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## **Foreword**

### **Tradition and Innovation – International Scientific Conference of (Agricultural) Economists**

**Szent István University, Gödöllő, 3-4 December, 2007**

Tradition and Innovation – International Scientific Conference was held on December 3-6, 2007, in the frames of the anniversary programme series organized by the School of Economics and Social Sciences of the Szent István University. The aim of the conference was to celebrate the 50th anniversary of introduction of agricultural economist training in Gödöllő, and the 20th anniversary of the School of Economics and Social Sciences, which was founded in 1987.

The articles published in the special edition of Bulletin 2008 of the Szent István University were selected from the 143 presentations held in 17 sections of the conference and 30 presentations held at the poster section. The presentations give a very good review of questions of national and international agricultural economics, rural development, sustainability and competitiveness, as well as the main fields of sales, innovation, knowledge management and finance. The chairmen of the sections were Hungarian and foreign researchers of high reputation. The conference was a worthy sequel of conference series started at the School of Economics and Social Sciences in the 1990s.

## **Előszó**

### **Tradíció és Innováció – Nemzetközi Tudományos (Agrár)közgazdász Konferencia Szent István Egyetem, Gödöllő, 2007. december 3-4.**

2007. december 3-6. között a Szent István Egyetem Gazdaság- és Társadalomtudományi Kara (SZIE GTK) által szervezett jubileumi rendezvénysorozat keretében került megrendezésre a Tradíció és Innováció – Nemzetközi Tudományos Konferencia, amelynek célja volt, hogy méltón megünnepelje a gödöllői agrárközgazdász képzés fél évszázada történet elindítását, s ugyanakkor a Gazdaság- és Társadalomtudományi Kar 1987-ben történt megalapításának 20. évfordulóját.

A Szent István Egyetem által kiadott Bulletin 2008 évi különszámában megjelentetett cikkek a konferencián 17 szekcióban elhangzott 143 előadásból, illetve a poszter szekcióban bemutatott 30 előadásból kerültek kiválasztásra. Az előadások jó áttekintést adtak a hazai és nemzetközi agrárközgazdaság, vidékfejlesztés, a fenntarthatóság és versenyképesség kérdései mellett az értékesítés, innováció, tudásmenedzsment, pénzügy fontosabb területeiről is. Az egyes szekciók elnöki tisztjét elismert hazai és külföldi kutatók töltötték be. A konferencia a Gazdaság- és Társadalomtudományi Karon az 1990-es években elkezdett konferencia sorozat méltó folytatása volt.

Dr. László Villányi  
Dean / dékán



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## AGRICULTURAL COOPERATIVES AND THEIR DEVELOPMENT AFTER THE TRANSFORMATION

LAZÍKOVÁ, JARMILA – BANDLEROVA, ANNA – SCHWARCZ, PAVOL

### Abstract

Agricultural cooperatives in Slovakia still represent the most important legal form of enterprises in agriculture. Chosen indicators of financial analysis and indicators of revenues as calculated to hectare of agricultural land show that the transformed agricultural cooperatives in Slovakia are able to keep in step with newly created business companies. The paper tries to answer the question why the agricultural cooperatives in Slovakia still maintain their dominant position in agricultural business while in other countries of Central Europe agricultural cooperatives play only an insignificant role.

**Keywords:** enterprise forms, land use, land price, profitability indicators

### Introduction

The agricultural cooperative as a legal form of enterprise has a long tradition in Slovakia. The first cooperative of this form was set up in Slovakia as early as in 1845 (Martuljak, 1995). It was of great importance to small producers in the growing free market at the beginning of the twentieth century. According to Demo (2001), the cooperative was to protect them against a pressure of stronger competitors in the market. Cooperatives along with state farms even kept their dominant position during the period of centrally planned economy in 1948-1989, although the idea of cooperative movement deformed substantially. In 1990 the process of transformation of the whole national economy to the socially and ecology-oriented market economy was launched, which also had a significant impact on agriculture. Agricultural cooperatives have started the long-term transformation process. While state farms cooperatives as a business structure of agricultural enterprises are slowly disappearing, agricultural cooperatives have succeeded in justifying their dominant position in terms of farming agricultural land even among newly created agricultural entities such as business companies or private farmers. In the neighbouring Czech Republic, by contrast, business companies are coming to the fore (a 44.8% share in agricultural land), while the agricultural cooperatives manage only 25.3% of land (Green Report of the Czech Republic, Ministry of Agriculture 2004). The agricultural cooperatives in Hungary are reported to own even less agricultural land, only 8.3 % (CSOH, Budapest, 2003). In Slovakia, the agricultural cooperatives are currently managing over 44% of a total acreage of agricultural land (Green Report 2006).

### Material and methods

The work is based on the legal regulations amending the transformation of agricultural cooperatives, the material obtained from the Slovak Statistical Office, the Slovak Ministry of Agriculture, Real Estate Cadastre and Company Register, the documentation obtained from the Institute for Agriculture and Food Economy Research, the ideas of home and foreign experts about the area in question, as well as on the results of research conducted by the Law Department of the Slovak Agricultural University in Nitra within the project VEGA no. 2570/05 as well as VEGA no. 1/46/49/07. In order to achieve the targets, we examined in details the legal regulations used as the primary resource for implementing the transformation process of agricultural cooperatives. Subsequently, statistical indicators of the structure

development of agricultural cooperatives, rights in agricultural land property and use, and the employment in agricultural cooperatives were analysed and compared to other legal forms of running business in Slovak agriculture. Chosen indicators of the financial analysis were used to compare the economic situation of different forms of agricultural enterprises.

Return on gross capital:  $RCK = \frac{PROFIT + ir(1 - tax)}{GrossCapital}$ ,  $ir$  – interest rate;  $tax$  – income tax rate;

Return on equity capital:  $RVK = \frac{PROFIT}{EquityCapital}$ ;

Return on fixed assets:  $RZI = \frac{PROFIT}{ZI}$ ;  $ZI$  – fixed assets

Return on revenues:  $RT = \frac{PROFIT}{REVENUES}$ ;

Return on added value :  $RPH = \frac{PROFIT}{PH}$ ;  $PH$  – added value

Return on total costs:  $RCN = \frac{PROFIT}{CN}$ ;  $CN$  – total costs

Total profitability of gross capital:  $UVCK = \frac{Total\ Revenues}{GraossCapital}$

## Results

### *1. The impact of legislative changes after the year 1990 on the position and function of agricultural cooperatives*

The starting point for implementing the structural changes to agriculture was first of all legislation changes. After 1990 the legal regulations were adopted through which the restitution of property, transformation and privatisation in the agricultural sector were carried out. As a result of the transformation of agricultural cooperatives, a transformation project was approved, whose part was also the decision on further existence of the cooperative, which could be changed into a business company or to adopt to a new legal form of cooperatives according to the new Commercial Code. From the statistical data relating to the transformation period it follows that the majority of cooperative members decided to continue a cooperative form of enterprise.

Another result of the transformation process was the fact that the property of original agricultural cooperatives was divided among entitled persons in accordance with the transformation laws. Among them were not only the members of the cooperative but also previous landowners, who were returned their property within restitution and the majority of which did not belong to the cooperative's membership. It means that a big part of the property of cooperatives was given to persons without previous property relationship or another legal relationship with the cooperative. It is due to the legal regulations that we can state that after 1992 two groups of agricultural cooperatives came into existence in Slovakia: 1) cooperatives which have not undergone the transformation process (set up as new legal entities according to the new Commercial Code 513/1991 Coll. after 1992), their initial conditions being better

as they did not begin farming as indebted entities and 2) cooperatives which have undergone the transformation process (set up before 1992). Thus, the situation when the persons that are not members of the cooperative have the right of its property is disadvantageous to both parties involved. On the one hand there are entitled persons who are not members of the cooperative, although they have the right of cooperative's property but they cannot interfere with managing the cooperative, and on the other one there are members of the cooperative without absolute rights of the cooperative's property (Bandlerová 2001). The current status of agricultural cooperatives by region is presented in Table 1:

Table 1 Status of agricultural cooperatives by Business register as to 28 February 2006

Locality	Nitra	Žilina	Trnava	Trenčín	Prešov	Košice	Bratislava	Banská Bystrica	Total
Total	124	61	98	53	106	115	34	102	693
Established before 1992	110	43	67	45	72	72	30	78	517
Established in 1992 and later	14	18	31	8	34	43	4	24	176

Source: Business Register ([www.orsr.sk](http://www.orsr.sk))

In the last years (2000-2006) the entrepreneurs who decided to run a business in the agricultural sector in Slovakia have mostly chosen some form of business companies as a form of enterprise, or they have started as private farmers. Only a few entrepreneurs have taken a decision to set up the cooperative in order to carry agricultural business. Our statement is based on the results obtained from the Slovak Company Register. Only four agricultural entities in Slovakia have preferred the cooperative as a form of enterprise over 2002–2006, and in some regions (Nitra and Bratislava regions) no agricultural cooperatives were established in the said period of time. The results of our study showed that these few agricultural cooperatives largely came into existence because of division, or a merger of hitherto agricultural cooperatives.

There is still a question why the agricultural cooperatives in Slovakia have maintained their dominant position in the market, as compared to other countries of Central Europe. Not only their number (598) but also a total acreage of agricultural land they farm (817,138 ha, i.e. 44.8%) (Green Report of the Slovak Ministry of Industry 2006) confirm that the agricultural cooperatives in Slovakia have remained one of the most important forms of land business up till now.

Is this situation a consequence of the absence of knowledge and of experience of managers of other forms of entrepreneurship? Is it caused by doubt, fear of responsibility, entrepreneurial risk or failure, a lack of resources to start business or is it the question of people's character? It is obvious that in the first years of a market economy in Slovakia it was due to ignorance of rules and problematic, finance- and time-demanding overcoming of barriers to start private business as well as to a lack of experience of entrepreneurship and last but not least unwillingness to give up advantages which present jobs offer. It is a fact that it is impossible to change the thinking of people influenced by a 40-year period of centrally planned economy during a night. In the 1990s, it was easier to continue with the established form of the cooperative as a form of entrepreneurship and wait how the situation will develop later. Indeed, many cooperatives were booming that time, especially those farming larger land areas (Námerová 1997).

According to the results achieved within VEGA 2570/05 project and project VEGA no. 1/46/49/07, the dominant position of cooperatives in the agricultural sector is influenced by the disintegration of property rights of agricultural land in Slovakia as well as by the unsettled restitution process and insufficiently developed agricultural land market. The fact that in Slovakia there are about 12-15 owners per less than hectare of agricultural land (0.45 ha) and there is 20% of agricultural land belonging to unknown owners, i.e. unidentified land (Bandlerová et al., 2005) causes that a new business entity showing an interest in land business has to enter into a contract of lease and/or a contract of sale with more owners. This process is time demanding and mainly finance demanding, as this fact results in increasing transaction costs. According to Swinnen and Ciaian (2003), transaction costs are costs of searching agricultural land owners, costs invested in talks and making a contract, as well as costs of separation of purchased land, which has been farmed by the cooperative, or another agricultural enterprise till now. Also, it is necessary to point out that the contract is relatively invalid if it is not made with all landowners so it can be impugned, thereby causing considerable uncertainty about business.

## **2. Cooperatives shares**

System of cooperative shares was established by amendment of transformation law no: 264/1995 Coll. Legislator reacted to non-convenient situation – decreasing of cooperative's net capital and problematic coverage of nominal value in transformation projects. Property participations of authorized persons – non-members of cooperatives were capitalized by system of cooperative shares.

Cooperatives were obliged to issue cooperative shares until the 30.6.1996. In case that agricultural cooperative has not issued cooperative shares until the end of the year 2005, authorized persons as alienee of debt can submit proposal for liquidation of cooperative to the court. Court can decide on abolishment of cooperative and issue an order to liquidation.

Eligible for emission of cooperative shares are persons who:

- have property share in cooperative which raised from voluntary or non-voluntary entering of property to former single agrarian cooperatives. Cooperative shares can be issued only to persons who have proved ownership to property share after transformation process, and
- opened so called „Asset account“ in Central Securities Depository of the Slovak Republic. This account had to be opened before emission of cooperative shares by relevant cooperative. Registered letters and advertisements in newspapers noticed shareholders. Relevant property accounts could have been established at security traders who are almost all banks in SR.

Shareholders who have not established account lost opportunity to get cooperative share. There is no possibility to register property share without asset account. If there is no cooperative share in ownership of stakeholder he has not opportunity to participate at meetings of members and to handle with cooperative share (sale, donation). At the same time he loses also right for share in profit. On other hand he does not lose property in cooperative, e.g. land, which is in use of cooperative.

Many people did not take an advantage of gaining the cooperative shares from the reason that fees for establishment and administration of an asset account in commercial banks are very high – up to 500 Sk/year. Since revenues from cooperative shares are often minimally or does not reach amount of bank fees people does not have interest to get cooperative shares.

There are only rough estimations on situation how cooperatives accomplished obligation to the authorised persons. Central Securities Depository of the Slovak Republic had in evidence in September 2005 altogether 583 emissions of cooperative shares issued by 505 cooperatives. Nominal value of issued cooperative shares was more than 19,7 mld. Sk.

Cooperatives shares are not being soled at securities market but they are traded privately between people who are interested in purchase or selling of cooperative shares. Also foreigners could buy cooperative shares. Prices for cooperative shares are only at level of 15-30% of their nominal value. In most cases there is a transfer between cooperative and stakeholder. Trade with cooperative share is in spite of low price minimal. Purchase of cooperative share (by cooperative or stakeholder) has been realised in app. 20% of cooperatives in SR. Trade with cooperative shares is also influenced by local conditions, mainly mentality and social situation of people. Changes in property proportions inside the member foundation are often result of transactions with cooperative shares. Up to now there is no real picture on actual property structure, but it is being changed to benefit of cooperative members who buy cooperative shares from non-members of cooperatives.

Table 2 Registration of cooperative shares from 15.3.1999 to 30.9.2005 (in pcs)

Status to date	Number of cooperatives – issuer of cooperative shares	Phase of elaboration			
		Assigned Identification number of issuer	Preparation of contract with Central Securities Depository	Delivering of materials	Issued cooperative shares–assigned to account
15.3.1999	835	193	83	382	177
29.3.2000	839	152	81	314	292
30.4.2001	839	135	75	266	363
31.3.2002	832	135	70	219	408
30.9.2002	826	106	72	224	424
27.11.2003	620				654
30.9. 2005	505				583

Source: Association of cooperatives and trading companies

### 3. Economic standing of the agricultural cooperatives in Slovakia and their functions in a market economy

Agricultural cooperatives have undergone a dynamic change not only from the viewpoint of the legislative process but also in terms of structural changes to the agricultural sector. Figure 1 illustrates the development trend in a number of agricultural cooperatives and average land area farmed by cooperatives in a period covering 1970 –2005.

Until 1989 agricultural cooperatives were one of two important forms of land farming. After 1989, due to gradual privatisation, state farms managing land were liquidated, or changed in new, superseding legal forms of entrepreneurship; however, these were set up only after new legal regulations governing business companies entered into the Commercial Code 513/1991 Coll. In the first years of its effectiveness companies made an unimportant percentage of land farming enterprises. Agricultural cooperatives dominated unequivocally in this period. A comparison of the situation in the Czech Republic revealed that as early as in 1998 the

agricultural cooperatives managed only 34.5% of agricultural land while business entities did over 40%.

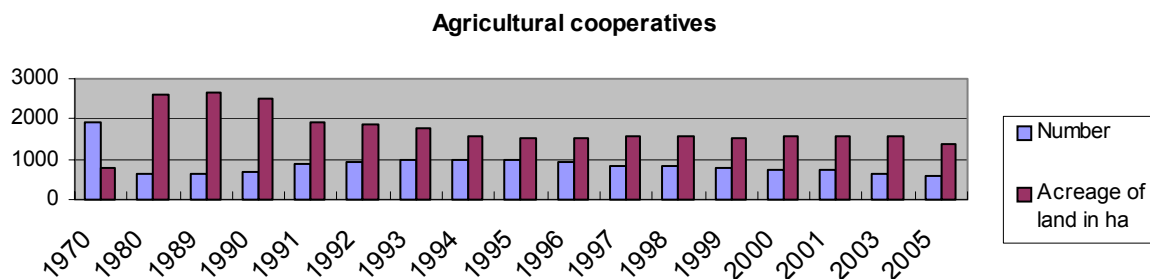


Figure 1 Agricultural cooperatives

Source: Green Report of the Slovak Ministry of Agriculture, 1996 – 2006

As shown in Figure 2, a share of both legal forms of enterprises managing agricultural land in Slovakia became balanced over time. Since 1996, a share of business companies in land management has started to increase and today they seriously attack the dominant position of agricultural cooperatives, although after a 10-year competitive struggle they have not succeeded in taking over the first place of the agricultural cooperatives. It will probably take just several years for business companies and/or private farmers to overtake the dominant position in land managing, as it is the case in other countries.

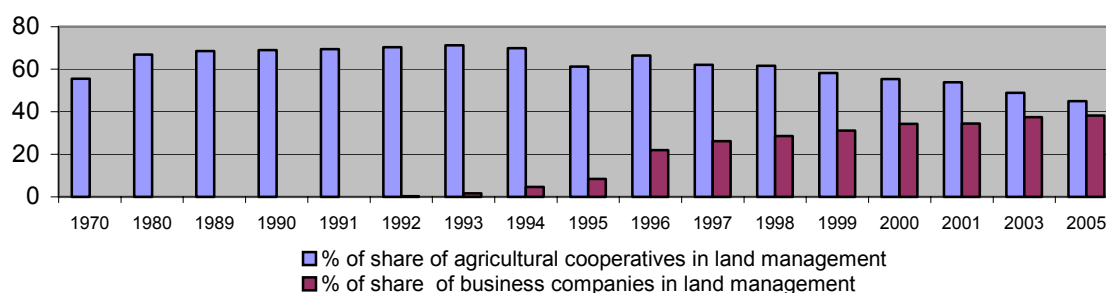


Figure 2 Share of agricultural cooperatives in land management

Source: Green Report of the Slovak Ministry of Agriculture, 1993 – 2005

### 3.1. Income of agricultural cooperatives

The development of profitable and loss making enterprises under legal form of entrepreneurship in legal persons is illustrated in Figure 3. As expected, a proportion of loss making cooperatives was the highest during the transformation process at the beginning of the 1990s. In the following period, a proportion of profitable and loss making agricultural cooperatives settled down on a 50:50 ratio, approximately; a number of profitable cooperatives did not start increasing until a new decade began. Business companies started to be established as late as after 1992, a number of profitable companies being prevailing. There were no substantial changes in this ratio during the 1990s. They appeared after the year 2000 when a share of profitable companies increased.

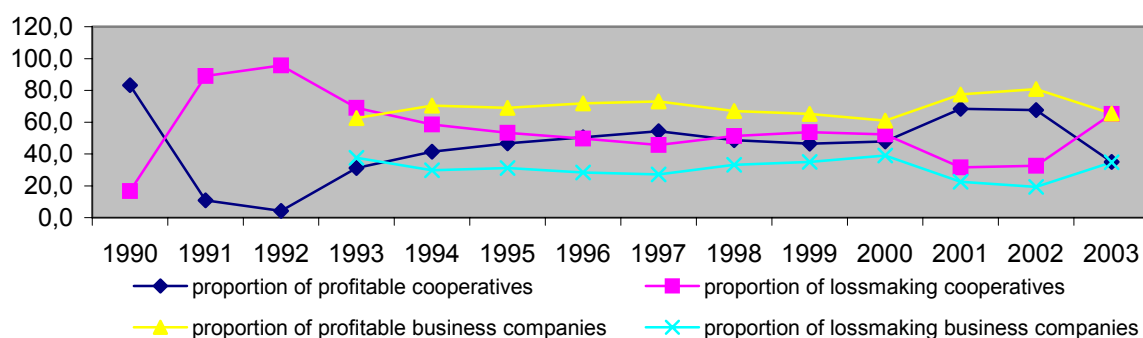


Figure 3 Development of profitable and loss making enterprises by legal form of entrepreneurship

Source: Green Report of the Slovak Ministry of Agriculture, 1996 – 2006

### 3.2. Profitability indicators of agricultural enterprises

Enterprises try to gain as high profitability values as possible. We may state that the situation improved significantly in 2004, this statement being also supported by a positive economic result. Values of different kind of profitability showed an increase last year.

Table 3 Profitability indicators

Indicator	2003	2004	Difference
All agricultural enterprises			
Total capital profitability	-0,025	0,024	0,049
Own capital profitability	-0,052	0,029	0,081
Fixed assets profitability	-0,108	0,068	0,176
Revenue profitability	-0,050	0,030	0,080
Added value profitability	-0,245	0,124	0,369
Final cost profitability	-0,042	0,025	0,067
Aggregate profitability of total capital	0,652	0,647	-0,005
Agricultural cooperatives			
Total capital profitability	-0,048	0,011	0,059
Own capital profitability	-0,071	0,009	0,080
Fixed assets profitability	-0,162	0,023	0,185
Revenue profitability	-0,046	0,006	0,052
Added value profitability	-0,391	0,042	0,433
Final cost profitability	-0,081	0,011	0,092
Aggregate profitability of total capital	1,140	1,172	0,032
Business companies			
Total capital profitability	0,009	0,045	0,036
Own capital profitability	-0,004	0,080	0,084
Fixed assets profitability	-0,006	0,172	0,178
Revenue profitability	-0,002	0,045	0,047
Added value profitability	-0,012	0,268	0,280
Final cost profitability	-0,002	0,039	0,041
Aggregate profitability of total capital	0,843	0,819	-0,024

Source: Our calculations

Table 4 presents revenues of agricultural cooperatives and business companies from sales of their own products and services per hectare of agricultural land as well as a share of plant and animal production and other activities in the total incomes of agricultural enterprises.

In the period 1991–2003, the total revenues per ha agricultural land in the agricultural cooperatives amounted to 19,248 SKK on average, which was nearly 1,000 SKK less than in business companies. A proportion of plant production in the total revenues was 33.18% on average in comparison with 37.25% in business companies. The revenues from animal production made as much as 48.39%, which is 5 % more than in business companies (43.09%)? A share of other business activities in the total revenues was the same in both types of agricultural enterprises; it made 18.30%. From the above-mentioned data it follows that the animal production was of the utmost importance to agricultural enterprises, followed by plant production and other business activities. Agricultural production seems to be the highlight in agricultural cooperatives in the nearest future and other activities will fulfill only a complementary function in terms of revenue and profit formation.

Table 4 Development of revenues by subject of activities of agricultural enterprises

Year	1991	1992	1996	1997	1998	1999	2000	2001	2002	2003
<b>Agricultural cooperatives</b>										
Revenues from sales of own products and services (SKK.ha <sup>-1</sup> agricultural land)	19202	17134	18188	18850	18493	17985	17915	20823	22710	21178
- Revenues from plant production, %	28,43	33,99	38,16	35,71	32,57	33,34	29,60	31,93	33,46	34,62
- Revenues from animal production, %	42,97	42,87	43,34	46,24	49,26	50,18	53,54	51,94	52,23	51,36
-Revenues from other activities	28,6	23,14	18,5	18,05	18,17	16,48	16,86	16,13	14,31	14,02
<b>Business companies</b>										
Revenues from sales of own products and services (SKK.ha <sup>-1</sup> per ha)	-	-	19829	21850	21159	18036	17715	19828	21374	21239
- Revenues from plant production, %	-	-	41,68	34,66	33,49	35,84	32,72	39,92	40,97	38,68
- Revenues from animal production, %	-	-	45,87	46,69	45,32	39,79	45,87	42,36	41,81	36,97
-Revenues from other activities	-	-	12,45	18,65	21,19	24,37	21,41	17,72	17,22	24,35

Source: Ambrózyová et al. 2003; our calculations

## Conclusions

Chosen indicators of financial analysis and indicators of revenues as calculated to hectare of agricultural land show that the transformed agricultural cooperatives in Slovakia are able to keep pace with newly created business companies. To carry agriculture business in the form of a cooperative is still one the most important forms of land managing despite the fact that a number of entrepreneurs willing to run a cooperative in the agricultural sector are minimal. There are more reasons for this attitude.

According to the results of research, the dominant position of cooperatives is influenced by the situation in the disintegration of right of agricultural land ownership, which makes signing a contract of sale or of lease complicated, by the process of restitution, which has not been settled yet, as well by undeveloped land market. In the first years of a market economy it was also ignorance of rules, the problematic time- and finance-demanding way of overcoming barriers to starting private business, a lack of experience of entrepreneurship as well as unwillingness to give up advantages offered by current job. It is the fact that it is impossible to change the thinking of people affected by a 40-year centrally planned economy during „a

night.. Despite that fact that the number of agricultural cooperatives and land acreage they manage are declining, it is obvious that the agricultural cooperatives in Slovakia will perform an important function of producers of agricultural and food commodities. Also, they play and will play a growing role in the area of social and ecological functions in rural areas and in the sphere of other non-agricultural activities as well.

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