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AGRICULTURAL COOPERATIVES – EXAMPLES OF GOOD PRACTISE IN THE WORLD AND SERBIA

Miladin M. Ševarlić¹, Marija M. Nikolić²

Abstract

Agricultural cooperatives play an important role in the development of agriculture and rural areas, especially in developing countries and in the time of economic crises – like the current started in 2008. In order to raise global awareness of the importance of agricultural cooperatives, the United Nations declared 2012 as cooperative year, pointing to the importance of cooperatives in reducing poverty, improving food security and employment opportunities in rural areas.

The paper is divided into three parts. After the introduction, in the first part of the paper is analyzed the most important characteristics of agricultural cooperatives in the country and abroad, with considerable attention to the activities in which agricultural cooperatives may have a special importance in the development of agriculture and poverty reduction in rural areas. In the second part are analyzed changes in the number of family farms based on data from the Census of Agriculture 2012, in order to identify trends in the agrarian structure of our country and highlight the interdependence between number of family farms and agricultural cooperatives. In addition, examples of good cooperative practice from the world and our country are highlighted. In the third part of the paper is pointed out to the importance of keeping complete and accurate cooperative statistics in order to properly argue their contribution to the development of rural areas.

Key words: agricultural cooperatives, good practise, family farms.

JEL classification: Q13

1. Introduction

Cooperatives all around the world contribute to survival of more than a half of world’s population, according to the UN estimate, and gather over a billion members. They also represent a significant employer because they provide over 100 million jobs. Cooperatives exist in both developed and developing countries: in

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Denmark they account for 36.4 percent of consumer retail market, in France 21 thousand cooperatives provide over a million jobs, or employ 3.5 percent of economic active population, while in New Zealand co-operative sector accounts for 3 percent in gross domestic product and 95 percent of dairy market.

Relevant state institutions can create favourable environment for development of agricultural cooperatives. There are different instruments that government can use to create a good climate for the development of cooperatives, starting from adequate law allowing variations and freedom of association in cooperatives and unions; reducing administrative procedures and facilitating the process of forming cooperatives; and providing equal or even privileged position for cooperatives comparing to other forms of organizations, for example through tax incentives, which is especially important in the initial stages of development of cooperative sector. However, even in the complete absence of any incentives from the state authorities, or openly neglect, agricultural cooperatives survive and contribute, although to a limited extent, to the development of rural areas. In this situation, the willingness of individual farmers to organize themselves into cooperatives is evident, especially in countries with unfavourable ownership structure of family farms, dominated by small farms, like in the Republic of Serbia (Ševarlić, 2013).

2. The role of agricultural cooperatives in development of rural areas

The main source of income for rural population, especially in developing countries, is agricultural production. Therefore, agricultural cooperatives are one of the main generators of local development, because they allow farmers to purchase inputs under favourable conditions and to sell their products on the market, or (more rarely) to increase the value of the final products. According to ILO Report COOP Fact Sheet No. 1 from 2007, contribution of cooperatives to solving the problem of rural (un)employment and poverty reduction is three-fold, as agricultural cooperatives enable direct employment and seasonal work; allow farmers to continue with production and contribute to rural community development; and provide income to rural population creating additional employment.

Ortmann and King (2007) suggest that cooperatives have a role in the overall economic and social development by creating jobs, generating income to members and reducing poverty. Kolin (2010) states that agricultural cooperatives – as a form of social enterprise, have the potential to mitigate the social consequences of transition by employment of rural population, particularly its marginalized groups. However, Serbian cooperative practice is characterized by a relatively small number of agricultural cooperatives that can generate the conditions for sustainable employment of greater number of new workers (Ševarlić and Nikolić, 2012-a).


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Although we tend to judge the contribution of cooperatives to development of rural areas based solely on our own experience, it is necessary to take into account the experience of other countries in which cooperatives are organized in activities which are not represented in Serbia, either because of legal obstacles and difficulties (savings and credit cooperatives, cooperative production of electricity) or the lack of tradition (cooperative for assistance to vulnerable groups, for child care, etc). Unlike profit-oriented organizations, cooperatives often provide specific services in rural areas where there are small number of users, even when these activities are on the edge of profitability. In the Report of the International Labour Organization (ILO) from 2007 is stated that 58% of electricity consumed in rural areas in Argentina is produced in cooperatives and that they create 6 percent of the national GDP; in the Philippines dominant part of 30,000 cooperatives are located in rural areas where they provide 65,215 jobs through employment in cooperatives. In India, 67 percent of rural households needs are being met through cooperatives. Serbia is not an exception in terms of contribution of agricultural cooperatives to the development of rural areas and reducing rural poverty, although the potentials of this sector are limited by economic conditions in which they operate. Agricultural cooperatives in Serbia are a dominant form of cooperative organizations: they represent 66.6 percent of the total number of cooperatives – which were 2,381 in April 2011 by the data from Serbian Business Registers Agency (SBRA); they also employed approximately 80 percent of the 6,292 employees in all types of cooperatives and gather some 30,000 cooperative members and much more associated members (Ševarlić and Zakić, 2012).

The effects of our cooperatives sector can be expressed through the following: cooperatives employ 6,292 people, and keeping in mind that the average family in Serbia has three members (Statistical Yearbook 2012, p. 32, SORS), cooperatives contribute to the existence of 18,876 inhabitants. Engagement not only of its members, but also a large number of farmers – associated members enables productive networking of small farmers and increases their competitiveness. As the agricultural co-operatives in our country have been neglected for a long time, it needs initial support for the implementation of the so-called “frog jumps”. If the agricultural cooperatives would receive financially assisted to build some 30 centers for gathering, finishing, processing and marketing of agricultural products, of which everyone could employ about 100 people, 3,000 workers would be to providing social security for an additional 9,000 residents in Serbia. At the same time 20-50% of the third class of fruits and vegetables would be collected in the system for processing and thereby increase the value of agri-food products in Serbia.

Despite the poor conditions of the entire cooperative sector, agricultural cooperatives are the only ones that show some tendency to merger. According to national legislation, cooperatives can be divided into small, medium and large. Of
the total number of cooperatives, every cooperative marked as major and 97.2 percent of small cooperatives are agricultural cooperatives. They also have the largest share in the GDP of the cooperative sector – 81.5 percent (SORs, 2011).

Although cooperatives may be organized in all lawful activities, and exist in all five continents, for the representative of cooperative practice and sector, and researches in our country, the most important examples comes from Europe. In period 2002-2007 was recorded increase of the number of agricultural cooperatives in the European countries (about 30% in Finland, 12% in Moldova and 10% in Lithuania), while in Denmark and the UK new cooperatives for exploitation of wind energy have been established. In France there are over 3,200 agricultural cooperatives that provide over 150,000 jobs and have about 650,000 members (ILO Coop, 2007).

By pointing out the good examples of cooperative practice we can influence the change in consciousness in general and the scientific community in favour of agricultural cooperatives, or against the adopted opinion that cooperatives are obsolete and that they have no role in the revival of rural areas, but also on the attitudes of farmers – potential cooperative members regarding possible success of agricultural cooperatives which all can motivate them to join the cooperative movement and to tackle with fatalistic attitude that the situation cannot be changed (Birchall and Simmons, 2009).

In the Serbian cooperative practices today there are no examples of co-operatives that could be compared with cooperative systems, at least at the national level (MIGROS). Therefore it is important to point out examples of good regional (apple production) and local cooperatives (vineyard) in other countries, particularly in Italy, whose ownership structure of family farms is similar to the one in Serbia.

In the World Bank report from 2008 on the development of agriculture, the role of cooperatives in agricultural development is for the first time explicitly highlighted and presented positive experiences of dozens of examples of agricultural and other types of cooperatives. It is particularly important to point out certain characteristics of agricultural cooperatives to potential members so that they become familiar with the new developments in cooperative practice, which is present both in foreign (Cook and Iliopoulos, 1999; Copa-Cogeca, 2010) and in domestic practice (Ševarlić and Nikolić, 2012-b).

3. Changes in number of family farms and agricultural cooperatives in Serbia

Agricultural cooperatives are associations of agricultural producers in which they are integrated to meet diverse needs, although the most common motive for membership is economic. In the survey conducted on a sample of 79 agricultural cooperatives in Serbia, cooperative members stated that the most common motive for joining the
cooperative was assistance in selling agricultural products (88.6%) and the purchase of inputs for agricultural production under favourable conditions (87.3%), but high frequency of response had also access to credit (57.0%) (Ševarlić and Nikolić, 2012a: 21).

In the Census of Population, Households and Dwellings (2002) conducted in Serbia; farms were defined as any household that at the time of the census used a minimum of 10 acres of arable land, or less than 10 acres of arable land, if it has a certain number of cattle.

**Table 1:** Number of FF in Serbia* and the total size of used land

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<tr>
<td></td>
<td>Number of FF</td>
<td>%</td>
<td>Number of FF</td>
<td>%</td>
<td>Number of FF</td>
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<tr>
<td>No land</td>
<td>1,145</td>
<td>0.1</td>
<td>6,288</td>
<td>0.8</td>
<td>9,486</td>
</tr>
<tr>
<td>Up to 2 ha</td>
<td>451,873</td>
<td>45.3</td>
<td>354,029</td>
<td>45.5</td>
<td>293,667</td>
</tr>
<tr>
<td>2 - 5 ha</td>
<td>319,066</td>
<td>32.0</td>
<td>244,064</td>
<td>31.3</td>
<td>184,637</td>
</tr>
<tr>
<td>5 - 10 ha</td>
<td>179,654</td>
<td>18.0</td>
<td>131,438</td>
<td>16.9</td>
<td>89,749</td>
</tr>
<tr>
<td>10 - 20 ha</td>
<td>40,960</td>
<td>4.1</td>
<td>36,772</td>
<td>4.7</td>
<td>32,486</td>
</tr>
<tr>
<td>Over 20 ha</td>
<td>4,537</td>
<td>0.5</td>
<td>6,300</td>
<td>0.8</td>
<td>18,530</td>
</tr>
<tr>
<td>Total</td>
<td>997,235</td>
<td>100.0</td>
<td>778,891</td>
<td>100.0</td>
<td>628,555</td>
</tr>
</tbody>
</table>

Source: Census of Agriculture from 1991 and 2002, SORS, Belgrade


In The Census of Agriculture 2012 the methodological approach was changed and instead of “individual farm” (IF) was uses the term “family farm” (FF) which was defined as the holding of at least 0.5 hectares of agricultural land or less than 0.5 ha of agricultural land if it is in the field crop, livestock, fruit growing, viticulture, vegetable production, producing flowers (greenhouses) or when engaged in other forms of agricultural production intended for the market, as well as fish farming, growing mushrooms, snails, bees, etc, or in other words if it is a commercial farm⁴.

Ignoring these differences in definitions of agricultural and family farms, it can be noted that the number of individual family farms in the period between two censuses has been significantly reduced (for 150,336 units or 19.3%). This reduction builds on the previous negative trend in the number of FF, and in the last two decades one in four FF disappeared. It can also be noted that the share of

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smaller farms is decreased and the share of farms with more land area is slightly increased by the Census 2012. The most significant reduction was noted in the category of farms with up to 2ha of land (by 35%, or 17% compared to in 1991 and 2002 respectively).

**Case 1 – Agricultural Cooperative Zelena bašta, Saraorci**

Agricultural Cooperative Zelena bašta (Green Garden) was founded by members of the five families in 2007 aiming at organizing vegetable production, predominantly in greenhouses. Only two years after the establishment of cooperative, they produce tomato, pepper and cucumber on 7ha indoor and production of cauliflower, broccoli and lettuce at about 20ha in the open. Production assortment is adjusted to meet the requirements of markets and customers.

Contemporary agricultural practice and the latest innovations in the field of vegetable production are used in production, in order to increase the yield and obtain more quality products. Cooperative also works with the agricultural advisory service.

Since the establishment, cooperative retains the number of members on the legal minimum, and doesn’t cooperate with associated members. In accordance with statutory requirements, investments in cooperative are equal for all farmer-members, but in order to collect significant capital for investment in the expansion of production members fee are higher than usual in agricultural cooperatives. These characteristics indicate that it is new generation cooperative, which among other features is characterised by closed membership and a great investment.

Increasing the number of family farms was recorded in two antipodal groups – landless and with more than 20 hectares, while larger increase was recorded in the category of farms over 20 ha (compared to 13,993 in 1991, i.e. 12,230 or almost three times more than in 2002), while the number of landless households increased 1.5 times compared to 2002, which is mainly due to changes in statistical methodology. Reducing the number of family farms was observed predominantly in the category of smaller ones, owned mainly by elderly population which resulted in the devastation of rural areas.

Along with reducing the number of FF, the number of agricultural cooperatives changed. According to the Statistical Office of the Republic of Serbia, the number of agricultural cooperatives has been continuously decreasing over the past few decades.

In 1991 there was a farmers’ cooperative on 1,274 FFs, with almost half (45.3%) of FFs disposed of less than 2 hectares of land, so these holdings in order to survive
were practically focused on some form of association. In 2002 the situation was almost identical in terms of distribution of households by interval groups. The ratio of FF and agricultural cooperatives was changed, and 1,527 IFs were oriented on one agricultural cooperative. Finally, in the 2012 this ratio was the highest – 2,883 FFs is focused on one agricultural cooperative, which is over two times more than in 1991. Focusing more FFs on one agricultural cooperative does not necessarily mean a deterioration of business conditions, if cooperatives are increasing and can meet the needs of a larger number of farmers. However, 66.5% of the agricultural cooperatives in Serbia are small cooperatives (SORS, 2011: 27), which actually indicates that they do not have the economic and human resources to be a good service to all farmers.

The work of agricultural cooperatives in Serbia is further burdened by unfavourable legal environment. According to the provisions of Article 13, paragraph 3 and Articles 150 to 154 of the Bankruptcy Law (2009), which were subsequently declared unconstitutional by the Decision of the Constitutional Court of the Republic of Serbia (2012) in 736 agricultural cooperatives was conducted accelerated bankruptcy. In this way, more than a third (38.1%) of the total number of agricultural cooperatives was liquidated. The majority of these cooperatives were from the territory of central Serbia (494 or 67.1%) and smaller number is from Vojvodina (242 or 32.9%). This can be described as the “largest and fastest administrative ‘euthanasia’ of agricultural cooperatives in Serbia – from the establishment of the first cooperatives in mid-nineteenth Century until today!” (Ševarlić, 2013).

Agricultural cooperative movement is unfortunately burdened with a number of other problems, among which stand out ownership issues that have not been regulated, and the impossibility of implementing the provisions of the Law on Cooperatives (1996) that regulate the return of the social ownership into cooperative property. If the refund of cooperative property is not resolved “consistently and efficiently”, and not just “in general and vague” and so prolong the agony of not addressing this issue, the cooperatives will be forced to “begin again from the scratch” (Maričić, 2006).
Village Karavukovo is located in the Zapadnobački District and has a population of about 5,000 inhabitants, which are mainly engaged in agriculture. Shortly after the Second World War, the village was colonized and there were established four peasant cooperatives that merged into one called Agricultural Cooperative Agrodunav, Karavukovo in 1956. This cooperative operates until today under the same name.

Analysis of the development path of cooperative Agrodunav is extremely important, as it indicates the different phases of the development of agricultural sector in Serbia. It also represents one of the better examples how agricultural cooperatives can be recovered. From the establishment of cooperative until the pre-transition period cooperatives operated relatively successfully, mainly by organizing crop production in their own economy, investing in the purchase of land and agricultural machinery. At the beginning of the 1990s, however, the cooperative enters into a recession which lasts for almost a decade and culminated in 1999 when the process of bankruptcy started. At this point, the cooperative was in extremely poor condition: the production of its own economy was almost non-existent, since 1,400 ha (77%) of the total 1,816 ha of cooperative land was neglected; cooperation with farmers wasn't organized, machinery was faulty or damaged, the debt to the creditors could not be settled, and the workers did not receive a salary in the last four years.

After two years in bankruptcy, active engagement of management and farmers, cooperatives have overcome the crisis: obligations to workers have been paid, the production started on the entire land with the planting structure significantly altered in favor of highly intensive production lines, and three years after getting out of the bankruptcy, cooperative settled all obligations to creditors and began restoring agricultural machinery and construction of dairy farm.

Agrodunav today is a leader in the organization of agricultural production in the local community. It employs 73 full-time employees and hires up to several hundred seasonal workers, mostly during the summer months. At over 1,000 hectares of its own land organize seed production, of which 400 ha under irrigation, with the active cooperation of agricultural extension services.

Experiences from cooperative sector from Europe and the world, as well as examples of good practice of “old” cooperatives (Agricultural cooperative “Beška”, Agricultural cooperative “Tisa”, ...) and the “new” cooperatives (Agricultural cooperative “Voćko” – Tavankut, Agricultural cooperative “Zelena bašta” – Saraorci, ...) from Serbia indicate that agricultural cooperatives can be organizations for poverty reduction in rural areas and faster and better addressing
economic, social and other problems of its members and residents of local communities. In order to agricultural cooperatives become more significant factor in the development of agriculture and villages in Serbia, it is necessary to do following: make restitution of cooperative property and enact a new law on cooperatives; enable cooperative members for the democratic participation in their organisation; train personnel for the cooperative management; reorganize and consolidate agricultural cooperative unions with other sectoral cooperative unions in one general union that would represent sector towards government organisations and Coops Europe and ICA; give priority to projects and programs that meet the needs and ensure the viability of a number of farms united into some forms of organisations, and not individual family farms in the agrarian policy, especially in the current economic situation.

4. Argumentation of the importance of cooperative statistics for the cooperative sector

Accurate and reliable data on the co-operative sector are a necessary precondition to assess the situation and make decisions about the development and new business activities. The need for adequate management of cooperative statistics is stressed in foreign literature (publications of the International Cooperative Alliance – ICA and Copa-Cogeca; UN Resolution 62/128 of 2008; ILO Recommendation 193 on the promotion of cooperatives adopted in June 2002) and domestic literature (Journal Agricultural Cooperative No. 15 of April 12 in 1936; Zakić 2000).

As an international umbrella association, the ICA has launched a campaign Global 300 list – the ranking of 300 economic most successful cooperatives in the world. Liebrand and Chesnick (2007) argue that cooperatives tend to last longer than profit-oriented enterprises since their business goals are realistically achievable only in the long run. They state that nearly half of the cooperatives in the Global 300 list were established before the Second World War, and that one in ten exists for more than a century, indicating their stability and reliability. The dominance of agricultural cooperatives in the overall cooperative sector is not confirmed only in our country, but also applies globally: more than one third of the cooperatives on the Global 300 list are operating in the field of agriculture, and almost every country that is present in the Global 300 list has at least one agriculture cooperative.

The importance of agricultural cooperatives in Europe is illustrated by the publications periodically issued by cooperative and other international institutions, such as the Copa-Cogeca, the ICA and the ILO, which highlight the need to conduct cooperative updated statistics. The ILO and the ICA collaborated since the establishment of the ILO in 1919, and ICA has the status of observer member of the ILO. ILO's commitment to the cooperative sector has manifested through the development of Recommendation No. 193 on the promotion of cooperatives
adopted in June 2002, and in signing and implementation of the Common Cooperative Agenda between the two organizations in February 2004 on creation of jobs and poverty reduction, especially in rural areas.

Case 3 – Danish Crown, Denmark

Danish Crown was created out of the first co-operative slaughterhouse, which was founded in 1887 in the town of Horsens in Denmark. Danish Crown is now Europe's largest and second largest in the world cooperative company that processes pork, and the largest processor and exporter of beef in Denmark. It accounts for 54.4% of the Danish agricultural exports and is the largest exporter of pork. It is among the top three exporters of meat in the world.

Danish Crown owns 15 pork and seven beef slaughterhouses (including one in Germany), has offices around the world, and especially extended network in Europe. Each year in their abattoirs is slaughtered 21.8 million pigs – of which 6.3 million in the UK, Poland and Sweden, and about 600,000 head of cattle – half of which in Denmark. It employs approximately 23,500 workers and 10,500 employees in daughter companies – engaged in manufacturing of various processed meat products.

Danish Crown is organized as a cooperative owned limited liability company and operated by the elected representatives of members and employees of cooperatives, which unites about 11,000 farmers. It is regularly ranked high on the Global 300 list of the largest cooperatives in the world – in 2010 was the 12th place among agricultural and on the 38th place between all cooperatives (regardless of activity).

Not surprisingly, the ILO also stressed the importance of co-operative statistics. This organization values highly cooperatives as one of the more significant employers and important contributor in terms of jobs creation. It also stressed that official statistics is often not monitoring sufficiently cooperative, or monitor only a part – whether it relates to certain types of cooperatives or to certain information on cooperatives. In fact, according to the ILO, cooperative statistics should include not only the number of cooperatives in total and by sectors, but the volume of business, members, employees, and a set of financial indicators, as well as reserve funds. This is why on the ILO International Conference of Statisticians, which is held in October 2013 in Geneva (Switzerland), for the first time will be considered the establishment of a database on cooperatives that would be comparable to the international level.
Obviously, the cooperative sector is an essential element in the agriculture of Europe and the world. The data presented in documents and on the websites of the relevant international organizations are an argument in the hands of the cooperative sector, which can be used to eliminate the ambiguity of the potential of agricultural and other types of cooperatives and their importance in solving some of the pressing problems of today.

5. Conclusion

While agricultural cooperatives all around the world experience the renaissance initiated by the global economic crisis, rising food prices and the identification of cooperatives as one of the most desirable models of social economy, agricultural cooperatives in Serbia are faced with one of the most difficult periods in its development since the end of the Second World War. Long term neglecting of cooperatives, lack of an adequate legal framework and consequently weak business effects of a dwindling number of agricultural cooperatives in Serbia, have contributed that not only farmers, but also representatives of the cooperative sector lose their trust in this type of organisation.

Unfavourable institutional and legal environment contributed to the drastic reduction of the number of agricultural cooperatives, since on the basis of the Law on Bankruptcy (2009) were executed more than a third of the total number of agricultural cooperatives (Ševarlić, 2013). The unresolved issue of transformation of social ownership in agricultural cooperatives, lack of access to favourable source of finance, unequal relationship with other stakeholders in agribusiness and other problems caused a reduction in their number in Serbia, and agricultural cooperatives that survived are mostly small (66.5% of the total number of agricultural cooperatives). Nonetheless, they gathered more than 30,000 cooperative members and employ about 5,000 workers. The importance of agricultural cooperatives is reflected not only in their business in Serbia, but also in developed countries, which is supported by the fact that the number of agricultural cooperatives in Europe is increasing.

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