

**ECONOMIC EFFECT, EXPERIENCES AND EXPECTATIONS IN  
AGRICULTURAL COOPERATION IN THE REPUBLIC OF CROATIA**

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**Abstract**

Cooperatives have significant role in economic development and this paper is affirming cooperative philosophy and other ethical cooperatives values. Family farms in the Republic of Croatia are identified as basic and key factors in agriculture cooperative business. Those farms should recognize advantages, adjust to the market and accept changes and new knowledge. Cooperatives in the Republic of Croatia have a rich and long tradition, but with a very turbulent development. The first cooperatives were established on the Croatian territory more than 150 years ago and in some period they were very important economic institutions (Sudaric *et al.*, 2010a; 320). However, different economic and political conditions have redirected this development and have decreased cooperative activities. The aim of this paper is to present cooperative position in the Republic of Croatia and its potential in retrospective to the Ministry of Agriculture and Ministry of Labor and Entrepreneurship program implementation. New law regulation, different kind of subvention as well as cooperative system of global meaning in the Republic of Croatia is on the way to affirming and supporting this kind of business organization. This paper also contains survey research about opinions of agricultural producers about cooperative business as well as importance of cooperatives in joining to European cooperative society.

**Key words:** agricultural cooperatives, development, economy, Republic of Croatia

**Introduction**

Cooperatives in the Republic of Croatia have a long history. However, the period of socialism - when the principles of cooperative organization and business model tried to adopt the socialist central planning and management economy - today leaves specific negative elements and prevents the powerful development momentum of this sector in the Republic of Croatia (Mataga, 2009; 246). There are many other problems like legislation, administrative barriers, lack of information and misunderstandings of farmers that did not lead to the desired result.

Agricultural production in the Republic of Croatia is dispersed in a large number of family farms. Farms are not self-sufficient and enough competitive neither for domestic nor for European markets. Cooperatives generally combine purchases and sales for tens and hundreds of their members, cooperate, and represent rational organization, service, database, source of information for their business cooperators (Sudaric *et al.*, 2010b: 155).

The European Commission data show the importance of cooperatives in the European economy because nowadays in the European Union operate approximately 250,000 cooperatives with 163 million cooperative members, or every third citizen of the European Union is in a cooperative. Cooperatives employ nearly 5.4 million people<sup>1</sup>.

Family farms in the Republic of Croatia are defined as the most important subjects of agricultural structure or as contractors of Croatian agriculture. According to the analysis of ownership structure it can be seen that they are very small operators that cannot achieve the necessary amount, quality and supply continuity of agricultural product. They are also in disadvantaged situation in acquiring raw materials, applying modern technology, finalizing processing and sale of finished products.

According to the Farm Register, 192,173 farms are registered in 2013, of which 96% are family farms, and in smaller ratio are registered as crafts, trades, society groups or cooperatives. Those farms have commercial status and they are in the support production system and generate production for the market. Observing average size of farms registered in the Farm Register to the land possession, the largest farms are in the eastern part of Croatia. The Croatian farm size average is 5.9 ha, and only 4% of farms has land possession larger than 20 ha.

Croatian accession to the European Union and further adjustments to the European market will affect that existing agrarian structure. They will experience some changes reflected in the increased number of farms that will tend to economic size of land property, or on the other side to keep small businesses with mixed farming, and the implementation of additional economic activities. However, changes in agricultural structure will be reflected through the new empowerment of cooperative business, which has been accepted and which successfully operates in many countries of the European Union and wider.

The aim of this paper is to identify issues of Croatian agriculture and to identify the importance and potential of cooperatives for the overall economy through social and economic value of cooperatives.

### **Materials and methods**

In this paper, besides relevant domestic and foreign publications, we used data from the Croatian Cooperatives Union, Ministry of Agriculture, the Ministry of Economy, Labour and Entrepreneurship as well as empirical research conducted during the 2013 year. The sample was consisted of 117 farmers who expressed their views and opinions regarding the cooperative system in the Republic of Croatia. The entire questionnaire consisted of 12 questions of open-ended and closed type of questions divided into several groups, related to the type of agricultural production, the legal status of farms, ownership structure, and views of supporting and development of agricultural cooperatives in the Republic of Croatia. The sample consisted of randomly selected respondents - participants who deal with agricultural production from eastern Croatia. Respondents show their opinion on the five (5) negation and four (4) affirmation statements with whom they had to agree or disagree, and which are related to the support / lack of incentives for the cooperatives development in Croatia. Respondents' replies were measured by five stages Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). In data processing we used standard deviation, sample variance, median, mod and mean. A chi-squared test, also referred to as chi-square test or  $\chi^2$  test, is any statistical hypothesis test in which the sampling distribution of the test statistic is a chi-squared distribution when the null hypothesis is true.

### **Results and discussion**

According to the Croatian Cooperatives Union in December 2010 in Croatia were active 1691 cooperatives, while in the 2009 existed 1125 cooperatives according to the final reports

of the Financial Agency (FINA). The largest number of cooperatives in 2009 was agricultural cooperatives with a share of 60.36% in the total number of cooperatives, followed by services cooperation (20.62%) and commercial cooperatives (9.60%) while the least were the savings and loan cooperatives (5.16%) and housing cooperatives, which accounted only 4.27% of the total number of cooperatives ([www.zadruga.hr](http://www.zadruga.hr)).

A cooperative as the movement develops according to the basic cooperative principles which are adjusted to the changes of society and the environment. The role of knowledge, information and education is a key element of the cooperative concept. Therefore, as part of this study is empirical research conducted of 117 random sample farmers who expressed their views and opinions regarding the cooperative system of Croatia. The aim of this survey was to explore and define the basic problems of the agricultural cooperatives development.

By education level, 15.4% of respondents had only completed primary school, 63.2% have a high school education, 18.8% had completed college or university level, 1.7% of respondents have a master's degree or PhD and one respondent (0.9%) is with no school. The average age of the respondent was 45.80 years. Among them 77.8% were men and 22.2% women. Ownership structure of respondents is in much more favorable position compared to the Croatian average. Specifically, 48.7% of the respondents have more than 10 ha, 27.4% of them had more than 3 ha, while only 10.3% had less than 1 ha farm.

Mostly, respondents were registered as family farms that have been registered in the Register of farmers (65%) and with a significantly smaller share as family farms that are not registered in the Register of farmers (22.2%). Worrying is the fact that only 1.7% of the randomly selected respondents is in agricultural cooperative. According to research, 43% of survey respondents believe that they are more successful as the individual producers rather than as members of the cooperative.

Table 1. Selected descriptive statistical indicators relating to the attitude statements.

Statement	Number of data	Mean	Median	Mode	Standard Deviation	Sample Variance
1.	117	3.55	4.00	5.00	1.24	1.53
2.	117	3.76	4.00	5.00	1.21	1.46
3.	117	3.90	4.00	5.00	1.10	1.21
4.	117	3.62	4.00	5.00	1.11	1.24
5.	117	3.40	4.00	5.00	1.29	1.66
6.	117	3.67	4.00	5.00	1.20	1.45
7.	117	3.91	4.00	5.00	1.13	1.27
8.	117	3.81	4.00	5.00	1.07	1.15
9.	117	4.20	4.00	5.00	1.04	1.08

*Source: own research*

Negation statements (1-5) were about fact that problems in the cooperatives development in Croatian are reflected in lack of information and farmers ignorance (Statement 1); mutual distrust and the past burden (Statement 2); lack of financial and organizational national support (Statement 3); inadequate legislation (Statement 4); investment problems and profit sharing (Statement 5).

Affirmation statements (6-9) were about easier way to obtain financial benefits and support (Statement 6); get better and faster information and help (Statement 7); get new knowledge and education (Statement 8); and interconnect and achieve better connectivity with the market (Statement 9).

Most of the respondents in the statements case, evaluated the analyzed elements of grade 4 or 5, but best evaluated were statement where respondents believe that the cooperative can be interconnected to achieve better correlation with the market, organization of production and distribution of goods (4.20) and that is the most important component of the cooperatives development.

The chi-square test with a significance level of  $p > 0.05$  indicates that problems in cooperatives development in Croatia reflects on the importance of the lack of information and farmers knowledge in mutual distrust, the lack of financial and organizational support, inadequate legislation and the problems about investments and income distributions which are significantly different from the normal distribution.

In Croatia, the number of cooperatives has increased which certainly favor the various programs and support in cooperative system. The responsible ministry for cooperative business is the Ministry of Economy, Labour and Entrepreneurship, with the exception of agricultural cooperatives where the Ministry of Agriculture still has the highest impact. The Ministry of Agriculture has encouraged the work of agricultural cooperatives in three sub-programs:

- Establishment of new agriculture cooperatives
- Development of agriculture cooperatives
- Co-financing professional managers in agricultural cooperatives

The aim of the program was to encourage the establishment and development of cooperatives, and to connect small producers into cooperatives in order to create cooperative products. Co-financing refers to agricultural cooperatives registered in the Croatian Cooperatives Association and having 7 or more people in cooperative business as well as has defined agricultural production.

Most respondents (62.4%) agree with the statement that the government encourages the establishment of cooperatives and cooperative development projects & cooperative systems, in accordance with the economic and social development strategy, which is connected with the fact that 64.9% of respondents were familiar with measures to encourage cooperatives development in the Republic of Croatia.

According to the draft version of the Rural Development Program in the Republic of Croatia from 2014-2020 most of the objectives, and the priority measures can contribute to the development for business connections in rural areas, especially through a new form of organization and measures: establishment of producer groups in order to co-finance groups of at least five agricultural producers. This new measure will simplify the procedural, administrative and legal regulations.

Cooperatives in Croatia have a relatively low efficiency, but it is positive that efficiency coefficient is more than one because the primary aim of cooperatives business is not just making a profit. The impact of cooperatives on the economy is more important and has a multi perspective views than just making profit ([www.zadruga.hr](http://www.zadruga.hr)).

Descriptive statistics indicators of cooperatives employment in the Republic of Croatia in 2009 year shows mode (3) median (3) mean (3) minimum value (1) and maximum value (10) (<http://www.coopseurope.coop>). Based on the calculated arithmetic mean and the median, the largest number of counties in the Republic of Croatia has hired three employees at the cooperative, which confirms the calculation mode and shows the most variable in sequence.

Establishing cooperatives should contribute to the generation of new jobs and improving employment in the overall Croatian economy. Based on the available data on employment in the cooperatives in 2007, 2008 and 2009, it is possible to draw conclusions about the impact of cooperative action on employment. In the Republic of Croatia in 2009 were 1 125 cooperatives that had more than 23000 members and 3565 employees. Although the analyzed period had no significant changes in the number of employees of cooperatives in the Republic of Croatia and the general trend was the reduction of the employees' number. Since 2007 until 2009, the number of cooperation employees decreased by 6.60% in average per year ([www.hsz.hr](http://www.hsz.hr)).

Although the respondents think that they have enough knowledge and enough information regarding support for cooperative system, 87% of them believe that there should be more education about cooperatives in current regulatory as well as in the future cooperatives development particularly in the Republic of Croatia accession to the European Union.

National system increasingly recognizes cooperatives as a possible wheel of new employment, creating new income and achieving a significant market share of agricultural food products, but multiple issues are reflected not only as the problems of the past but also by the new cooperative conditions, or the problems of lack information and knowledge of farmers.

### **Conclusions**

The emergence of the first cooperative goes back over two hundred years into the past, when rural entrepreneurs and farmers decided to combine their resources and help each other to overcome common problems, primarily limited market access. The original idea of cooperatives since then didn't change a lot. According to the performed survey research statement, "*I believe that cooperatives can be linked with each other's and achieve a better relationship with the market,*" ranks with the most significant average score of 4.2, therefore it can be concluded that the production organization and distribution of goods are still the most important goal of the cooperative association.

Although national system more and more recognizes cooperatives as a possible new employment engine, creating new income and achieving a significant market share of agricultural food products, multiple issues is reflected not only in the problems of the past but also in the new conditions or the problems as the lack of information and knowledge of farmers. There were some contradictions in the conducted survey results. Although the majority of respondents (62.4%) agree with the statement that the government encourages the cooperatives establishment and cooperative development projects and cooperative systems, in accordance with the economic and social development strategy, and 64.9% of respondents were familiar with measures to encourage cooperatives development in the Republic of Croatia, although 87% of them still believe that they should continue to be informed and have education in the field of cooperatives about current regulatory and future cooperatives development particularly in entering the Republic of Croatia in the European Union, they are still not joining in to the cooperative system. Only 1.7% of the randomly selected respondents is in a cooperative, and 43% of respondents believe that they are more successful as individual farm producers rather than as members of a cooperative.

European countries have specific cooperatives laws, and in some countries, cooperatives are established in accordance with the European Cooperative Society Statute (ECSS). The ECSS was developed in 2003 in order to provide an appropriate legal framework for the cooperatives operation and to facilitate and streamline their cross-border and trans-national activities. The European Commission data show the importance of cooperatives in the European economy because nowadays in the European Union operates approximately 250.000 cooperatives with 163 million cooperative members, or every third citizen of the European Union is in a cooperative. Cooperatives employ nearly 5.4 million people.

In the cooperative organization and cooperative legislation in the Republic of Croatia there are still many understatement and not solved problems. This paper presented and compared the data of the Croatian Cooperatives Association and empirical research. Although cooperatives grew stronger and developed, a negative opinion, farmers ignorance and distrust but also problems in joint ventures and profit sharing are still in effect. Croatian agricultural cooperatives in the future should be compared to the cooperatives in the other European Union environments but with stable even stronger coordination between the state and local communities, and there should be systematic and coordinated approach in making short, medium and long term plans for the cooperatives development and other partnership and some producers groups according to the new rural development plan 2014-2020. By encouraging cooperatives, local governments contribute most to the elimination of the gray economy, unfair competition, and poverty and, most importantly, support employment, growth and development in their communities.

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