

# Analysis of the selected problems of agricultural business entrepreneurship in Slovakia

## *Analýza vybraných otázok podnikania poľnohospodárskych podnikov na Slovensku*

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**Abstract:** Even ten years after the revolution in 1989, Slovak agriculture is characterized by the predominant position of cooperatives. There were shifts towards other types of agricultural entrepreneurship, and some of these trends we documented in our article, based on the data gained by surveying agricultural enterprises. We drew a conclusion that cooperatives are more labor demanding. This also means that they still preserve a social role as a main employer in rural areas. Our paper also differentiates between Southern and Northern (less favorable for agriculture) regions, represented by the Nitra and Žilina region, respectively. We examined soil quality, labor intensity, wages, and finally main crops yields in these two regions.

**Key words:** cooperative farms, labor intensity, wages, official price of land

**Abstrakt:** Aj desať rokov po zmenách, ktoré nastali v roku 1989, v slovenskom poľnohospodárstve pretrvávajú dominantné postavenie poľnohospodárskych družstiev. Avšak došlo k niektorým závažným posunom k iným typom hospodárenia na pôde. Príspevok sa zaoberá práve trendmi, ktoré dokumentuje na základe údajov získaných dotazníkovým prieskumom poľnohospodárskych podnikov. Dospeli sme k záveru, že poľnohospodárske družstvá sú viac náročné na prácu. Toto však nie je spôsobené len štruktúrou výroby, ale aj tým, že ešte stále si plnia funkciu jedného z najdôležitejších zamestnávateľov na vidieku. Ďalej rozdeľujeme podnikanie v južných a severných oblastiach (keď severné oblasti sú menej priaznivé pre poľnohospodársku výrobu). Tieto oblasti sú zastúpené regiónom Nitra a regiónom Žilina. Skúmali sme kvalitu pôd, produktivitu práce, výšku miezd, a tiež priemerné hektárové výnosy najdôležitejších plodín.

**Kľúčové slová:** poľnohospodárske družstvá, produktivita práce, mzdy, úradná cena pôdy

Nowadays, Slovak agriculture is characterized not only by its problems, but the main factor of its development trends is the enlargement of the European Union (henceforth EU). All the Slovak agriculture evolution variants are based on the assumption of sooner or eventually later entering the EU. Connected with this is an approximation of legal and policy instruments. But at least as important is the pre-accession position of Slovakia. Some aspects of the current situation and its causes in Slovak agriculture are also referred to in this article.

The object of our study is the main production group farming on land in Slovakia, i.e. cooperatives, joint stock companies, limited liability companies. For the purpose of gaining more correct and up-to-date information, we used the survey methodology (more closely about methodology, drawing sample, etc in Bielik et.al. (2002).

### OBJECT AND METHODOLOGY

The purpose of the article is to analyze some aspects of agricultural entrepreneurship in Slovakia. We set up some main questions of agricultural production in Slo-

vakia. What are the aspects of agricultural production in Slovakia? How different are agricultural enterprises according to their legal entity, and according to production regions? What is the current state of agricultural reform in Slovakia? To answer these questions, we used our own sample and compared these results with Slovakian statistics. More accurate information about drawing sample, and its characteristics are to be found in Bielik et.al. (2002).

### RESULTS AND DISCUSSION

There were 801 cooperatives operating in Slovakia and 623 business companies in year 1999. About 83% of business companies were limited liability companies, 16% joint stock companies, less than 1% were other types of companies. Cooperatives were operating most of the agricultural land; 1,228,267 ha (50.24%). More can be seen in Table 1.

In our sample, we included 150 businesses in two regions. These regions represented different production conditions in Slovakia. On one side, it was the Nitra re-

gion with Slovakia's best production conditions, favorable climate, good soil, etc. On the other side, it was the Žilina region with worse conditions, colder climate, hilly relief, bad soil; representing farming in marginal conditions. The sample consisted of 120 cooperatives and 30 business companies.

An average business in Slovakia is farming 1,487 ha of agricultural land (after excluding private farmers). Cooperatives are farming on 1,533 ha of agricultural land in average. Business companies are smaller; in average farming 1,022 ha of agricultural land. Average acreage in the sample was 1,746 ha, that is larger than Slovakia average. But the ratio between cooperatives and business companies was preserved; cooperatives are operating 1,872 ha and business companies 1,241 ha.

In the Nitra region, it was 71 cooperatives and 17 other type of commercial farming entities. Farming in better conditions, according to our survey, is characterized by higher differentiation of subjects; cooperatives are larger (1,978 ha) and business companies are smaller (952 ha). This is caused by better conditions. Cooperatives were not forced to change their farming there, as were cooperatives in less favorable regions. So cooperatives preserved their size and the shift to other types of farming entities was not that considerable. This also did not create space for business companies. Thus, they are smaller than in other regions.

In the Žilina region, the trend was opposite, as we could assume from what we have already mentioned. Here we can see the differentiation less noticeable, cooperatives having 1,719 ha and business companies 1,618 ha.

Agricultural production is more labor intensive in the Nitra region. In the Nitra region, labor intensity in cooperatives is more than twice as high as in business companies. The reason is that cooperatives have more diverse plant production, but the main reason is the lack of animal production at a number of business companies.

In the Žilina region, labor intensity is less diverse; this is caused by worse conditions for plant production, so most of the companies have animal production, which is more labor intensive than plant production. Differences between the two regions come out again from the production area. In the northern part (the Žilina region), there are pastures and meadows used for sheep and cattle, while in the south, there is more intensive production and a high amount of pigs and poultry. More exact data are in Table 2.

Average administrative price of cultivated land varies in both regions, and documents different conditions of both regions. In the Nitra region, average administrative price (based on fertility of land) is 7 times higher than in the Žilina region (70,707 SKK/ha; 11,420 SKK/ha, respectively). Average price of the land in the sample was 45,871 SKK/ha. This is documented in Figure 1.

Table 3 documents average monthly wages of agricultural workers. Average wage in Slovak agriculture was 8,392 SKK/month in 1999. In our sample, the average was higher, reaching 8,997 SKK/ha. Monthly wages in agri-

Table 1. Structure of Slovak agricultural businesses, and sample distribution according to legal entity (excluding individual private farmers)

	Number of businesses	Acreage agricultural land (ha)	Average acreage per business (ha)
<i>Slovakia</i> (without SHR <sup>1</sup> )	1 496	2 224 102	1 486.7
– cooperatives	801	1 228 267	1 533
– business companies	623	655 680	1 052
– others	72	340 155	–
<i>Sample total</i>	150	261 872.5	1 745.8
– cooperatives	120	224 648.7	1 872
– business companies	30	37 223.8	1 240.8
<i>Nitra region</i>	88	156 630.7	1 779.9
– cooperatives	71	140 443	1 978
– business companies	17	16 187.7	952.2
<i>Žilina region</i>	62	105 241.8	1 697.4
– cooperatives	49	84 205.7	1 718.5
– business companies	13	21 036.1	1 618.2

1) SHR is Slovak abbreviation for individual private farmers

Table 2. Share of agricultural employees according to legal entity

Legal entity	Number of employees (total)	Share (%)	ha per employee	Employee per 100 ha
<i>Slovakia</i>	90 805	100	24.5	4.08
out of it:				
– cooperatives	62 837	69.2	19.5	5.12
– business companies	25 794	28.4	25.4	3.93
– others (state farms, ..)	2 174	2.4	156.5	0.64
<i>Sample total</i>	16 462	100	15.9	6.29
out of it:				
– cooperatives	14 672	89.1	15.3	6.53
– business companies	1 790	10.9	20.8	4.81
<i>Nitra region</i>	10 670	100	14.7	6.81
out of it:				
– cooperatives	10 119	94.8	13.9	7.21
– business companies	551	5.2	29.4	3.40
<i>Žilina region</i>	5 792	100	18.2	5.50
out of it:				
– cooperatives	4 553	78.6	18.5	5.41
– business companies	1 239	21.4	17.0	5.89

culture in the Nitra region were about 10% higher than in the Žilina region. We can assume that this is caused by higher price of labor in the Nitra region, as here is a lower unemployment rate; and the type of production is more labor intensive. Next to fulltime workers, part-time workers are an important source of labor especially for agriculture. Part-time workers received 3,415 SKK per month,

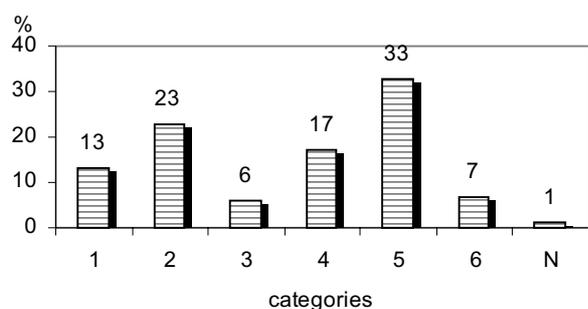


Figure 1. Average administrative price of cultivated land

Categories: 1 = up to 8 000 SKK; 2 = 8 001 to 15 000 SKK; 3 = 15 001 to 30 000 SKK; 4 = 30 001 to 60 000 SKK; 5 = 60 001 to 90 000 SKK; 6 = 90 001 SKK and more; N = not applicable

Table 3. Average monthly wages of agricultural workers in Slovakia

	Slovakia	Sample total	Nitra region	Žilina region
Average monthly wages				
– fulltime workers	8 392	8 997	9 354	8 442
– part-time workers	–	3 415	3 598	2 887

Table 4. Main crops yield in tons per hectare

Crop	Slovakia	Sample total	Nitra region	Žilina region
Wheat	4.0	4.9	5.2	3.3
Maize	6.0	6.4	6.4	5.4
Barley	2.9	4.0	4.0	4.2
Sugar beet	40.8	47.5	47.5	–
Potatoes	14.3	13.7	14.8	13.5
Oil seeds	1.7	2.4	2.3	4.6
Legumes	1.92	2.4	2.4	–

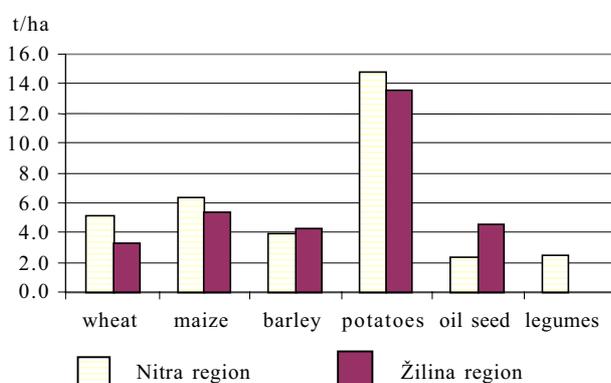


Figure 2. Average yields of main crops per hectare

in average. Here is the difference between regions higher (Nitra region workers received about 20% more).

Table 4 and Figure 2 depict the average yields of main crops, for Slovakia and sample as well, and compare both regions. As could be seen on it, the Nitra region has favorable conditions for almost all main crops. The exception is barley. Sugar beet and legumes were not produced in the Žilina region. Oil seeds production in the Žilina region is higher because of the structure of oil plants grown.

## CONCLUSION

According to the data we gathered in the survey we could draw a conclusion, that even if cooperatives are the predominant form of agricultural entrepreneurship, their importance is decreasing. Cooperatives, having the largest acreage of other relevant legal entities, are the most labor demanding, so least labor effective. Their size differs on conditions, when in northern region business companies have almost the same acreage. So we can say than in less favorable conditions the reform of agriculture is farther.

## REFERENCE

- Bielik P., Pokrivčák J., Jančíková V. (2002): Microeconomic analysis of households restructuring in the pre-accession to the EU. In: *Agric. Econ.*, 48, (2): 49–54.
- Dvořák M. (2001) Faktory diferenciácie odčerpateľných zdrojov družstiev ako formy podnikania. In: *Zborník z medzinárodnej vedeckej konferencie*. SPU Nitra, s. 63–69; ISBN 80-7137-973-5.
- Hutník F. (2000): Izolácia poľnohospodárstva na potravinovej vertikále. Working papers, PÚ Bratislava, 33 s.; ISBN 0862-9137.
- Gozora V. (1996): Podnikový manažment. SPU Nitra, 191 s.; ISBN 80-7137-341-9.
- Gurčík E. (2000): Faktorová analýza rozkladu hospodárskeho výsledku vo vybranom súbore podnikov. In: *Agrárna politika, ekonomika a právo – zborník MVD 2000*, SPU Nitra, s. 262–267; ISBN 80-7137-716-3.
- Kuzma F. (2000): Zmeny štruktúry poľnohospodárskej výroby na Slovensku. In: *Zborník MVD*, SPU Nitra, s. 105–112; ISBN 80-7137-716-3.
- Pokrivčák J., de Gorter H. (2000): Integration of Central and East European countries into the EU: a public choice approach. In: *Acta oeconomica et informatica 2*, Slovak Agricultural University, Nitra, pp.748–752.
- Serenčes R. (2000): Agrárna a spotrebiteľská stabilita vybraných krajín CEFTA. In: *Zborník vedeckých prác*, SPU Nitra, s. 35–42; ISBN 80-7137-760-0.
- Podolák A., Alemu D. (1998): Analýza dopadov vybraných nástrojov agroobchodnej politiky SR. In: *Ekonomické rozhľady*, EU Bratislava, (3): 271–278.

Zoborský I.M. (2000): Ekonomika výroby vybraných druhov drobného ovocia. In: Zborník MVD, SPU Nitra, s. 87–93; ISBN 80-7137-716-3.

Zentková I. (2000): Vplyv trhového prostredia vybranej komodity na správanie sa trhových subjektov. In: Zborník MVD, SPU Nitra, s. 460–466; ISBN 80-7137-716-3.

Arrived on 13th March 2002

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