the end consumers.
Success of SMEs in agribusiness depends on several important factors: the productivity of employees, the capacity of the company to manage cash flow, innovations, managerial competence of the owners-managers and locations of the firm's business facilities (Buttercup et al, 2006). Optimal strategy should balance each of these factors because their synergy would make results that will be visible in the long run. Workforce productivity can be improved through training, gaining broader knowledge in a particular area, or by using more sophisticated instruments for work. In addition to the conditions in the workplace, the business climate that prevails within the company, willingness to cooperate and teamwork among employees can also have a positive impact on the productivity of employees. Cash flow management in agribusiness is a complex process since the capital turnover ratio is low and it is necessary to hire additional funds to fulfill the obligations towards input suppliers on time. When a positive financial result is achieved at the end of the year the funds for future production and its expansion should be provided.

CONCLUSION

Given the current state of the economy in our country and its future prospects, the subject of this paper is small and medium-sized enterprises in the agro-food system. During the transition years when major reforms are taking place in terms of economic and social policy, one of the factors that affects economic development, primarily through the partial absorption of workers who lose their jobs, but also by adapting to the trends prevailing with the modern consumers, is the SME sector. Having in mind that Serbia is rich in natural resources, has a favorable geographical position and climatic conditions, the chances for developing this sector within agriculture and agro-food industries are great. When all the existing possibilities are considered, in order to move towards the economic progress, the strategy that will represent a specific program is necessary and such program should be followed in the coming years.

Small and medium-sized enterprises in the agro-food system have been created primarily by the entrepreneurial incentives of individuals or groups in order to produce agricultural products and process them into the food products. Changes in the political and economic aspects during the transition years are caused by the growth of small businesses due to the privatization process, instead increasing the number of large corporate systems that were previously thought to be the main drivers of the economy and macroeconomic growth.

In the period from 2007 to 2012 there was an increase in the number of SMEs from 83,511 to 91,030 entities. However, in the agribusiness a drop was recorded in the number of business entities within this category. The main reasons can be sought in the detailed and expensive administration, lack of funds and the absence of adequate agricultural policy that would lead this sector towards the progress, prosperity and competitiveness. In the same period there was a growth of total employment in the SME sector, but not in agricultural enterprises. New generations are increasingly leaving their hometowns and villages moving to the cities trying to make progress and achieve a greater potential for career development. If there were a better institutional support to the rural population and those who have the capability for agriculture activity, the situation would be quite different, standard of living would be higher, products more competitive and employment rate greater.

In recent years the state has taken steps to overcome barriers to the development of SMEs and entrepreneurship. These are aimed at raising awareness of the importance of this category of business, with particular emphasis on agriculture as an important factor of economic development. Agricultural measures, institutional reforms and reduction in public levies are necessary in order to achieve results including a strong financial sector that will serve as the backbone in the implementation of the projects and activities that will give good results. The level of foreign direct investments has not been at a high level, but continuation of the policy that grants numerous benefits and privileges, the number of
investments will increase, employment will rise and overall macroeconomic performance can make Serbia a country in which is advisable and profitable to invest and do business.

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