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Aleksandar NEDANOV, Đurđica ŽUTINIĆ [1]

COOPERATIVE ORGANIZATION AS A FACTOR OF COMPETITIVENESS AND SUSTAINABILITY IN CROATIAN AGRICULTURE

SUMMARY

Low competitiveness and poor positioning of Croatian agriculture on the EU market is the consequence of a number of constraints such as possession of a small and fragmented land parcels, undeveloped market infrastructure, low technological level of production, etc. In such circumstances, one of the basic prerequisites for increasing the competitiveness of domestic agriculture is production and marketing organizing family farms. Numerous experience in the EU and around the world show that cooperatives operate as a successful business model of the farmers' organizations and contribute to their competitiveness in the global food market and strengthening the bargaining power in the food supply chains. According to available data we describe the institutional and normative support of the current situation in Croatian cooperatives in agriculture sector and compare it with the agricultural cooperatives in selected EU member states. An analysis showed the marginal contribution of cooperatives in the production, purchase and turnover of agricultural products in Croatia. Cooperative legislation in Croatia is regulated by EU standards, but the financial and institutional support is insufficient for the incentive development of agricultural cooperatives. In order to raise the competitiveness of Croatian agriculture there should be transparent promotion of cooperatives as a successful business model organization of family farms.

Keywords: agriculture, cooperatives, family farms, institutional support, Croatia.

INTRODUCTION

Despite the favourable agro-climatic conditions and diversity of ecosystems, agricultural production in Croatia has been decreasing in long term period which results in a low level of self-sufficiency and in high food imports dependence of the majority of domestic agricultural products. Low competitiveness of agriculture in domestic and EU market, is a result of the numerous constraints such as possession of a small and fragmented land parcels,

[1] Aleksandar NEDANOV, (corresponding author: anedanov@agr.hr), Đurđica ŽUTINIĆ, University of Zagreb Faculty of Agriculture, Department of agricultural economics and rural development, CROATIA.
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undeveloped market infrastructure, low technological level of production, etc. One of the basic preconditions for increasing the competitiveness and sustainability of local agricultural production and market is joint entrepreneurship of family farms. Business networking and corporation of family farms is particularly important in the area of distribution, or rather in marketing and management activities in the field of farm products sale, where the competitiveness of the family farms is the lowest.

Numerous examples in the world show that cooperatives operate as a successful business model organizing farmers and contribute to their competitive position in the global food market and in strengthening the bargaining power in the food supply chains. Many authors point out that cooperative entrepreneurship at a time when agriculture becomes more industrialized and based on innovation and knowledge, has multiple effects on rural economic growth and this business form will play an important role in the future rural and agricultural sector (Corbett, 2008; Ševarlić, 2012). Worldwide many of cooperatives are part of complex network structures that combine multiple functions and services such as manufacturing, finance, audit, insurance, marketing, education, consulting, recreation, etc., and in all economic sectors (Hanisch, 2009). Based on common ownership and democratically controlled businesses, cooperatives are very important instrument of 'self-help services' in rural areas. Babić et al. (2011) suggest that cooperative entrepreneurship has strong support of European institutions because they simultaneously achieve economic and social effects, contributing to business activity and also to the social cohesion of society. They offer employment opportunities in all sectors of the rural economy by providing permanent, seasonal and temporary jobs and successfully addressed the key issues of regional and local development. For example, according to the NCBA, the American cooperative sector has about 30,000 cooperatives with over 2 million working places and taking care of about 350.8 million members. American cooperatives own property valued at US $3 trillion, achieving more than US $500 billion in revenue and paid salaries for employees in amount of US $25 billion. In rural areas of the United States cooperatives in 47 states, serving 42 million electricity customers, and generate 42% of total production (2010). In Brazil (2011) social care cooperatives provide medical and dental services for 17.7 million people or 10% of the total population. In Cote d'Ivoire (2002) cooperatives were investing US $26 million for the construction of schools, rural roads and clinics for nursing mothers, etc. (ICA, 2014).

Worldwide agricultural cooperative sector achieved impressive economic results. In 2010 the American agricultural cooperatives have achieved 28% of market share in the food processing industry and in the agriculture market. In Japan, 91% of farmers are members of cooperatives and achieve annual turnover in amount of US $90 billion. Cooperatives in Argentina gains more than 20% total exports of wheat, while in New Zealand cooperative entrepreneurship generates 3% of GDP, covering 95% of the domestic market and 95% of exports of dairy products to the international market. In the world 28% of total number cooperatives with higher annual turnover above US $100 million are from the agriculture and food industries sector. In the Top 300 largest cooperatives in the world, 100 of them operate in the sectors of agriculture and forestry and achieve annual sales in amount of US $471.15 billion.

MATERIAL AND METHODS

Possibilities and prospects of cooperative development are different in each country, depending on the socio-political circumstances, legal, fiscal, financial and institutional framework. Chloupková (2004) concluded that it is necessary to create, due to market liberalization and competition of global multinationals companies, a favourable political environment with targeted lobbying and cooperative education by experts and relevant institutions to promote and raise awareness about the possibilities of cooperatives in achieving local and national interests. Chaves (2010)[2] emphasizes the necessity that cooperative sector should be separately allocated in national accounts due deep insight of real cooperative contribution in the national economy and social development. Examples of many countries confirmed that cooperatives, based on ethical values contribute to the development of social capital and today they are important part of their national economies (Porter and Kramer, 2011).

The aim of the paper was to describe the current situation of the Croatian agricultural cooperative sector and compare it with the situation in the European Union (EU) considering the institutional and normative support for cooperative development in Croatia. The analysis is based on available statistical data provided by the Croatian Bureau of Statistics (DZS), Financial Agency (FINA), Croatian Association of Cooperatives (HSZ), Eurostat, International Cooperative Alliance (ICA) and USA National Cooperative Business Association (NCBA). We also used relevant documentation and literature sources.

RESULTS AND DISCUSSION

Socio-economic characteristics of Croatian agriculture

According to the basic socio-economic indicators (2012) agriculture in the overall Croatian economy generates about 6% of GDP, participate with 13.8% in total employment and 11.2% in foreign trade (including food processing industry). In the last decade, Croatian agricultural and food products report constant deficit in foreign trade exchange. In 2012 foreign trade deficit reached the amount of US $949 million, and Croatia is a big food importer among EU-28 members. The value of agricultural production in the 2012 was US $3.65 billion where crop production achieved 59.6% and livestock 35.8%. Croatian agriculture

[2] Engagement and collective action of citizens/communities in achieving their common interests is shaped in today's modern concept of understanding the social economy. Cooperative entrepreneurship emerged in political and legal circles of European countries as a pillar of social utility (Chaves, 2010).

productivity is twice lower than the productivity of the EU agriculture (average is 6,368.2€/AWU compare with EU average which is 15,223.6€/AWU[3]).

In 2010 Croatia had 233,000 agricultural holdings with average land size of 5.6 ha, which is lower than the EU average (14.4 ha)[4]. Most of them are small scale family farms with less than 2 ha of used agricultural land, while the share of the largest farms (50 and more ha) is only 1.4% of total farms in Croatia. Additional problem is also internal fragmentation of agricultural land, average farm in Croatia have 15 separate land plot which is from perspective of production and economic efficiency not favorable. In these circumstances, average size of land holding is not able to provide full employment and adequate income of farmers. The agricultural sector constantly or occasionally includes more than half a million people who spend 184.5 thousands of annual work units (AWU). Approximately 91% of the total labor force in agriculture sector is provided by family farms (farmer and family members).

The labour force is dominated by the older age group, the farm-holders are on average 59.8 years old, while only 4.5% of them are younger than 35 years. Farm labour force has low vocational level training, only 5% have a formal agricultural education, while for majority of them (76%) knowledge as based on practical experience (Radinović and Žutinić, 2006).

Table 1. Number and structure of family agricultural farms in Croatia, 2010

Land structure (categories)	**Number of holdings**	**%**	**Utilised agricultural area (ha)**	**%**	**Average size (ha)**
Zero ha	230	0.1	-	-	-
< 2 ha	122,560	52.5	100,680	7.6	0.8
from 2 to 4.9 ha	55,430	23.8	177,470	13.5	3.2
from 5 to 9.9 ha	30,240	13.0	208,860	15.9	6.9
from 10 to 19.9 ha	13,880	5.9	188,580	14.3	13.6
from 20 to 29.9 ha	4,330	1.8	103,090	7.8	23.8
from 30 to 49.9 ha	3,470	1.5	132,300	10.1	38.1
from 50 to 99.9 ha	2,290	1.0	154,230	11.7	67.3
100 ha or over	850	0.4	250,790	19.1	295.0
Total	**233,280**	100.0	**1,316,000**	100.0	**5.6**

Source: Eurostat – processed by the authors

The illustrated data show that Croatian agriculture is mainly positioned on the small scale businesses and non-competitive part of agriculture. Production and market of fragmented family farms with modest marketing and management skills, should look for the economies of scale through the cooperative organization.

Croatian agricultural cooperative sector and comparison with EU

[3] Annual Work Unit. In Croatia 1 AWU = 1.800 annual operating hours.

[4] Agricultural holding in Croatia organized as family farms, crafts, trade association or cooperatives. In total number of holdings 97% are family farms.

After independence Croatian cooperative movement begins with reaffirmation with adopting the first Law on cooperatives (1995) which recognize cooperatives as economic entities but didn't resolve a series of legal and financial issues. These are particularly related within process of division of membership shares after the process of transition and transformation of the former estate-owned cooperatives. Very often cooperative assets were abused and transferred to enterprises (private companies) without legal sanction. Although in the period of 1999-2007, number of cooperatives in Croatia increased from 350 to 556 but their business activity and number of employees decreased because the majority of former cooperative property remained in state ownership (Mataga, 2009). In this period contribution of state financial support increased the number of cooperatives, but without the existence of cooperative audit and control of spending this support is often used from so-called pseudo-cooperatives (Matjašević, 2005)[5]. The newest Law on Cooperatives (2011) solves the problem of pseudo cooperatives raising minimum number of founding members from three to seven. Also, dealt with the issue of illegal removal of cooperative assets in case of bankrupt cooperatives transferred to the local government units that are required to use that property for the future development of cooperatives.

Because of legal harmonization from 2011 till 2013, the number cooperatives (2,060) decreased by 48%, the number of members by 33% and the number of employees by 36%[6]. According to the basic social indicators of development of cooperatives Croatia lags considerably behind the EU (Table 2). Only 0.3% of the Croatian population are members of cooperatives, while in the EU every third person (or 32.4% of total population). The EU-27 cooperative sector account 2.5% of total employment, while in Croatia is only 1.15%. Equalizing the Croatian average in cooperative membership and employment with EU-27 average could potentially create more than 20,000 jobs.

Table 2. Basic indicators of cooperative development in Croatia and EU

Indicators	**Croatia (2012)**	**EU-27 (2011)**
Total number of cooperatives	1,202	250,000
Total number of cooperative members	19,485	163 million
Total number of cooperative employees	2,820	5.4 million
Average of members per cooperative	16	652
Average of cooperative employees per cooperative	2.36	21.6
Cooperative members share in the total population	1.15%	32.4%
Share of cooperative employees in the total labour force	0.16%	2.2%
Share of cooperative employees in the total of employed	0.20%	2.5%

Source: FINA (2011) and EUROSTAT data - processed by the authors

[5] *Pseudo cooperatives or family cooperatives* using 'cooperatives' as a name for their business activities enjoying various government benefits and support, and in practice operates as a fully private enterprises of a small group of people (Antonić, 2007:222).

[6] One part of non-active cooperatives is liquidated while several of them is restructured in cooperatives with huge membership.

Cooperatives in agriculture, forestry and fisheries are the most numerous and most contribute to Croatian cooperative movement (Table 3). In 2013 operate 444 agricultural cooperatives (39%), with 8,080 members (42%) and they employ 1,378 workers (51%) (HSZ, 2013). In previous year they had revenue of US $187.4 million (or 56% of total revenue cooperative sector). Structural data (2012) on agricultural cooperative sector show that 276 cooperatives are active in crop production (54%), 88 in livestock production (17%), 39 in fresh-water and marine fisheries and aquaculture (8%), and the remaining cooperatives engaged in mixed model production and other like additional service activities in crop and animal production, forestry and hunting (21%).

Table 3. Number and cooperatives turnover per business sectors in Croatia, 2012.

Cooperative business sectors	**Number**	**Market share (%)**	**Turnover (US mill $)**
Agriculture, forestry and fisheries	510	42%	216.2
Processing industry	190	16%	65.2
Retail sector; repair of motor vehicles and motorcycles	130	11%	30.3
Construction industry	79	7%	12.9
Activities of providing accommodation and food service activities	57	5%	3.1
Other business sectors	236	19%	28.1
TOTAL RH:	**1,202**	**100%**	**355.8**

Source: FINA (2011) data - processed by the authors

Unlike Croatian circumstances where the cooperative sector contributes with just 6% in overall agricultural production, in the EU-27 agricultural co-operatives achieve on average 40% of market share of the agricultural sector. According to FINA, agricultural cooperatives in 2012 have their own land whose equivalent value expressed in money is US $34.78 million, gains total revenues of US $216.18 million and reserves at the end of the year in the amount of US $45.36 million. The most common are co-operatives in dairy production (57% market share), fruits and vegetables production (42%), wine production (42%), olive (37%) and in the cultivation of cereals with 34% (Bijman et al., 2012). Dairy sector and the production of fruits and vegetables are the most active sectors of business and together account for 60% of total EU cooperative production. Among the EU member states the Netherlands has the highest percentage of market share of the agricultural sector with 83%, Finland 79%, Italy 55% and France 50%.

Institutional support to cooperative movement in Croatia

The role of institutional support is to provide assistance and qualitative information about opportunities in foundation of cooperatives, to provide assistance to cooperative members, ethically and effectively develop collaboration at every stage of cooperative life cycle (Cook and Burress, 2009).

This support includes activities such as market research, training and development of business skills for members and management, assistance in the preparation of business and financial plans and lobbying for co-operative entrepreneurship in the local community. Financial support provided appropriate source of funding for the cooperative sector through national, regional, local or special donor funds, loans or savings and loan associations and credit unions.

Institutional support of Croatian cooperative movement legally begins by establishing the Croatian Association of Cooperatives (HSZ) on amendments to the Law on Cooperatives (NN, br. 12/2002). As an independent professional business organization, the associations of cooperatives main tasks are promoting, harmonizing and representing the common interests of its members to government bodies. In the last few years, the Association has contributed substantially to the harmonization of Croatian legislation in accordance with EU standards, regulating the business and financial records of cooperatives entrepreneurship, the organizing of seminars and training courses for actors, publishing brochures and collaborating with the relevant international cooperative associations. The further tasks for the development of cooperatives are to increase the number of qualitative employees, to lobby and provide greater public financial, fiscal and institutional support, especially for youth generations (Novićević and Mijović, 2012). Further, there should be stronger influence on the development of curriculum for permanent professional education in the field of cooperative management and socially responsible entrepreneurship for their members and the whole society. It is necessary to promote the development of cooperative trademark for the preservation of tradition, authenticity and origin of products, and assist in the acquisition of promotional logo supplement '.coop', which provide Croatian cooperatives greater visibility in the domestic and foreign markets

CONCLUSIONS

According to the basic social indicators Croatian cooperative movement significantly falls below the EU-27 average. Agricultural cooperatives dominate in the Croatian cooperative sector, but in comparison with other EU member cooperatives they achieved marginal business results in the production, sale and turnover of agricultural products. Although Croatian cooperative legislation is regulated by EU standards, fiscal and institutional support is unsuitable for the qualitative promotion of agricultural cooperatives development. It is necessary to establish a cooperative audit for controlling the accuracy of the joint business activity by applying cooperative principles and accordingly encourage cooperative entrepreneurship through various tax reliefs. Resolving the policy of double taxation for cooperative members would be supportive for the overall development of Croatian agricultural and cooperative movement to the original cooperative physiognomy which is presented in most developed world countries. Stronger development of agricultural cooperatives would positively influence the development of agriculture, rural areas and the overall Croatian economy.

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