

# Agricultural land market in selected regions of the Slovak Republic

## *Trh s poľnohospodárskou pôdou vo vybraných regiónoch SR*

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**Abstract:** One of the conditions of accession of Slovakia into the European Union is the existence of a developed land market. At present, the official land price is mostly used in the evaluation of agricultural land. The price was calculated on the basis of normative production and normative costs required to achieve such production. As the land market gradually develops, market prices come into being; reflecting the effect of real market forces. With the full-fledged market prices, the task of official prices will be just an informative one. The land market prices will gradually assume all the tasks of the current official prices of the agricultural land.

**Keywords:** agricultural land, official land price, land market price, cadastre, statistical monitoring

**Abstrakt:** Jednou z nevyhnutných podmienok vstupu Slovenska do Európskej únie je aj rozvinutý trh s pôdou. V súčasnosti sa pri oceňovaní poľnohospodárskych pozemkov v prevažnej miere využíva úradná cena pôdy. Vypočítaná bola na základe normatívne stanovenej produkcie a normatívne stanovených nákladov na jej dosiahnutie. S postupným rozvojom trhu s pôdou sa začínajú formovať trhové ceny, vznikajúce pôsobením reálnych trhových síl. Po ich plnom rozvinutí budú mať úradné ceny len funkciu informačnú, resp. doplnujúcu. Trhové ceny pôdy postupne prevezmú všetky funkcie súčasných úradných cien poľnohospodárskej pôdy.

**Kľúčové slová:** poľnohospodárska pôda, úradná cena pôdy, trhová cena pôdy, kataster, štatistické sledovania

## INTRODUCTION

Despite the fact that Slovakia has become one of the serious candidates to join the European Union, the issue of striving for a transparent land market through the use of official statistical data remains unresolved. Even though many authors maintain that the land market has gradually developed, their data on the sale and purchase prices of agricultural land does not have the credibility based on statistical methods.

The current applicable official prices of agricultural land play an important task in cases of restitution, legacy claims, in specification of the amount of tax for occupation of agricultural land, and amount of rent. In addition, the official prices are used as benchmark prices in negotiation of real sale and purchase (market) prices of agricultural land.

The calculation of official prices of agricultural land was based on the results of evaluation and land evaluation survey. The basic unit of mapping and evaluation is the evaluated soil-ecological unit (ESEU), currently described by the specific 7-digit code. The calculation of land price is based on the normative production of nine key agricultural crops for each specific ESEU (currently, there are 6 266 ESEUs registered with the Evaluation data

bank). The normative production was specified as the optimum value; therefore it does not take other important factors into account, such as the position of land, distance from the intravilan municipality border, existing limitations – PHO, CHKO (state-protected natural areas), which exert immediate effect on the formation of real market prices.

## CURRENT CONDITION OF THE LAND MARKET

The agricultural land market has some specific features. The soil is the basic and non-substitutable source of food production and natural resource in every country. Therefore, it must always be protected from destruction and degradation by the state and its legislative standards and/or economic measures. To a certain extent, land market must be controlled by the state despite the fact that in the conditions of market economy such a market is fully exposed to the impact of market forces of demand and supply, and thus becomes an ordinary subject of sale and purchase.

In general, one of the key development factors for the land market in our country is the settlement of land ownership. The land market makes it possible to purchase

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and sell the land owned by corporate organisations and individual persons. As yet, the land owned by state under supervision of the Land Fund cannot be sold or purchased. However, this land may help to accelerate the land market dynamics and, in future, to leverage the use of land in intensive farming. The current transfers of ownership rights mostly result from legacy claims. However, a change in land ownership is often motivated by speculative reasons. The sale and purchase of agricultural land motivated by the effort to carry out business in agriculture is very rare. This situation is caused by the generally low capital yield in agriculture, and by the lack of own capital to make a long-term investment by purchasing agricultural land. This is reflected in the fact that the banking sector mostly does not accept agricultural land as a credit collateral.

In order to regulate and harmonise the land and real estate market with the EU countries (also for fiscal purposes), statistical monitoring of transactions in the real estate market, and the access to objective information is required. Therefore, the land evaluation team with the Research Institute of Agriculture and Food Economics, in co-operation with the Research Institute of Geodesy and Cartography, has now launched a research task to monitor and provide statistical evaluation of market prices of agricultural land.

## METHODOLOGY OF SOLUTION

The actual market (sale-purchase) prices were monitored in co-operation with the Research Institute of Geodesy and Cartography (RIGC) in Bratislava. At first, the team selected representative areas for the given structure of land fund in the individual regions of Slovakia. The task was carried out in co-operation with the six selected cadastral administration offices in the districts of Dunajská Streda, Liptovský Mikuláš, Michalovce, Rimavská Sobota, Svidník, Topoľčany.

The subject matter of the data processing was to gather the actual sale and purchase prices of agricultural land in the following breakdown:

a) summary data from the sale and purchase contracts, regarding transfers of ownership rights to agricultural land reported in 2001 to be registered with the real estate cadastre in individual districts; including the following data:

- type of land
- total land acreage
- purchase, sale (market) price of the land;

b) detailed overview of individual contracts by districts, including the following data:

- contract number;
- name of cadastral area;
- type of land
- land acreage;
- purchase, sale (market) price per square meter ;
- total number of contracts.

The protocols worked out on behalf of each cadastral administration office were delivered in the electronic format (MS Excel 2000). The data so gathered will provide a statistical overview of the monitored facts.

## RESULTS OF SELECTIVE MONITORING OF PURCHASE, SALE (MARKET) PRICES OF THE AGRICULTURAL LAND

The team monitored the acreage and market prices of the land being sold in selected six districts, for 1976 completed sale transactions (agricultural land). This corresponds to 2 109.5442 hectares of agricultural land sold in 2001.

Of the total acreage of agricultural land sold, most of the land was sold in the district of Dunajská Streda (68%), and Rimavská Sobota (14%). On the other hand, the smallest land acreage was sold in the district of Svidník (0.4%).

Most of the arable land was sold in the district of Dunajská Streda (60%), and Rimavská Sobota (21%). The smallest arable land acreage was sold in the district of Svidník (0.6%).

Most of the vineyards was sold in the district of Dunajská Streda – 99% of the total acreage sold; followed by

Table 1. Acreage of sold land by crops in selected districts of the Slovak Republic in 2001

District	Acreage of sold land (m <sup>2</sup> )				
	AgL	ArL	vineyards	orchards	PGC
Dunajská Streda	14 434 078	4 918 214	8 363 961	32 616	1 119 287
Topoľčany	1 300 918	862 709	782	18 909	418 518
Liptovský Mikuláš	1 988 054	328 882	0	0	1 659 172
Rimavská Sobota	2 857 527	1 687 956	4 043	9 396	1 156 132
Svidník	91 976	51 412	0	2 057	38 507
Michalovce	422 889	370 545	31 645	0	20 699
Selected districts, total	21 095 442	8 219 718	8 400 431	62 978	4 412 315

Source: RIGC, own calculations

AgL = agricultural land, ArL = arable land

the districts of Michalovce (0.4%), and Rimavská Sobota (0.05%).

Most of the orchards were sold in the district of Dunajská Streda (52%), Topoľčany (30%), and Rimavská Sobota (15% of the total area sold).

The trend in sales of permanent grass covers (PGC) was relatively balanced in the following three districts: Liptovský Mikuláš (38%), Rimavská Sobota (26%), and Dunajská Streda (25%). The smallest acreage sold was

recorded in the district of Michalovce, with 0.5% of the total acreage of PGC sold.

Table 1 provides overview of the sold land in selected districts.

The comparison between regions suggests that most of the lands were sold in the district of Dunajská Streda – 813, and Liptovský Mikuláš – 756. These are the districts with most developed agricultural production and tourism. However, this trend could be also explained by

Table 2. Summary sales data – agricultural land in selected districts in the Slovak Republic

District	Type of lands	Number of lands	Total acreage (m <sup>2</sup> )	Total price (SKK)	Average price (SKK/m <sup>2</sup> )
Selected districts, TOTAL	Arable land	1 113	8 219 718	129 267 068	15.73
	Vineyards	73	8 400 431	21 911 624	2.61
	Orchards	28	62 978	2 105 782	33.44
	Permanent grass covers	762	4 412 315	17 452 491	3.96
	number of contracts: 1 130	1 976	21 095 442	170 736 965	8.09
Dunajská Streda	Arable land	700	4 918 214	107 775 237	21.91
	Vineyards	28	8 363 961	21 693 050	2.59
	Orchards	19	32 616	1 998 845	61.28
	Permanent grass covers	66	1 119 287	1 491 360	1.33
	number of contracts: 452	813	14 434 078	132 958 492	9.21
Topoľčany	Arable land	80	862 709	8 304 376	9.63
	Vineyards	1	782	34 440	44.04
	Orchards	5	18 909	60 318	3.19
	Permanent grass covers	71	418 518	1 792 740	4.28
	number of contracts: 114	157	1 300 918	10 191 874	7.83
Liptovský Mikuláš	Arable land	215	328 882	8 564 561	26.04
	Vineyards	0	0	0	0.00
	Orchards	0	0	0	0.00
	Permanent grass covers	541	1 659 172	13 338 183	8.04
	number of contracts: 392	756	1 988 054	21 902 744	11.02
Rimavská Sobota	Arable land	46	1 687 956	1 636 375	0.97
	Vineyards	7	4 043	34 197	8.46
	Orchards	2	9 396	34 813	3.71
	Permanent grass covers	42	1 156 132	439 259	0.38
	number of contracts: 72	97	2 857 527	2 144 644	0.75
Svidník	Arable land	33	51 412	432 313	8.41
	Vineyards	0	0	0	0.00
	Orchards	2	2 057	11 806	5.74
	Permanent grass covers	28	38 507	212 302	5.51
	number of contracts: 42	63	91 976	656 421	7.14
Michalovce	Arable land	39	370 545	2 554 206	6.89
	Vineyards	37	31 645	149 937	4.74
	Orchards	0	0	0	0.00
	Permanent grass covers	14	20 699	178 647	8.63
	number of contracts: 58	90	422 889	2 882 790	6.82

Source: RIGC, own calculations

the need of buyers to expand the acreage of their own gardens or to purchase land for other purposes than to make business in agriculture.

The average market price of agricultural land per square meter in Slovakia amounted to SKK 8.09. Table 2 shows the overview of summary data on sales of agricultural land in the selected districts, and the totals for the Slovak Republic.

Of all the evaluated regions, the highest average market price per square meter of agricultural land was recorded in the district of Liptovský Mikuláš – SKK 11.02/m<sup>2</sup> and Dunajská Streda – SKK 9.21/m<sup>2</sup>. On the other hand, the lowest average market prices were recorded in the districts of Rimavská Sobota – SKK 0.75/m<sup>2</sup>, Michalovce – SKK 6.82/m<sup>2</sup>, and Svidník – SKK 7.14/m<sup>2</sup>. Surprisingly enough, there were high market prices recorded in the district of Liptovský Mikuláš – SKK 26.04/m<sup>2</sup> of arable land, even though this is relatively low acreage of sold land – 328 882 m<sup>2</sup>. Compared to arable land, the prices of vineyards were several times higher in the district of Topoľčany – SKK 44.04/m<sup>2</sup>. Also the prices of orchards were much higher in the district of Dunajská Streda – SKK 61.28/m<sup>2</sup>. The highest average market prices of permanent grass covers were recorded in the district of Michalovce – SKK 8.63/m<sup>2</sup> and Liptovský Mikuláš – SKK 8.04/m<sup>2</sup>.

#### THE COMPARISON OF AVERAGE MARKET AND OFFICIAL PRICES OF AGRICULTURAL LAND IN SELECTED REGIONS

The ratio of official and market price of agricultural land is very different in individual districts. The data suggests that with increasing official price in the district the ratio of market and official price of the land is also increasing. The only exception to this rule is the districts of Liptovský Mikuláš and Rimavská Sobota. The findings suggest that with the formation of the land market prices the

importance of soil and climate conditions for agricultural production is diminishing in less productive districts. However, these conditions played a decisive role in establishing the official prices of agricultural land. Market prices of these lands were largely affected by the position of lands, in relation to the major city agglomerations, resort areas, etc.

In general, the average market prices of agricultural land are several times higher than the official prices. The only exceptions are the districts of Dunajská Streda, where the average market prices are on the same level as the official prices; and Rimavská Sobota, where the average market prices of agricultural land amount to only about 29% of the average official prices. On the other hand, the average market price in the district of Liptovský Mikuláš is 9 times higher than the average official price.

The average market prices of arable land have recorded similar trend as the agricultural land. The average market prices of arable land in the most productive district of Dunajská Streda are 2.5 times higher than the average official prices. The difference is even more distinct in the district of Liptovský Mikuláš, where the average market prices are 14 times higher than the official prices. However, these are mostly lands of small acreage that were purchased with the intention to expand the acreage of already owned land, especially gardens and land near the intravilan border. The amount of average market prices in the district of Rimavská Sobota is only about 27% of the average official prices.

There are major regional fluctuations in the average market price of vineyards. In the district of Dunajská Streda, the values of average market prices reach to about 28% of the official prices, and on the other hand, the average market prices in the district of Topoľčany are 7 times higher than the official prices, and 2.4 times higher in the district of Rimavská Sobota.

Also, the average market and official prices for orchards largely vary in individual districts. In the district of Dunajská Streda, the average market price is 6.6 times

Table 3. Average market and official prices of the sold land by crops<sup>a)</sup> in selected districts of the Slovak Republic in 2001

District	Average prices of the sold land (SKK/m <sup>2</sup> )							
	official			market				
	AgL	ArL	PGC	AgL	ArL	VIN	orchards	PGC
Dunajská Streda	9.10	9.25	5.45	9.21	21.91	2.59	61.28	1.33
Topoľčany	5.96	6.12	2.21	7.83	9.63	44.04	3.19	4.28
Liptovský Mikuláš	1.20	1.79	0.99	11.02	26.04	0.00	0.00	8.04
Rimavská Sobota	2.59	3.60	1.37	0.75	0.97	8.46	3.71	0.38
Svidník	1.72	2.62	1.20	7.14	8.41	0.00	5.74	5.51
Michalovce	3.48	4.14	1.79	6.82	6.89	4.74	0.00	8.63
Selected districts	4.43	5.86	1.44	8.09	15.73	2.61	33.44	3.96

Source: RIGC, own calculations

<sup>a)</sup> official price of vineyards and orchards is the same as the official price of arable land

AgL = agricultural land, ArL = arable land

higher than the official price, while in the district of Topoľčany, the level of average market prices achieves only the level of 52% of the average official prices. In the district of Svidník, the amount of average market prices is 2.2 higher than average official prices. In the district of Rimavská Sobota, the amount of average market prices is the same as that of the official prices.

The average market prices of PGCs copy the official price trends for the above crops. Below-average market prices were recorded in the districts of Dunajská Streda (24% of the official price), and Rimavská Sobota (28%). In other districts, the amount of average market prices by far outpaced the average official prices (Liptovský Mikuláš – 8.1 times higher, Michalovce – 4.8, Svidník – 4.6, and Topoľčany – 1.9).

## CONCLUSION

The current findings on the land market development suggest that the agricultural land market in Slovakia is underdeveloped. This is especially evident in the total acreage of sold land, which represents only 0.63% of the total acreage of agricultural land registered with the real estate cadastre in selected districts.

The characteristic trends in the development of land market are:

1. The sale and purchase of agricultural land is focused mainly on small plots, with the acreage up to 1 000 square meters, the intention of the new owner of the agricultural land is either building development, or expansion of the already owned land; rather than to launch market production.
2. The market prices of small acreage plots are much higher than the official land prices and depend especially on – the distance from the intravilan border, position, shape and potential expansion of intravilan borders, with an option of the conversion to the land for building development;

- available capital and business plans of potential buyers in individual cadastral areas;
- number of entrepreneurs in respective regions and intensity of business activities related to the agricultural land fund;
- overall dissipation of agricultural land.

3. Most of the sale and purchase transactions took place in the agriculturally most productive district of Dunajská Streda, and in the district of Liptovský Mikuláš with good conditions for development of tourism.
4. The current level of official prices of land in some instances is considerably different from the market prices, and this fluctuation is likely to continue.
5. In some instances, the same land is being sold and purchased several times for speculative reasons, in order to increase the sale and purchase price.

The statistical survey of market prices of agricultural land is the first of its kind in Slovakia. It appears that in future, the monitoring period will have to be extended, and the number of cadastral areas in individual regions should be increased, in order to improve the objectivity of findings.

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