

Agricultural land market in Slovakia in years 2001–2008

Trh s poľnohospodárskou pôdou na Slovensku v rokoch 2001–2008

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Abstract: The article presents the results from the monitoring analyses of the buying/selling prices of agricultural land in accordance with the deposited contracts in the Real Estate Cadastre in years 2001–2008. Agricultural land sales, land areas and market prices are observed and evaluated under the size structure of the sold estates and their anticipated further utilization in the counties Dunajská Streda, Topoľčany, Rimavská Sobota, Liptovský Mikuláš, Michalovce and Svidník and for all observed counties as a whole. By data analyzing and evaluating of the agricultural land purchases/sales, there was taken into consideration the fact that the average price of the sold estates is to a large extent influenced by their size, location and the purpose of further utilisation. The estates of small area characterized as agricultural land are selling for the highest prices, but they already figure in the development studies and the land-use plans of the villages or they are regarded as building estates in the future. Therefore, the sold estates were divided into two categories in accordance with the expected further land utilization. As the estates for further agricultural utilization, there were considered the estates with the area above 1 hectare of agricultural land. In the case of smaller estates, it is assumed that they will be of building, recreational, sporting or other utilization after the landowner change.

Key words: agricultural land market, land area, land price, county, estate utilization

Abstrakt: V príspevku sú prezentované výsledky analýz monitorovania kúpno-predajných cien poľnohospodárskej pôdy podľa zavkladovaných zmlúv v Katastri nehnuteľností v rokoch 2001–2008. Predaje poľnohospodárskej pôdy, výmery a trhové ceny sú sledované a vyhodnotené podľa veľkostnej štruktúry predaných pozemkov predpokladaného ďalšieho využitia predaných pozemkov za okresy Dunajská Streda, Topoľčany, Rimavská Sobota, Liptovský Mikuláš, Michalovce a Svidník a za všetky sledované okresy ako celok. Pri analýze a vyhodnocovaní údajov o predaji a kúpe poľnohospodárskej pôdy bola zohľadnená skutočnosť, že priemerná cena predávaných pozemkov je do značnej miery ovplyvnená ich veľkosťou, polohou a účelom ďalšieho využitia. Za najvyššie ceny sa predávajú pozemky s nízkou výmerou, ktoré sa síce predávajú ako poľnohospodárska pôda, ale v rozvojových zámeroch a územných plánoch obcí už vystupujú alebo sa do budúcnosti s nimi počíta ako so stavebnými pozemkami. Preto boli predané pozemky rozdelené na dve kategórie podľa predpokladaného ďalšieho využitia pôdy. Za pozemky na ďalšie poľnohospodárske využitie boli pokladané pozemky s výmerou nad 1 hektár poľnohospodárskej pôdy. Pri menších pozemkoch sa predpokladá, že po zmene vlastníka budú mať stavebné, rekreačné, športové či iné využitie.

Kľúčové slová: trh s poľnohospodárskou pôdou, výmera pozemku, cena pôdy, okres, využitie pozemku

Monitoring of the agricultural land market prices belongs among the indicators of the economic state in agricultural sector. Land market helps to generate the overall characteristic of agricultural sector in connection with the role of agriculture in the national economy in relation to the institutional factors, predominantly the ownership and user relationship

towards land. Land market development in the next period could be considered based on the analysis of this development, besides international context, and in connection with the assumptions of economic sector development. On the basis of the performed analyses, Matošková and Gálik (2009) state that despite the increased support and full trade liberalisation, we

have substantial reserves from the competitiveness point of view. At the present time, there are several assistance programmes in progress focused on the mentioned issues solutions. According to Chrastinová and Burianová (2009), the achieved results in agriculture after the EU accession show that the sector is characterised by improving revenues owing to the contribution of the European subsidies inflow. The tendency of the business companies' dominance rises under the influence of faster structural changes. There persists the differentiated development of the ownership structure and a more rapid reduction of landowners in business companies than in agricultural co-operatives. The expected further estates utilization is also closely connected with the running process of the agricultural activities diversification. One measure of the Sectoral Operational Programme Agriculture and Rural Development Programme focuses on the agricultural activities diversification. The analysis of the mentioned measure that was carried out by Buday et al. (2009) showed that the largest interest in financial contribution originates in legal entities running business on land and that they want to diversify their own activities towards agri-tourism and rural tourism.

Up to now, the data about the course of market development with agricultural estates, the terms of the estates transactions and the rents of agricultural estates are not available in Slovakia. Just a part of this data is gathered through monitoring of the land market prices development in the selected regions (Buday 2007) that is carried out by the Research Institute of Agricultural and Food Economics in Bratislava.

Problems related with the agricultural land market and the agricultural land price are also discussed in the works of Bandlerová et al. (2005), Lazíková and Bandlerová (2006), Buday and Bradáčová (2008), Gecíková et al. (2008), Némethová and Moravcová

(2009), Hudák and Rovný (2009), Swinnen and Vramlem (2009).

METHODOLOGY AND SOLUTIONS

Monitoring of the actual purchase/sell prices of agricultural land is performed in the counties Dunajská Streda, Topoľčany, Rimavská Sobota, Liptovský Mikuláš, Svidník and Michalovce.

The basic data for the analysis, synthesis and the comparison performance were monitored in the following classification:

- the total data of agricultural land sales from buying/selling contracts relating to agricultural land transfers with the announced deposits into the Real Estate Cadastre in the respective counties with the following information: land class, number of estates, total land area, average buying/selling (market) price of estates;
- data relating to the agricultural land sales in the county in following classification: contract number, total land area, buying/selling (market) price per square metre, name of cadastral region.

For the evaluation purpose relating to the further utilization of sold estates, they were divided into two basic groups on the basis of empirical experiences:

- (1) estates up to 1 hectare area with the assumption that they will be used for non-agricultural utilization (building purposes, recreation, sporting)
- (2) estates above 1 hectare area with the assumption that they will serve for agricultural production

Data transformation and processing were performed using the UNIX operational system, the INFORMIX database system and the SQL structured query language. There were applied the Excel programme analytical tools as well as the SPSS statistical software for the statistical evaluation.

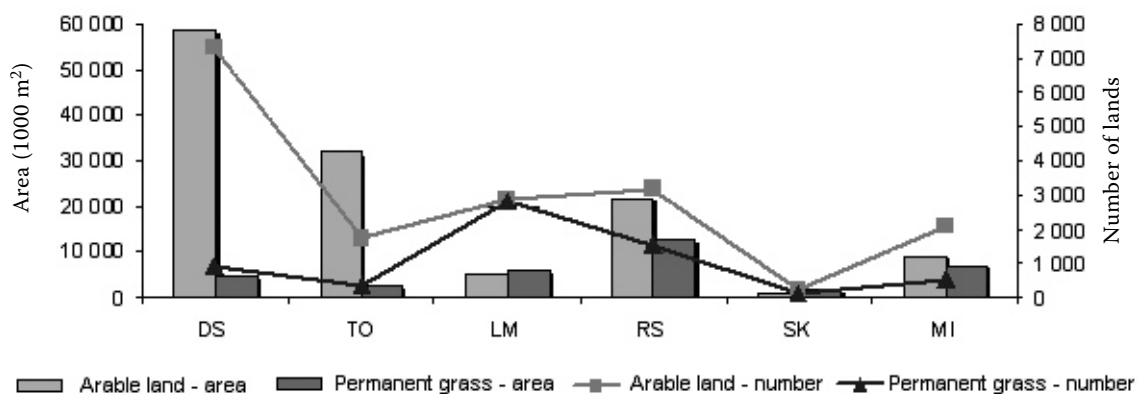


Figure 1. Multiplicity distribution and area of sold agricultural land and permanent grass in 2001–2008

Source: Research Institute of Geodesy and Cartography, own calculations

Table 1. Sold agricultural land area by land class in the selected counties of Slovakia in years 2001–2008

County	Area (m ²)				
	agricultural land	arable land	vineyards	orchards	permanent grassland
Dunajská Streda	75 093 347	58 653 177	11 132 773	509 166	4 798 231
Topoľčany	34 290 496	31 639 632	1 866	99 560	2 549 438
Liptovský Mikuláš	11 123 307	5 177 336			5 945 291
Rimavská Sobota	35 166 604	21 525 538	123 841	714 285	12 802 940
Svidník	2 630 952	629 923		14 138	1 986 891
Michalovce	15 917 776	8 957 183	83 916		6 876 677
Total	174 222 482	126 582 789	11 342 396	1 337 829	34 959 468

Source: Research Institute of Geodesy and Cartography, own calculations

RESULTS – SUMMARY OF KNOWLEDGE ABOUT LAND MARKET IN THE YEARS 2001–2008 IN TOTAL

Number of sold estates and area

During the years 2001–2008, there were sold 24 213 estates in the selected original Slovak counties. According to the land class, there were 17 478 estates with arable land, 280 vineyards, 149 orchards and 6 306 permanent grassland plots (Figure 1). During the observation period of transactions at the agricultural land market, the most estates were sold in the counties Dunajská Streda (7 340), Rimavská Sobota (3 173), Liptovský Mikuláš (2 878), Michalovce (2 108) and Topoľčany (1 723). Minimum estates (256) were sold in the county Svidník.

The total area of the sold agricultural land in the monitored counties during the years 2001–2008 represented 174 222 482 m² (17 422.2 ha). Arable land comprised 72.65% of this total area, the share of permanent grassland was 20.06%, vineyards 6.51% and orchards 0.76%.

The county Dunajská Streda shared with 43% of the sold agricultural land area in the total sold area, the county Rimavská Sobota 20.2%, Topoľčany 19.7%, Michalovce 9.1%, Liptovský Mikuláš 6.4% and Svidník 1.5%.

Likewise with agricultural land, the county Dunajská Streda has the highest share – up to 46.3% – in the total sales of arable land, followed by the counties Topoľčany with 25.0%, Rimavská Sobota 17.0%, Michalovce 7.08%, Liptovský Mikuláš 4.09% and Svidník 0.50%.

The vineyards have been sold in four counties. The highest share of the sold area was utterly in the county Dunajská Streda, 98.15%. The shares of the sold vineyards area ranged 0.02 to 1.09% in the counties Rimavská Sobota, Michalovce and Topoľčany.

The highest share in the total sold orchards area was in the counties Rimavská Sobota 53.39% and Dunajská Streda 38.06%. The sold orchards area shares ranged 1.06 to 7.4% in the counties Topoľčany and Svidník.

The largest amount of the permanent grassland area were sold in the counties Rimavská Sobota 36.6%, Michalovce 19.6%, Liptovský Mikuláš 17% and Dunajská Streda 13.7%. The Topoľčany county

Table 2. Share of the sold agricultural land in the total land area in the county by the land class in years 2001–2008

County	Share in the total land area (%)				
	agricultural land	arable land	vineyards	orchards	permanent grassland
Dunajská Streda	9.55	8.01	85.93	4.74	15.52
Topoľčany	9.41	9.24	0.06	6.15	17.07
Liptovský Mikuláš	2.57	4.61	.	0.09	1.85
Rimavská Sobota	4.26	4.82	3.53	26.29	3.43
Svidník	1.12	0.87	.	0.86	1.23
Michalovce	2.25	1.80	4.02	0.00	3.34
Total	6.12	6.84	53.12	7.42	3.75

Source: Research Institute of Geodesy and Cartography, own calculations

Table 3. Number of sold agricultural land estates by land size in years 2001–2008

Size of estate (m ²)		Number of estates	Share on total number (%)	Land area (m ²)	Share on total land area (%)	Average size of estate (m ²)
Above	up to					
0	100	3 028	12.51	110 814	0.06	37
100	1 000	9 093	37.55	4 413 878	2.53	485
1 000	2 500	4 945	20.42	8 051 773	4.62	1 628
2 500	5 000	2 798	11.56	9 886 472	5.67	3 533
5 000	10 000	1 822	7.52	12 567 486	7.21	6 898
Up to 1 ha		21 686	89.56	35 030 423	20.11	1 615
10 000	20 000	1 223	5.05	16 972 379	9.74	13 878
20 000	50 000	780	3.22	23 952 381	13.75	30 708
50 000	100 000	284	1.17	20 057 808	11.51	70 626
100 000	–	240	0.99	78 209 491	44.89	325 873
Above 1 ha		2 527	10.44	139 192 059	79.89	55 082
Total		24 213	100.00	174 222 482	100.00	7 195

Source: Research Institute of Geodesy and Cartography, own calculations

shared with 7.3% in total sold permanent crops area and the county Svidník 5.6% (Table 1).

During the years 2001–2008, in the monitored counties, there were sold 6.12% of the total agricultural land area. The highest share of the agricultural land area was sold in the production counties of Slovakia, namely Dunajská Streda 9.55% and Topoľčany 9.41%. The lowest area 1.12% was sold in the county Svidník (Table 2).

Size structure of the sold estates

Even though there is not explicitly defined the sale purpose of the deposited cases of estates, the results of the analysis concerning the development in the agricultural land market prices clearly proved that the highest prices was bt the reached estates with a small area. Conversely, the average market price is

decreasing for the estates with a larger cumulative area (Table 3, Figure 2).

The share of estates in the class up to one hectare area was 89.6% in the total number of the sold agricultural land estates. Within the class of estates, the share of estates with arable land was 88.3%, vineyards 88.1%, orchards 90.0% and permanent grassland 91.3%. The share of the sold area in this size category demonstrates the opposite trend, namely agricultural land 20.1%; arable land 21.1%, vineyards 2.06%, orchards 17.8% and permanent grassland 22.4%.

Similarly, the share of the estates in the class above one hectare in the total number of the sold agricultural land estates was 10.4%, i.e. arable land 11.7%, vineyards 11.9%, orchards 10.0% and permanent grass crops 8.7%. However, by these low shares of the estates numbers, the sold area constitutes up to 79.8% of agricultural land, 78.9% of arable land,

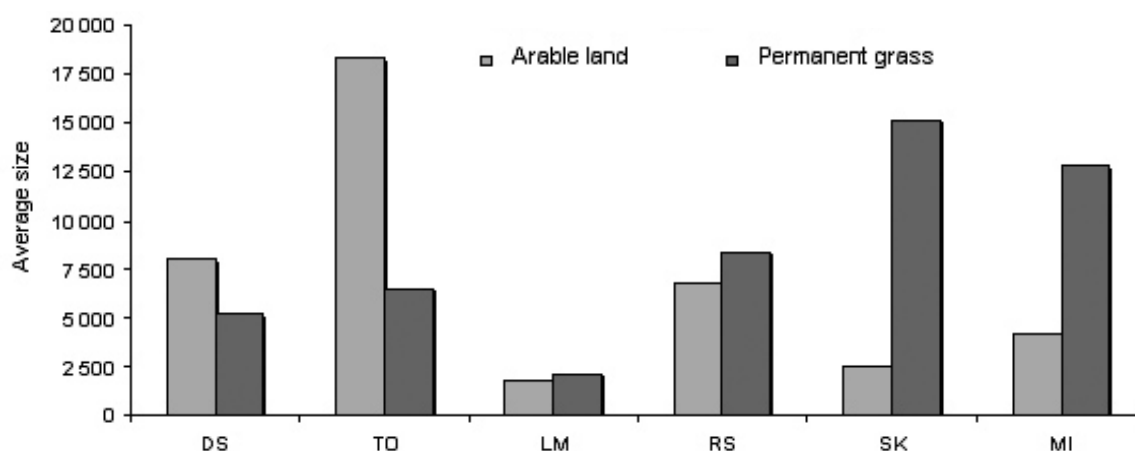


Figure 2. Average size of land sold in 2001–2008 according to districts (m²)

Source: Research Institute of Geodesy and Cartography, own calculations

Table 4. Agricultural land area by land class and the share of area in size intervals in years 2001–2008

Size of estate (m ²)		Arable land		Vineyards		Orchards		Permanent grassland	
Above	up to	(1000 m ²)	%	(1000 m ²)	%	(1000 m ²)	%	(1000 m ²)	%
0	100	74 219	0.06	1 248	0.01	114	0.01	35 233	0.10
100	1 000	3 115 419	2.46	82 954	0.73	42 784	3.20	1 172 721	3.35
1 000	2 500	6 023 057	4.76	76 271	0.67	27 131	2.03	1 925 314	5.51
2 500	5 000	7 735 353	6.11	36 710	0.32	76 334	5.71	2 038 075	5.83
5 000	10 000	9 758 413	7.71	36 067	0.32	92 702	6.93	2 680 304	7.67
Up to 1 ha		26 706 461	21.10	233 250	2.06	239 065	17.87	7 851 647	22.46
10 000	20 000	13 656 192	10.79	66 067	0.58	71 543	5.35	3 178 577	9.09
20 000	50 000	18 351 432	14.50	195 682	1.73	183 342	13.70	5 221 925	14.94
50 000	100 000	15 815 444	12.49	194 132	1.71	155 712	11.64	3 892 520	11.13
100 000	*	52 053 260	41.12	10 653 265	93.92	688 167	51.44	14 814 799	42.38
Above 1 ha		99 876 328	78.90	11 109 146	97.94	1 098 764	82.13	27 107 821	77.54
Total		126 582 789	100.00	11 342 396	100.00	1 337 829	100.00	34 959 468	100.00

Source: Research Institute of Geodesy and Cartography, own calculations

97.9% of vineyards, 82.1% of orchards and 77.5% of permanent grassland (Table 4).

The average market price of agricultural land in years 2001–2008

The average land market price without purpose differentiation of further utilisation

In the years 2001–2008, the average market price of agricultural land sales was 0.74 EUR per 1 square metre in the selected counties. The average price of arable land was 0.89 EUR/m², permanent grassland 0.36 EUR/m², orchards 1.04 EUR/m² and vineyards 0.14 EUR/m².

The data analysis about the average market prices of agricultural land in the selected six counties since the year 2001 till 2008 resulted in the conclusion that

the most expensive agricultural land was in the county Liptovský Mikuláš – 2.78 EUR/m² in the course of the monitored years. The price of agricultural land in the county Dunajská Streda was 0.92 EUR/m², in Michalovce 0.58 EUR/m² and in Topoľčany 0.40 EUR per m². The minimum average price levels of agricultural land were in the counties Rimavská Sobota 0.13 EUR/m² and Svidník 0.18 EUR/m².

The highest average price of arable land was determined in the county Liptovský Mikuláš 4.67 EUR/m². In the county Dunajská Streda, the average price of arable land reached the level 1.09 EUR/m², in the county Michalovce 0.58 EUR/m², Svidník 0.45 EUR per m² and Topoľčany 0.41 EUR/m². The average price of arable land in the county Rimavská Sobota was just 0.14 EUR/m².

Table 5. Average agricultural land market price according to size intervals and land class in years 2001–2008

Size of estate (m ²)		Average price of sold land (EUR/m ²)				
Above	up to	agricultural land	arable land	vineyards	orchards	permanent grassland
0	100	4.56	5.45	14.94	7.04	2.31
100	1000	6.30	7.94	2.53	5.22	2.25
1 000	2 500	1.72	1.90	0.53	1.64	1.20
2 500	5 000	1.28	1.44	0.98	0.59	0.72
5 000	10 000	1.18	1.35	2.40	1.30	0.55
Total up to 1 ha		1.99	2.28	1.68	1.82	1.02
10 000	20 000	0.73	0.80	0.23	0.16	0.45
20 000	50 000	0.71	0.77	1.08	4.07	0.35
50 000	100 000	0.53	0.64	0.21	0.49	0.12
100 000	–	0.24	0.32	0.09	0.18	0.07
Total above 1 ha		0.42	0.52	0.11	0.87	0.17
Total		0.74	0.89	0.14	1.04	0.36

Source: Research Institute of Geodesy and Cartography, own calculations

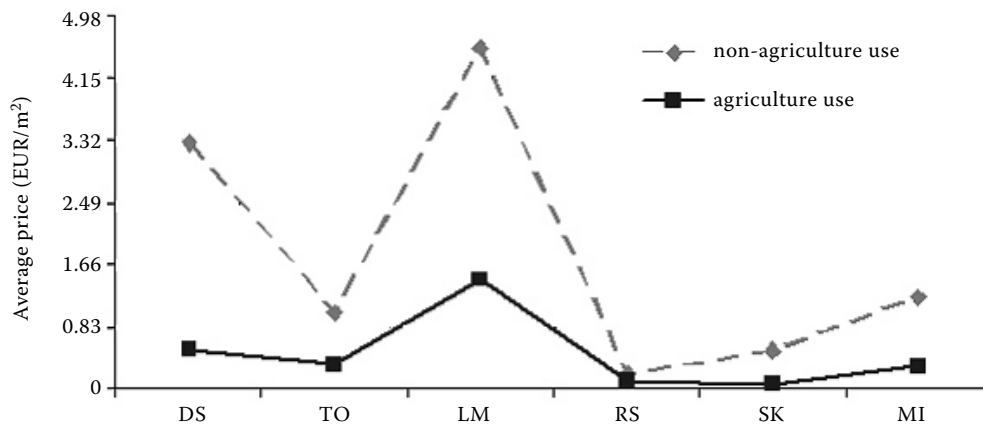


Figure 3. Market price comparison of land according to purpose of further use

Source: Research Institute of Geodesy and Cartography, own calculations

The average market price of vineyards was highest in county Topoľčany 7.99 EUR/m² and county Michalovce 1.42 EUR/m². The vineyards in county Rimavská Sobota were sold for average market price 0.18 EUR/m² and in county Dunajská Streda for 0.13 EUR/m². Highest average market price of orchards was in county Dunajská Streda 2.40 EUR/m². The orchards were sold for 0.38 EUR/m² in county Topoľčany, 0.19 EUR/m² in Svidník and 0.18 EUR/m² in Rimavská Sobota.

Average market price of permanent grass crops reached the highest level in the counties Liptovský Mikuláš – 1.13 EUR/m², Dunajská Streda 0.54 EUR/m² and Topoľčany 0.32 EUR/m². In other counties, the average market price was the following: Michalovce 0.15 EUR/m², Rimavska Sobota 0.11 EUR/m² and Svidnik up to 0.09 EUR/m².

The average land market price by the expected further utilization

Survey of the average land market price levels according to the size intervals of the estates sales and the land class in years 2001–2008 is stated in Table 5.

Estates up to 1000 m² area without the differential occurrence by counties achieved the highest selling

prices. The average land price level was decreasing proportionally to the increasing area. The county Liptovský Mikuláš was the exception where the highest market prices of agricultural land have reached the intervals from 2500 up to 5000 square metres and from 5001 up to 10 000 square metres.

Land sold for non-agricultural purposes at the county level

The comparison of the average land market prices during the years 2001–2008 shows an uneven trend with the assumption of further non-agricultural utilization where the price level moves from 4.54 EUR/m² in the county Liptovský Mikuláš to 0.19 EUR/m² in the county Rimavská Sobota (Table 6, Figure 3).

Land sold for agricultural production utilization

The average market price of agricultural estates with the assumption of further agricultural utilization (with the area above 1 hectare) was the highest in the counties Liptovský Mikuláš 1.45 EUR/m², Dunajská Streda 0.53 EUR/m², Topoľčany 0.32 EUR/m² and Michalovce 0.30 EUR/m². Estates in the county Svidník were sold for the lowest prices – 0.07 EUR per m² (Table 7).

Table 6. Average land market price for non agricultural utilization in years 2001–2008 by counties

Size of estate (m ²)		Dunajská Streda	Topoľčany	Liptovský Mikuláš	Rimavská Sobota	Svidník	Michalovce
Above	up to						
0	100	7.16	2.64	3.69	0.48	0.84	3.11
100	1 000	10.90	5.79	3.70	0.63	1.26	2.83
1 000	2 500	2.46	1.38	3.31	0.25	0.67	1.52
2 500	5 000	1.52	0.64	4.54	0.13	0.36	1.47
5 000	10 000	1.25	0.40	5.43	0.12	0.28	0.62
Up to 1 ha		3.29	1.00	4.54	0.19	0.50	1.22

Source: Research Institute of Geodesy and Cartography, own calculations

Table 7. Average land market price for agricultural utilization in years 2001–2008 by counties

Size of estate (m ²)		Dunajská Streda	Topoľčany	Liptovský Mikuláš	Rimavská Sobota	Svidník	Michalovce
Above	up to						
10 000	20 000	0.72	0.33	3.14	0.12	0.37	1.04
20 000	50 000	0.96	0.26	3.27	0.12	0.06	0.43
50 000	100 000	0.84	0.45	0.12	0.10	0.02	0.14
100 000	–	0.27	0.32	0.13	0.10	0.03	0.12
Above 1 ha		0.53	0.32	1.45	0.10	0.07	0.30

Source: Research Institute of Geodesy and Cartography, own calculations

Interannual comparison of the agricultural land market in the years 2001–2008

Since 2003 till 2006, the agricultural land market had been showing the continuous growth of the sold estates numbers and areas. The most estates and the largest area of agricultural land were sold in 2006, when it comprised almost one quarter of the total number of sold estates (24.2%). The sold area comprised 22.0% of agricultural land jointly for all years. The fall of the number and area of sold estates occurred in 2007.

In 2008, the number of sold estates as well as their area shared by one fifth in the total monitored set of the data transactions in the agricultural land market for the years 2001–2008 (namely 19.8% of the numbers and 20.1% of the area). Compared with 2007, the

number of sales and the sold land area decreased by 2% and 45%, respectively. The counties Topoľčany, Liptovský Mikuláš and Rimavská Sobota shared in fall of the sold estate numbers. On the contrary, the number of sold estates grew in the counties Dunajská Streda, Svidník and Michalovce in comparison with the year 2007.

In 2008, the sold agricultural land area in the county Svidník increased 3.7 times and in the county Michalovce 1.5 times compared to the previous year. Regarding other counties, in 2008 the sold agricultural land area in the county Topoľčany decreased 2.2 times, in Rimavská Sobota 2.1 times, in Dunajská Streda and Liptovský Mikuláš alike 1.4 times (Table 8).

By the purpose differentiation of the further agricultural land utilization, the fact was constantly

Table 8. Development of number and area of sold estates by counties in years 2001–2008

Year	County	Dunajská Streda	Topoľčany	Liptovský Mikuláš	Rimavská Sobota	Svidník	Michalovce
2001	number of lands	813	157	756	97	63	90
	area	14 434 078	1 300 918	1 988 054	2 857 527	91 976	422 889
2002	number of lands	1 095	122	576	130	73	79
	area	9 900 469	1 471 422	1 847 858	222 277	183 419	883 935
2003	number of lands	456	33	75	55	31	38
	area	8 603 281	124 523	108 897	82 492	63 893	132 553
2004	number of lands	632	110	504	347	38	349
	area	11 303 773	1 035 787	860 320	1 379 187	1 533 085	2 419 435
2005	number of lands	2 190	173	857	341	98	974
	area	12 559 187	4 504 255	1 075 095	4 993 239	494 456	3 911 414
2006	number of lands	1 770	992	741	836	14	562
	area	11 188 428	11 116 737	1 747 542	5 134 523	64 233	5 323 817
2007	number of lands	593	322	1 148	1 703	5	241
	area	4 227 508	10 162 796	2 044 447	13 947 109	42 467	1 105 594
2008	number of lands	884	225	1 028	1 280	70	447
	area	2 876 623	4 574 058	1 451 094	6 550 250	157 423	1 718 139
Total	number of lands	8 433	2 134	5 685	4 789	392	2 780
	area	75 093 347	34 290 496	11 123 307	35 166 604	2 630 952	15 917 776

Source: Research Institute of Geodesy and Cartography, own calculations

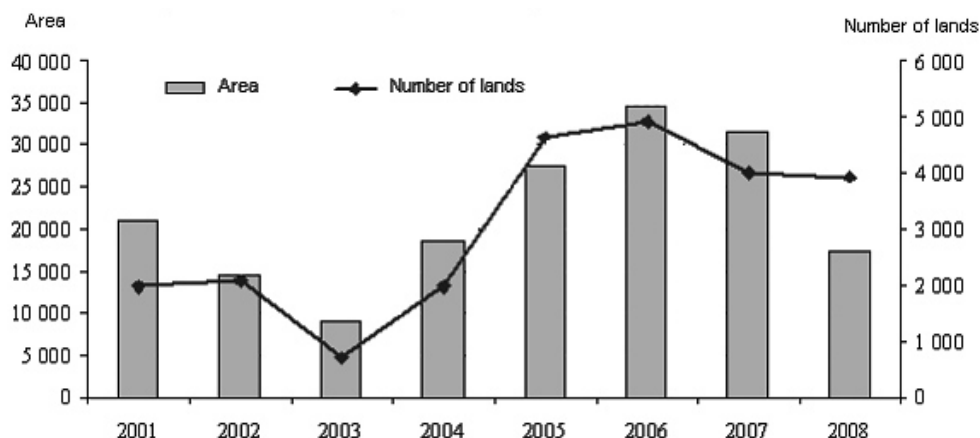


Figure 4. Development of sold land area (thousand m²) and number of lands in 2001–2008

Source: Research Institute of Geodesy and Cartography, own calculations

confirmed that the share of sold estates up to one hectare interval oscillate up to around 90% from the total number of the sold estates. The share fell moderately to 86.6% in 2006, but it rose to 89.0% in 2007. In 2008, it increased by around 1% compared to the year 2007 (Figure 5).

The sold land area shows the opposite trend. In 2001, the share of the agricultural land area sold for non-agricultural utilization represented 9.9% of the total sold area, in 2004, it grew by 19.6% and in 2006 it grew to 24.3%. The share was moderately rising in years 2007 and 2008 and it comprised approximately one fifth of the sold agricultural land assumed for other utilization than the agricultural one.

The average market price development of sold agricultural land

Since 2001 till 2004, the average market price development of the sold agricultural land without purpose differentiation of the further utilisation showed an annual growth. In years 2005 and 2006, there occurred a moderate price decline. In 2007,

we experienced the returned price growth and in 2008, the average price reached its maximum value. Compared with 2001, the price increased 7.7 times (Table 9).

The average market price development of agricultural land for further agricultural utilization shows an uneven trend. Within the counties in 2008, there occurred a multiple growth of the average agricultural land price that was sold without the purpose differentiation of the further utilisation, predominantly in the county Liptovský Mikuláš, where the average price constitutes 100 multiple of the price in the year 2001 (mostly in consequence of the tourism development) and it constitutes 13 multiple of price in the county Dunajská Streda (Table 10).

In 2007, there occurred a fall of the average price of the sold estates in the agricultural most productive county Dunajská Streda to 0.59 EUR/m², i.e. the decrease by 0.38 EUR/m² compared to the year 2005. On the contrary, in 2008 in this county, there happened the returned growth of the average sold estates price to 2.33 EUR/m², i.e. the increase by 1.75 EUR/m²

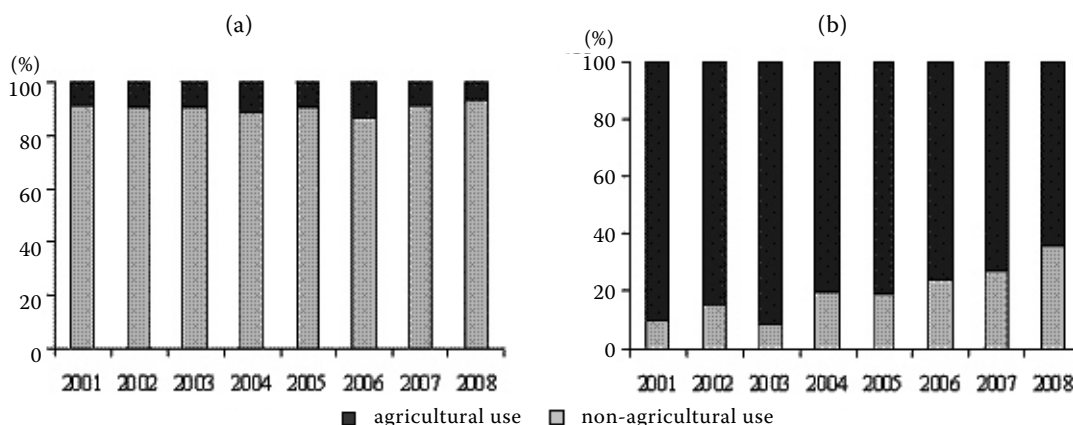


Figure 5. Proportion number of sold (a) and agricultural (b) lands according to purpose of further use

Source: Research Institute of Geodesy and Cartography, own calculations

compared to the year 2007. While in 2007 the price of the sold land in the county Michalovce rose to 0.99 EUR/m² (increase by 0.61 EUR/m² compared to the

year 2006), in 2008 the price repeatedly fell to 0.24 EUR/m² (decrease by 0.75 EUR/m² compared to year 2007) (Figure 6).

Table 9. Average market price development of the sold land by counties without the purpose differentiation of further utilisation in EUR per square metre

Year	Dunajská Streda	Topoľčany	Liptovský Mikuláš	Rimavská Sobota	Svidník	Michalovce	Total
2001	0.31	0.26	0.37	0.02	0.24	0.23	0.27
2002	0.61	0.11	0.25	0.18	0.09	0.15	0.47
2003	0.50	0.45	0.71	0.31	0.28	0.18	0.49
2004	0.73	0.77	1.74	0.24	0.09	0.42	0.65
2005	1.07	0.21	1.29	0.13	0.30	0.28	0.64
2006	1.07	0.27	1.30	0.12	0.49	0.50	0.60
2007	1.84	0.37	4.70	0.12	0.09	2.21	0.80
2008	4.59	1.06	10.26	0.17	0.52	1.01	2.07
Total	0.92	0.40	2.78	0.13	0.18	0.58	0.74

Source: Research Institute of Geodesy and Cartography, own calculations

Table 10. Average price development (in EUR) of the sold land by counties with the further purpose utilization for agricultural production

Year	Dunajská Streda	Topoľčany	Liptovský Mikuláš	Rimavská Sobota	Svidník	Michalovce	Total
2001	0.18	0.19	0.12	0.02	0.06	0.19	0.15
2002	0.20	0.04	0.03	0.07	0.12	0.14	0.16
2003	0.31	0.37	0.04	0.16	0.17	0.18	0.31
2004	0.43	0.59	0.59	0.10	0.05	0.20	0.37
2005	0.96	0.14	0.52	0.09	0.12	0.16	0.50
2006	0.84	0.14	0.76	0.07	0.32	0.37	0.42
2007	0.59	0.32	0.72	0.13	0.06	0.99	0.31
2008	2.33	0.95	11.98	0.15	0.03	0.24	1.37
Total	0.53	0.32	1.45	0.10	0.07	0.30	0.42

Source: Research Institute of Geodesy and Cartography, own calculations

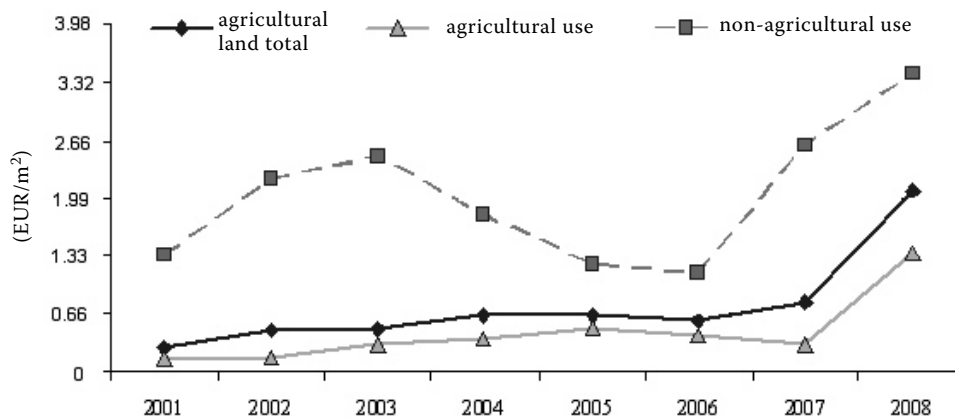


Figure 6. Average market price development of agricultural land according to purpose of use in 2001–2008

Source: Research Institute of Geodesy and Cartography, own calculations

CONCLUSION

Data analysis about the land market transactions proved a very low average sold estates area. From the total number of the old estates, up to 89% of them belong into the 1 hectare land category with the average size 1615 m². Through the detailed examination about the deposited cases of the old estates, it was determined that almost all estates of this category were assigned to the non-agricultural utilization, namely building and recreational purposes and the like. In the estate aggregation according to the size intervals, the estates in the range 100–1000 m² prevailed, their share in the area constituted 37.55% and the average size of the sold estates was 485 m².

In the selected counties of Slovakia, the average market price of agricultural land without the purpose differentiation was 0.74 EUR/m² during the years 2001–2008. The average market price of arable land reached the value 0.89 EUR/m², vineyards (including undergrowth) 0.14 EUR/m², orchards 1.04 EUR/m² and permanent grassland 0.36 EUR/m².

In the 1 hectare land category, at which we assume other than agricultural utilization, the average price of the sold agricultural land constituted 1.99 EUR/m² what is 4.7 multiple of the average market price of the estates assigned for further agricultural utilization with the area above 1 hectare. It retained the continuous trend from the previous years by the maximum average price of the estates in the size interval from 100 to 1000 square metres which was valid also in the year 2008. Its value 16.33 EUR/m² 4.6 times higher than the average price of the total sold agricultural land area.

The average agricultural land price with the assumption of further agricultural utilization reached through its value 0.42 EUR/m² 89% of the average price of all sold estates. The estates with the largest area above 10 hectares were sold for the minimum average prices of 0.24 EUR/m².

REFERENCES

Bandlerová A., Lazíková J., Rumanovská L. (2005): Agrarian land market development – case of Slovakia. In:

- Kwestia agrarna w Polsce i na świecie: prace naukowe. Wydawnictwo SGGW, Warszawa, pp. 453–465.
- Buday Š. (2007): Land market and agricultural land use after the EU enlargement. *Agricultural Economics – Czech*, 53: 145.
- Buday Š., Bradáčová K. (2008): Analysis of agricultural land market in 2001–2006. In: *Almanac from international scientific conference Business on agricultural land in EU-27*. SPU Nitra, Račkova dolina, 29–30 April 2008, pp. 27–32; ISBN 978-80-552-0041-5.
- Buday Š., Federičová Z., Vajcíková R. (2008): Diversification of economical activities with focus on employment (in Slovak). *Ekonomika poľnohospodárstva*, 8: 55–63.
- Buday Š., Federičová Z., Vajcíková R. (2009): Diversification of farm business. *Agricultural Economics – Czech*, 55: 77–83.
- Gecíková I., Hudáková M., Rumanovská L.. Schwarcz P. (2008): Current problems and questions of agricultural development in terms of Slovak republic. SPU, Nitra.
- Hudák J., Rovný P. (2009): Marketing level evaluation of crop production in Slovakia compared with other member countries of European Union (in Slovak). *Ekonomika poľnohospodárstva*, 9: 30–37.
- Chrastinová Z., Burianová V. (2009): Economic development in slovak agriculture. *Agricultural Economics – Czech*, 55: 67–76.
- Lazíková J., Bandlerová A. (2006): Land price and lease price of agricultural land. In: *On matters of EU agricultural policy*. International scientific conference (electronic source). SPU, Nitra, pp. 13–144.
- Matošková D., Gálik J. (2009): Selected aspects of the internal and external competitiveness of Slovak agricultural and food products. *Agricultural Economics – Czech*, 55: 84–93.
- Némethová J. (2009): Agrostructures of high-production Slovak region (in Slovak). *Ekonomika poľnohospodárstva*, 9: 50–58.
- Swinnen J.F.M., Vramlem L. (2009): *Land & EU Accession. Review of the Transitional Restrictions by New Members States on the Acquisition of Agricultural Real Estate*. Centre for European Policy Studies (CEPS), Brussels.

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